



**North I-25
Revised December 2011 Record of Decision
(ROD1) between SH 392 to SH 14**

**FHWA-CO-EIS-08-01-F
CDOT Project Number 18357 IM 0253-221**

Federal Highway Administration

August 2017



DECISION

The findings and analysis in the August 2011 *North I-25 Final Environmental Impact Statement/Section 4(f) Evaluation* (CDOT, 2011a), October 2011 *Revised Section 4(f) Evaluation* (CDOT, 2011b), and the *North I-25 Environmental Impact Statement of Decision1* (CDOT, 2011c) are incorporated by reference into this Revised ROD1 between SH 392 and SH 14.

Based on the information provided in the 2011 North I-25 FEIS, the additional evaluation included in this Revised ROD1 between SH 392 and SH 14, and the 2011 Revised Section 4(f) Evaluation, FHWA concludes that the change in selection between SH 392 and SH 14 from the Accel/Decel Alternative to the Express Lane Alternative, as described in this document, is in the best overall public interest, minimizes impacts overall as demonstrated in the information presented in this document from the Reevaluation dated August 8, 2017 (23 Code of Federal Regulations [CFR] 771.129), and does not introduce any new significant impacts based on the design changes and new information. The Express Lane Alternative, as described in this document, uses all practicable means to restore and enhance the quality of the human environment, and avoids or minimizes any possible adverse effects. Based on the considerations identified in the 2011 Revised Section 4(f) Evaluation, FHWA also concludes that there are no feasible and prudent alternatives to the use of Section 4(f) resources and that the Revised ROD1 includes all possible planning to minimize harm to the identified Section 4(f) properties resulting from such use.

This Revised ROD1 between SH 392 and SH 14 does not change the FEIS Preferred Alternative identified in the August 2011 FEIS, and the remainder of ROD1 does not change.

8/16/2017

Date

A handwritten signature in blue ink that reads "John M. Cater".

John M. Cater, PE
Colorado Division Administrator

1 **STATUTE OF LIMITATIONS**

2 A notice will be published in the Federal Register, pursuant to 23 United States Code
3 §139(l), indicating that the Federal Highway Administration (FHWA) has taken the final
4 action to approve the Revised ROD1 between SH 392 and SH 14. Claims seeking judicial
5 review of this Federal action must be filed within 150 days after the date of the notice.

6 **INFORMATION AVAILABILITY**

7 The following individuals may be contacted for further information regarding the Revised
8 ROD1 between SH 392 and SH 14.

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21
22 The North I-25 Revised ROD1 is available electronically at
23 <https://www.codot.gov/projects/north-i-25-eis> or in hard copy format. Please contact either
24 of the individuals listed above to obtain a copy.

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1 LIST OF ACRONYMS AND ABBREVIATIONS

accel/decel	acceleration/deceleration
ADA	Americans with Disabilities Act
AM	Morning
APCD	Air Pollution Control Division
APE	area of potential effect
APEN	Air Pollutant Emissions Notice
AST	above ground storage tank
BMP	best management practice
BNSF	BNSF Railway
BRT	bus rapid transit
BTU	British thermal unit
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CDPS	Colorado Discharge Permit System
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLOMR	Conditional Letter of Map Revision
CORRACTS	Corrective Action
CPW	Colorado Parks and Wildlife
dBA	A-weighted decibels
DIA	Denver International Airport
DOT	Department of Transportation
EIS	Environmental Impact Statement
EPA	United States Environmental Protection Agency
ERNS	emergency response notification system
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FINDS	facility index system
FIS	Flood Insurance Study

ft	foot, feet
HOT	high-occupancy toll
HOV	high-occupancy vehicle
I-#	Interstate # (e.g., I-25)
IPAC	Information, Planning, and Conservation
LWCF	Land and Water Conservation Fund
LEDPA	least environmentally damaging practicable alternative
LEP	limited English proficiency
LOMR	Letter of Map Revision
LOS	level of service
LPG	liquefied petroleum gas tank
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MMP	materials management plan
MOVES	motor vehicle emissions simulator model
MP	Milepost
MSAT	mobile source air toxics
MS4	municipal separate storm sewer system
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NFRMPO	North Front Range Metropolitan Planning Organization
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
OAHP	Office of Archaeology and Historic Preservation
OSHA	Occupational Safety and Health Administration
PBO	Programmatic Biological Opinion
PM	Evening
ppm	parts per million
ppb	parts per billion

PPP	Public Private Partnership
PRRIP	Platte River Recovery Implementation Program
RAQC	Regional Air Quality Council
RCC	Regional Coordination Committee
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
ROD	Record of Decision
ROW	right-of-way
RTD	Regional Transportation District
RTP	Regional Transportation Plan
SB	Colorado Senate Bill
SH#	State Highway
SHPO	State Historic Preservation Officer
SPPBA	South Platte Programmatic Biological Assessment
SPPBO	South Platte Programmatic Biological Opinion
SPWRAP	South Platte Water Related Activities Program
SQG	small quantity generator
SWMP	Stormwater Management Plan
TAC	Technical Advisory Committee
TIGER	Transportation Investment Generating Economic Recovery
TIP	Transportation Improvement Program
TMDL	total maximum daily load
US #	United States Highway number (e.g., US 36)
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
VMT	vehicle miles traveled
VOC	volatile organic compound

BACKGROUND

This Revised ROD1 between SH 392 and SH 14 documents the final agency decision for improvements to Interstate 25 (I-25) between SH 392 to SH 14. It is the final step in the National Environmental Policy Act (NEPA) process for this section of I-25, which started with a Notice of Intent to prepare an Environmental Impact Statement (EIS) in 2003.

The Express Lane Alternative discussed in this Revised ROD1 between SH 392 and SH 14 consists of adding one buffer separated express lane in each direction from SH 392 to SH 14 and changes the limits of the acceleration (accel)/deceleration (decel) lanes (Accel/Decel Alternative) to milepost (MP) 267 (Port-of-Entry) - MP 269 (SH 14) (**Figure 1**). The Express Lane Alternative is being selected now in this Revised ROD1 because funding has become available to construct express lanes from SH 14 to SH 402, which will improve mobility and safety, replace aging and obsolete infrastructure, and provide for modal alternatives.

In addition to the above improvements, the City of Fort Collins has requested that CDOT install a 10-foot sidewalk within CDOT right-of-way (ROW) under the new I-25 bridges over the Cache la Poudre for the future Poudre River Trail. This improvement was not documented in the FEIS. Improvements to address capacity at the Harmony Road bridge over I-25, as well as the southbound I-25 ramp and northbound I-25 off-ramp at Harmony Road also were not documented in the FEIS.

The Revised ROD1 between SH 392 and SH 14 also reviews information contained in the *North I-25 Final Environmental Impact Statement* (FEIS) (CDOT, 2011a), in the *North I-25 Revised Section 4(f) Evaluation* (CDOT, 2011b), and in the *North I-25 ROD1 (SH 392 to SH 14) Reevaluation* (CDOT, 2017). and considers changes in legislation, regulations, or guidance and existing conditions or future conditions.

A. INTRODUCTION

The ROD1 was the final step in the NEPA process for only a portion of the FEIS Preferred Alternative, referred to as Phase 1. The ROD1 stated a commitment on behalf of FHWA and CDOT (lead agencies) that the lead agencies intend to work toward implementing the FEIS Preferred Alternative in its entirety. As additional funding is identified and included in the fiscally constrained Regional Transportation Plan (RTP), subsequent phases or portions of phases can be implemented.

On August 8, 2017, a Reevaluation (**Appendix A**) was completed to evaluate the impacts of the Express Lane Alternative to determine if there are any new significant impacts that were not previously analyzed as part of the FEIS and ROD1. The Reevaluation resulted in a determination that the Express Lane Alternative does not introduce any new significant impacts based on the design changes and new information. Additionally, there are no significant impacts because of construction of the Poudre River Trail or Harmony Road improvements at I-25.

Figure 1. Revised ROD1 between SH 392 and SH 14



CDOT prepared this Revised ROD1 between SH 392 and SH 14 to update the findings in the FEIS and to document the changes in ROD1. With this selected alternative, CDOT will add one buffer separated express lane in each direction from SH 392 to SH 14. This improvement was part of the FEIS Preferred Alternative, but was not included in ROD1. Instead, ROD1 included continuous accel/decel lanes between SH 392 and SH 14. However, with the addition of the express lanes the accel/decel limits have changed. Accel/decel lanes will now be from MP 267 (Port-of-Entry) to MP 269 (SH 14) (**Figure 1**). Additionally, the Revised ROD1 between SH 392 and SH 14 documents added infrastructure not evaluated in the FEIS, which are the Poudre River trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements.

A.1 PROJECT COST AND FUNDING

Table 1 compares the estimated cost of widening I-25 between SH 392 and SH 14 with continuous accel/decel lanes and express lanes. More detailed information on Phase 1 is included in ROD1.

Table 1. – Estimated Cost by Element

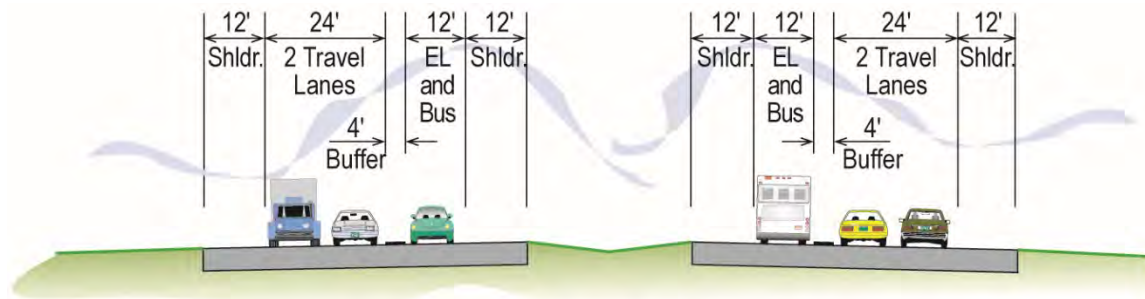
Element	ROD1	Revised ROD1
	Continuous Accel/Decel Lanes Estimated Cost (2009 dollars/2015 dollars)	Express Lanes Estimated Cost (2015 dollars)
Widen I-25 between SH 392 and SH 14, including Prospect and SH 14 interchanges Replace or reconstruct 13 structures	\$196 million/\$260 million	\$297 million

B. DESCRIPTION OF THE EXPRESS LANE ALTERNATIVE

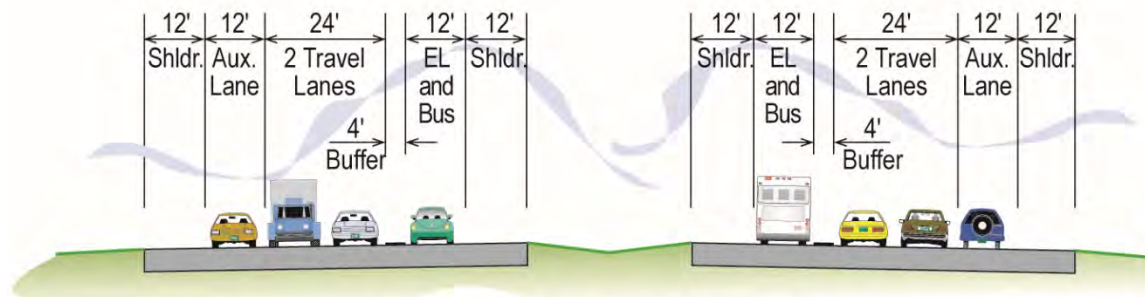
The Express Lane Alternative consists of the following elements (**Figure 2**):

- ▶ Widening of I-25 between SH 14 and SH 392 (approximately seven miles) with express lanes;
- ▶ Reconstruction of the existing cross-section;
- ▶ Reconstruction of four 12-foot (ft) general purpose lanes (northbound and southbound) along I-25 from SH 392 to SH 14;
- ▶ Construction of two 12-ft express lanes (northbound and southbound) along I-25 from SH 392 to SH 14;
- ▶ Construction of two 12-ft inside shoulders (northbound and southbound), two 12-ft outside shoulders (northbound and southbound), and a 4-ft buffer (northbound and southbound) along I-25 from SH 392 to SH 14;
- ▶ Construction of two 12-ft continuous accel/decel lanes (northbound and southbound) along I-25 from the Port of Entry located approximately 0.7 mile south of Prospect Road to SH 14;

Figure 2. Revised Record of Decision (ROD1)



Express Lanes Alternative I-25 (SH 392 to Port of Entry)



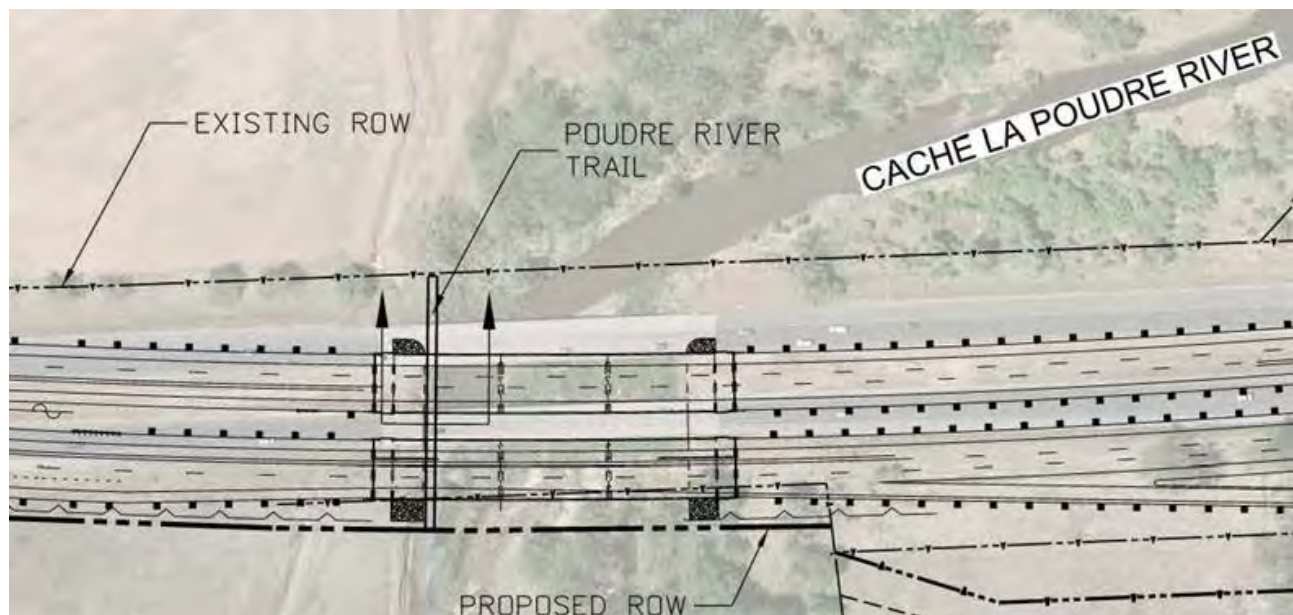
Express Lanes Alternative I-25 (Port of Entry to SH 14)

- ▶ Installation of a center-median of varying width from SH 392 to SH 14 with median barrier features necessary to accommodate this improvement.
- ▶ Installation of three water quality detention basins.
- ▶ Acquisition of property for right-of-way (ROW) associated with the ultimate FEIS Preferred Alternative cross-section.
- ▶ Replacement or reconstruction of structures along I-25 between SH 392 and SH 14 (**Table 2**).
- ▶ Construction of the Poudre River Trail (10-ft wide concrete trail) within CDOT ROW on the south side of the Cache la Poudre River (**Figure 3**). The Poudre River Trail has not yet been constructed to the east or west of this segment but will be constructed at a later date by other parties.
- ▶ Construction of and restriping for an additional left-turn lane (two left-turns total) from eastbound Harmony Road to the northbound I-25 on-ramp (**Figure 4**).
- ▶ Extension north of the reconstruction of the southbound I-25 on-ramp from Harmony Road with widening of the ramp to accommodate an additional (two left-turn lanes total) left-turn from westbound Harmony Road to the southbound I-25 on-ramp (**Figure 4**).

Table 2. Revised ROD1 – Structures between SH 392 and SH 14

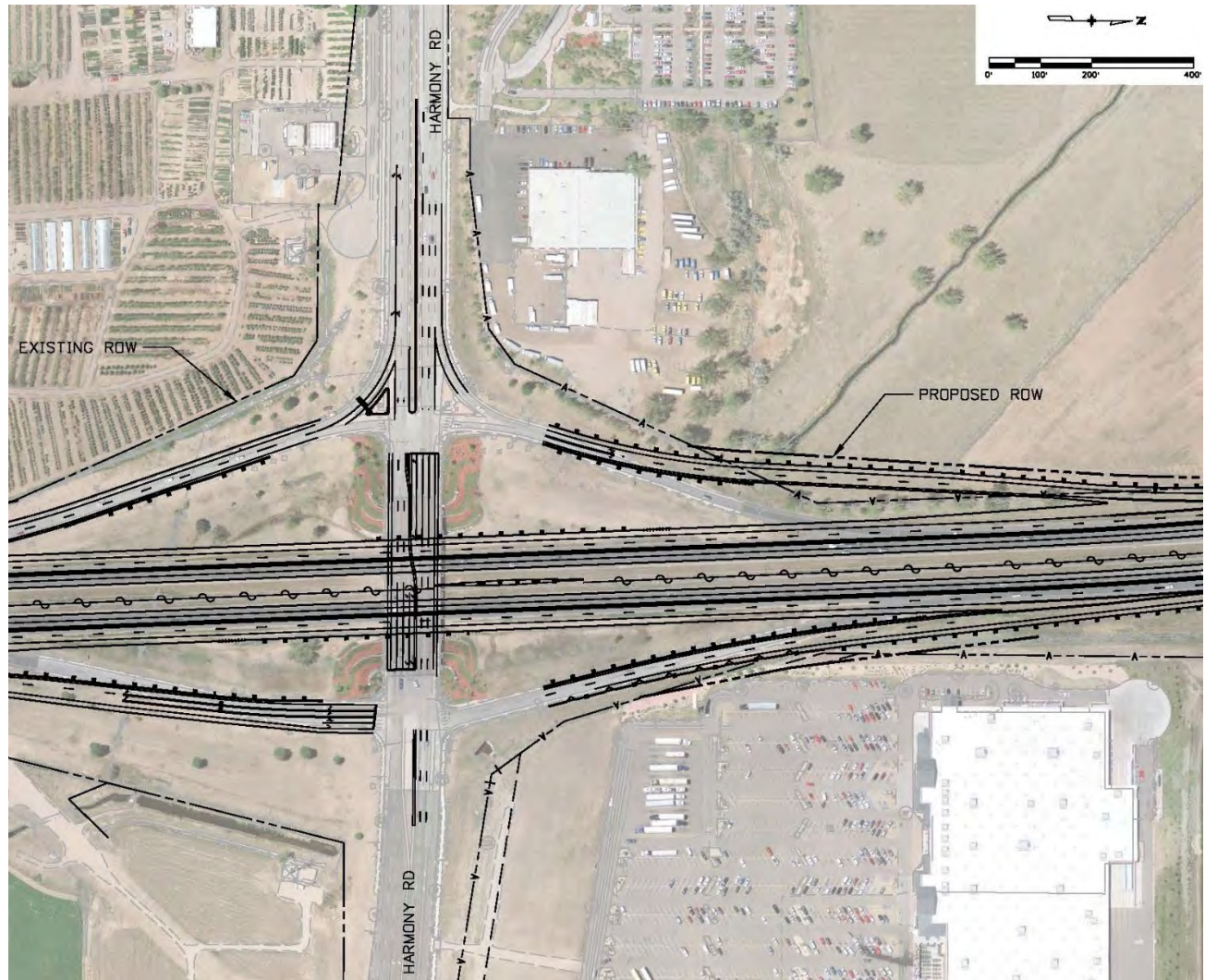
Replacement or Reconstruction
I-25 over Cache la Poudre Floodway concrete box culvert
I-25 northbound over Cache la Poudre River
I-25 southbound over Cache la Poudre River
I-25 northbound over Great Western Rail Road (two locations)
I-25 southbound over Great Western Rail Road (two locations)
Prospect Road over I-25
Lake Canal north of Prospect Road concrete box culvert
Timnath Ditch (Cache la Poudre Reservoir Inlet) concrete box culvert
Box Elder Creek concrete box culvert
SH 14 over I-25
SH 14 over Frontage Road Connector

Figure 3. Revised ROD1 Poudre River Trail



- ▶ Extension north of the reconstruction of the northbound I-25 off-ramp to Harmony Road to accommodate widening of the ramp for an additional lane (three lanes total) for the northbound to westbound movement (**Figure 4**).

Figure 4. I-25/Harmony Road Improvements



- ▶ Construction of the Poudre River Trail within CDOT right-of-way; construction of and restriping for an additional left-turn lane from eastbound Harmony Road to the northbound I-25 on-ramp; extension north of the reconstruction of the southbound I-25 on-ramp from Harmony Road with widening of the ramp to accommodate an additional left-turn from eastbound Harmony Road to the southbound I-25 on-ramp, and extension north of the reconstruction of the northbound I-25 off-ramp to Harmony Road to accommodate widening of the ramp for an additional lane for the northbound to westbound movement were not included in the FEIS.
- ▶ Construction of the carpool/Park-Ride lots at the I-25/SH 14, I-25/Prospect and I-25/Harmony interchanges. The Express Lane Alternative does not modify the locations of these carpool/Park-n-Ride lots, as was shown in Table 2-13 Preferred Alternative Interchange Configurations in the FEIS (CDOT, 2011a) and ROD1.

B.1 REASONS FOR SELECTING THE EXPRESS LANE ALTERNATIVE

- ▶ An express lane in each direction adds capacity to I-25. The Accel/Decel Alternative provides better short term operations, but by adding the express lanes now, the goal of meeting the overall purpose and need of the FEIS can be achieved sooner with less construction impacts between SH 392 and SH 14.
- ▶ By adding the express lanes now, CDOT's regional express bus will experience travel time savings because the bus will have access to the managed lane facility providing a more reliable trip and avoiding the general purpose lanes when they are congested. The Accel/Decel Alternative provides improved mobility around the interchanges, but does not provide the trip reliability or as much time savings for the longer trips that the buses make.
- ▶ Because the roadway facility has not been reconstructed since the original I-25 construction, there is little to no remaining service life of the pavement. The Express Lane Alternative would allow for the reconstruction of the pavement where there is no remaining service life similar to the Accel/Decel Alternative.
- ▶ The Accel/Decel Alternative included reconstruction of the same interchanges as the Express Lane Alternative, I-25/SH 14 and I-25/Prospect. The Express Lane Alternative also adds some additional operational improvements to the intersections and ramp terminals at Harmony and I-25 to address queuing issues on the ramp terminals.
- ▶ The Express Lane Alternative improves mobility by increasing capacity with a managed lane in each direction. This is expected to provide greater benefits for longer regional trips by providing reliable trip times for high occupancy vehicles, drivers willing to pay a toll, and transit travel using the express lanes compared to the Accel/Decel Alternative.
- ▶ Either the Express Lane Alternative or the Accel/Decel Alternative address the North I-25 EIS committee's desire to improve safety and mobility north of SH 60 in the near term. The accel/decels lanes may provide a higher level of mobility in the short term, but the express lanes will contribute to the overall goals of the corridor for the long term solution.
- ▶ Either the Express Lane Alternative or the Accel/Decel Alternative would increase of travel demand on I-25 compared to No Action. Based on the FEIS analysis, the Express Lane Alternative or the Accel/Decel Alternative would improve regional safety by increasing the number of vehicle trips occurring on I-25. Regional vehicle trips would be rerouted from local surface streets to I-25. Since freeway travel has a lower crash rate than arterials the Express Lane would improve transportation safety in the region.
- ▶ The Express Lane Alternative is supported by local stakeholders. Stakeholders support the addition of express lanes through the corridor and have contributed funds in support of express lane construction. Purpose and Need

The purpose of the North I-25 Project is discussed in Chapter 1 of the FEIS and summarized in this document. It is to meet long-term travel needs between the Denver Metro Area and the rapidly growing population centers along the I-25 corridor north to the Fort Collins-Wellington area. To meet long-term travel needs, the project must improve safety, mobility, and accessibility, and provide modal alternatives and interrelationships. The need for the project can be summarized in four categories:

1. Increased frequency and severity of crashes.

2. Increasing traffic congestion leading to mobility and accessibility problems.
3. Aging and functionally obsolete infrastructure.
4. Lack of modal alternatives.

The Express Lane Alternative incrementally addresses these elements of purpose and need between SH 392 and SH 14 in the following ways:

▶ ***Increased frequency and severity of crashes.***

- Widening and reconstruction of I-25 with expresslanes between SH 392 and SH 14 would correct deficiencies in the horizontal alignment between SH 392 and Harmony Road.
- The Express Lane Alternative would reduce anticipated crashes along the corridor. CDOT's DiExSys Roadway Safety System indicates that I-25 from SH 392 to SH 14 operates at Level of Service of Safety III today with a moderate to high potential for crash reduction. Implementation of the Express Lane Alternative would improve the facility to bring the crash rate to the median or better. This improvement is expected to result in 20 fewer crashes per year in 2040.
- The Express Lane Alternative would improve regional safety by increasing the number of vehicle trips occurring on I-25. Regional vehicle trips would be rerouted from local surface streets to I-25. Since freeway travel has a lower crash rate than arterials the Express Lane Alternative would improve transportation safety in the region. The improvements of the Express Lane Alternative bring the decision back in line with the FEIS analysis for this section between SH 392 and SH 14.

▶ ***Increased future traffic congestion leading to mobility and accessibility problems.***

- Without improvements to the I-25/Prospect interchange both ramp terminals would operate at LOS F during both 2040 peak hours. Reconstructing the I-25/Prospect interchange would improve capacity and, therefore, enhance accessibility at this location. Peak hour operation would improve to LOS C or better at both ramp terminals during both 2040 peak hours.
- Without improvements to the I-25/Harmony Road interchange the northbound ramp terminal would operate at LOS F during both 2040 peak periods. The southbound ramp terminal would also operate at LOS F during the 2040 PM peak hours. Reconfiguration of the I-25/Harmony Road interchange would improve capacity, reduce delay, and reduce queuing on the off ramps. Peak hour operation would improve to LOS C or better at both ramp terminals during both 2040 peak hours.
- Widening I-25 with express lanes between SH 392 and SH 14 would be part of a longer express lane system extending south to SH 66 and improving mobility along the I-25 corridor. The Express Lane Alternative attracts approximately 10,000 additional vehicles per day. It contributes to meeting the overall purpose and need identified in the FEIS connecting the northern extent of the Express Lane identified in the FEIS Preferred Alternative. The express lanes provide more reliable trip times for drivers that meet the occupancy criteria, choose to pay a toll or use the regional bus transit.
- Widening I-25 with express lanes between SH 392 and SH 14 would reduce the number of vehicles unserved by approximately 5,000 vehicles daily (vehicle volume

exceeding capacity at entry into the modeling area) compared to the No Action. This would reduce congestion duration on I-25 therefore improving mobility and accessibility on the corridor.

▶ ***Aging and obsolete infrastructure.***

- A number of structures to be replaced are at or nearing their 50-year design life. Replacement is needed to accommodate widening and/or to extend the design life. Structures to be reconstructed include:
 - Prospect Road structures over I-25 that were constructed in 1966.
 - SH 14 structures over I-25 that were constructed in 1966.
 - I-25 structure (northbound) over the Cache la Poudre River that was constructed in 1948
 - I-25 structure (southbound) over the Cache la Poudre River that was constructed in 1965.
 - I-25 structures (northbound and southbound) over the Great Western Rail Road that were constructed in 1966.
 - Kechter Road structure over I-25 that was constructed in 1965.
- Pavement on I-25 would between SH 392 and SH 14 has not been reconstructed since the original I-25 construction and has little to no remaining service life. This ROD would allow for the reconstruction of the pavement where there is no remaining service life.

▶ ***Lack of modal alternatives.***

- Providing express lanes improves travel time and reliability of CDOT's regional express bus. Improving the connections for transit users by improving park and ride lots is included in the Express Lane Alternative.
- Constructing carpool/Park and Ride lots at the I-25/SH 14, I-25/Prospect and I 25/Harmony interchange would enhance modal alternatives and provide better opportunities for carpools, van pools and connections with CDOT's regional express bus service. It will also provide an opportunity to connect CDOT's express bus service with other area transit providers.

C. ALTERNATIVES CONSIDERED

There were a number of alternatives developed and evaluated during the North I-25 EIS process. These were documented in the *North I-25 Draft Environmental Impact Statement* that was released for public comment in 2008 and in the FEIS that was released for public comment in August 2011 (CDOT, 2008 and CDOT, 2011a). These alternatives included:

No Action Alternative, which included only projects with committed funding. This included the two FasTracks rail corridors, the bridge over I-25 at 84th Avenue, the I-25/SH 392 interchange reconstruction, interchange improvements at I-25 and Prospect Road, and the replacement of the I-25 frontage road over the Little Thompson River.

Package A, which focused on general purpose lane widening of I-25 (one additional lane in each direction) plus construction of a double-tracked commuter rail line between Fort

Collins and Thornton (at the terminus of the FasTracks North Metro commuter rail line). Package A also included commuter bus service along US 85 from Greeley to downtown Denver and along E-470 from US 85 to Denver International Airport (DIA).

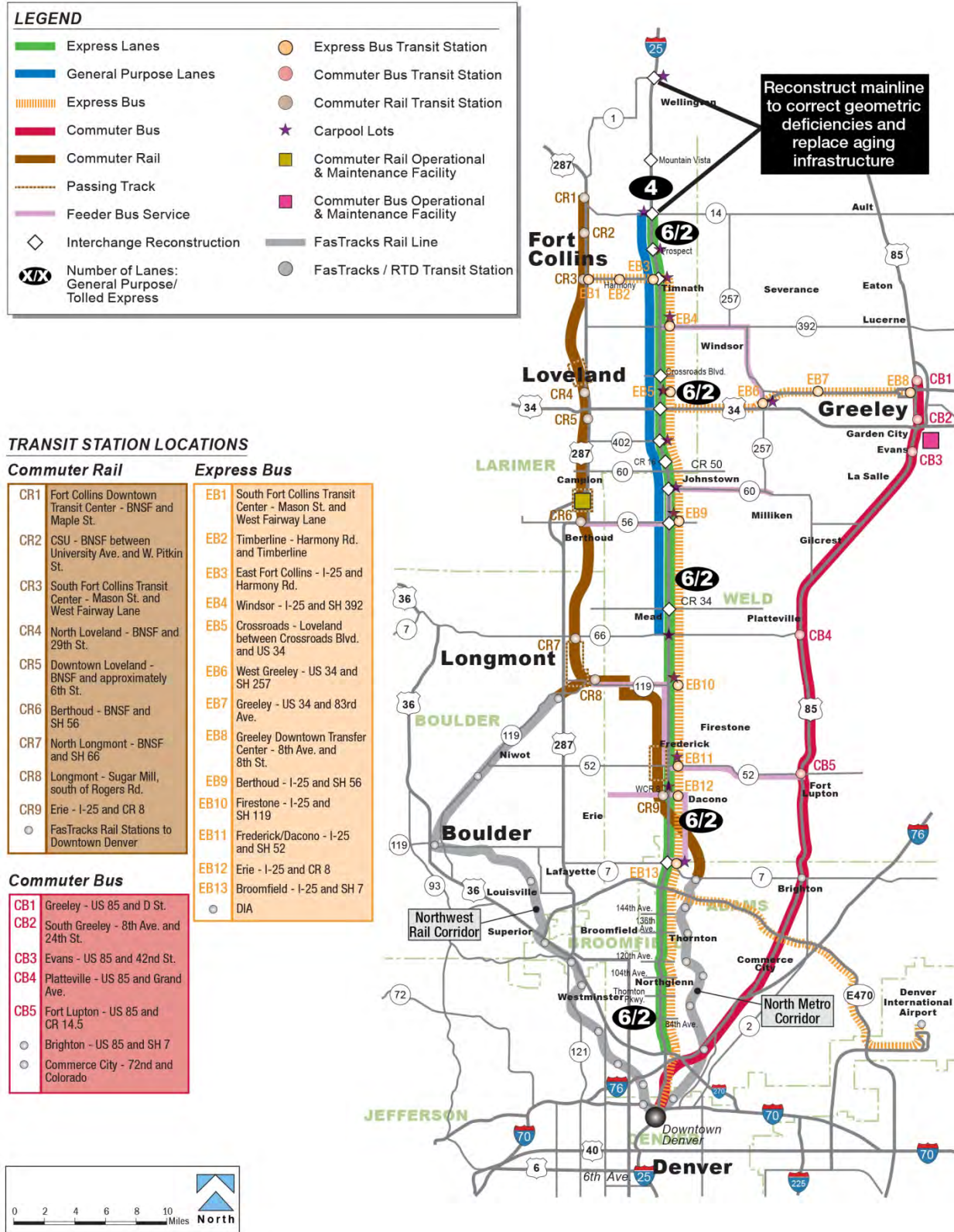
Package B, which included one additional tolled express lane (now referred to as express lane) along I-25 in each direction except north of SH 60, where two tolled express lanes (now referred to as express lanes) in each direction were assumed. Package B also included bus rapid transit service along I-25 and feeder bus service along several arterial streets.

FEIS Preferred Alternative, which combined some elements of Package A with Package B. I-25 would be widened with general purpose lanes and tolled express lanes (now called express lanes). Substandard interchanges would be reconstructed or upgraded.

The FEIS Preferred Alternative (**Figure 5**) also includes commuter rail transit service from Fort Collins to the anticipated FasTracks North Metro end-of-line. Service to Denver would travel through Longmont and along the FasTracks North Metro Corridor. A connection to Boulder would also be made with a transfer to Northwest Rail at the Sugar Mill Station in Longmont. Nine commuter rail stations and a commuter transit maintenance facility are included in the FEIS Preferred Alternative. The commuter rail would consist of a single track with occasional passing tracks at four locations. The BNSF railroad is requiring that commuter rail utilizing BNSF track upgrade BNSF facilities to include a maintenance road where maintenance access is not available. The FEIS Preferred Alternative design includes a maintenance road parallel to the BNSF line between Longmont and Fort Collins. Commuter rail track that is not within the BNSF right-of-way does not include a maintenance road.

Express bus service would operate in the express lanes to connect northern Colorado communities to downtown Denver and DIA and serve 13 stations along Harmony Road, US 34, and I-25. Commuter bus service along US 85 would connect Greeley with downtown Denver with five stops at the communities along the route. A bus maintenance facility would be constructed to accommodate both express buses and commuter buses.

Figure 5. FEIS Preferred Alternative



As documented in the ROD1, the FEIS Preferred Alternative:

- ▶ Best responds to the project purpose and need (reducing the frequency and severity of crashes, addressing the increasing traffic congestion along I-25, replacing aging and functionally obsolete infrastructure, and providing modal alternatives).
- ▶ Best responds to the land use goals of the cities and counties.
- ▶ Provides the best regional connectivity.
- ▶ Provides the best regional safety.
- ▶ Provides the best overall travel reliability into the future.
- ▶ Best supports livability goals (energy consumption, land use, environmental factors).

C.1 ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The Council on Environmental Quality regulations (40 CFR 1505.2[b]) require the ROD to identify the environmentally preferable alternative. The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. The Council on Environmental Quality has clarified that the environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment, and that best protects, preserves, and enhances historic, cultural, and natural resources. NEPA does not require an agency to select the environmentally preferable alternative.

Package A requires relocation of the most number of residences and businesses, results in slightly higher total air emissions than the other packages, results in the most acreage of vegetation impacts and soil disturbance, the most acreage of impact to potential Preble's meadow jumping mouse habitat, the highest numbers of adverse effects to properties on the National Register of Historic Places (NRHP) and the most number of parcels with potential or recognized hazardous material conditions. Package A also exacerbates an existing freight rail barrier between neighborhoods in some areas and creates a new barrier in other areas. Package A improves transit related mobility on two corridors in the regional study area. The addition of general purpose lanes to I-25 does not provide an opportunity to manage congestion over time, as volumes grow.

Package B results in the largest number of residences and commercial buildings that would be impacted by highway noise, the most acreage of new impervious surface area, the most wetland impact, the most acreage of floodplain impact, the greatest acreage of impact to sensitive wildlife habitat and aquatic habitat, and the most acreage of impact to black-tailed prairie dog habitat. Package B concentrates both highway and transit improvements on a single corridor, I-25. It therefore does not have the negative community impacts the other two alternatives have on noise, visual and community cohesion. It requires the least number of residential and business relocations. It could also tend to provide a growth stimulus to areas along I-25, farther away from the downtown areas located along the US 287 corridor.

In general, the magnitude and severity of the impacts of the three build alternatives to the natural environment are relatively similar taking into account the size of the project. The FEIS Preferred Alternative has fewer impacts to the habitat for the Preble's meadow jumping mouse, a federally threatened species. The FEIS Preferred Alternative also has the least impacts to aquatic resources. On the other hand, the FEIS Preferred Alternative has

more impacts than either of the other build alternatives to bald eagle foraging habitat and raptor nests and it has more impervious surface than Package A.

Air pollutant emissions associated with all three build packages would be slightly greater than those anticipated under the No Action Alternative because vehicle miles travel would be expected to increase. These emissions in 2035 would, however, be lower than existing levels for all pollutants and in all alternatives.

The FEIS Preferred Alternative has been determined to cause the least overall harm to Section 4(f) properties. The FEIS Preferred Alternative is most responsive to land use goals of stimulating growth around transit stations, because it includes commuter rail along US 287, express bus along I-25 and commuter bus along US 85. Over time, there is a greater potential with the FEIS Preferred Alternative to conserve energy and reduce air emissions because of the easier expansion capabilities of transit service provided on more corridors and because of the potential for transit oriented development around commuter rail, express bus and commuter bus stations. The FEIS Preferred Alternative also has the least impact to aquatic resources, including wetlands, other jurisdictional waters, aquatic habitat, and impacts to Preble's meadow jumping mouse habitat. For these reasons, the FEIS Preferred Alternative is considered to be the Environmentally Preferable Alternative.

C.2 LEAST ENVIRONMENTALLY DAMAGING PRACTICABLE ALTERNATIVE

The FEIS Preferred Alternative (which includes the Express Lane) has received a Section 404 permit. Wetland mitigation for the entire FEIS Preferred Alternative has been completed in advance of wetland impacts. The permit number is NWO-2004-80110-DEN, and it was issued on May 17, 2013. The Clean Water Act Individual Section 404 permit (NWO-2004-80110-DEN) permitted 16.08 acres of permanent impacts to wetlands and other waters of the U.S. and 2.06 acres of temporary impacts to wetlands and other waters of the U.S.

The Express Lane would have an additional 2.01 acres of impacts more than the FEIS Preferred Alternative. The increase in permanent impacts is due to the 8-ft wider cross-section of the Express Lane compared to the FEIS Preferred Alternative, as well as the shift in the alignment to the east to facilitate construction of the I-25 bridges over the Cache la Poudre River. The shift of the I-25 Bridges over the Cache la Poudre River to the east of the existing location has numerous benefits. The shift of the structures will allow for more efficient phasing of the construction of the bridges by allowing the new structures to be built off line of the existing structures. An additional beneficial result of the revised structure location is improved highway geometry that allows the use of a larger radius curve and a reduction in superelevation. The shift to the east also improves the hydraulic conditions of the area by allowing the river to cross under the bridges closer to a perpendicular angle. The improved angle of approach for the river allows for better hydraulic characteristics at this location through the reduction of sedimentation and scour potential near the abutments of the new structure. In addition, the design helps facilitate a future project by the local floodplain administrator that would consolidate the split flow that happens at this location during heavy flood events.

Each individual project from the FEIS Preferred Alternative and its impacts to wetlands and other waters of the U.S. is being tracked. As of February 2017, the individual projects from the FEIS Preferred Alternative have permanently impacted 0.37 acre of wetlands and other waters of the U.S. and 0.23 acre of temporary impacts. Because the permit accounts for

impacts cumulatively, rather than by individual crossing, the total wetland impacts are anticipated to fall within the permit. In issuing this permit, the U.S. Army Corps of Engineers (USACE) has confirmed that the FEIS Preferred Alternative, which includes the Express Lane, is the Least Environmentally Damaging Practicable Alternative.

C.3 ROD1 AND PHASED IMPLEMENTATION

A phased approach to the decision-making process was taken during development of the ROD1 because the solution to the identified transportation problems cost more to implement than is available in the fiscally constrained RTPs. The identification of an initial phase for implementation is consistent with FHWA requirements to have funding identified for projects before final decisions are made.

The ROD1 identified a set of guiding principles that were to be used to develop a phasing plan for the FEIS Preferred Alternative. These were related to project purpose and need and include:

- ▶ Replacing aging infrastructure at the interchanges and drainage crossings.
- ▶ Addressing safety concerns by decreasing safety concerns.
- ▶ Improving mobility by increasing capacity.
- ▶ Increasing modal options and providing a competitive time advantage by providing the Express Lanes for carpools, vanpools, and bus service.

D. COORDINATING WITH COMMUNITY PLANS

Several transportation plans have been developed that relate to the Express Lane. These plans include:

- ▶ City of Fort Collins Transportation Master Plan (Fort Collins, 2011)
- ▶ City of Loveland 2035 Transportation Plan (Loveland, 2012)
- ▶ Larimer County Transportation Plan (Larimer County, 2006)
- ▶ Town of Timnath Transportation Plan (Timnath, 2015)
- ▶ Town of Windsor Comprehensive Plan (Windsor, 2016)

The City of Fort Collins identifies Harmony Road and Prospect Road as Enhanced Travel Corridors from I-25 into the City of Fort Collins. I-25 is designated as a Regionally Significant Corridor. SH 392 is identified as requiring access management along the corridor from I-25 to the west. The Town of Windsor identifies SH 392 as the primary access to town due to wayfinding guide signage, while the town also uses Harmony Road to access I-25. The Town of Windsor Comprehensive Plan recommends study of a Park-n-Ride at I-25/SH 392, which was not included in the FEIS Preferred Alternative (**Figure 5**). The City of Fort Collins Transportation Master Plan, the City of Loveland 2035 Transportation Plan, the Larimer County Transportation Plan, and the Town of Windsor Comprehensive Plan reference the FEIS Preferred Alternative (**Figure 5**) identified as part of the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c).

D.1 CONSEQUENCES

The Express Lane would not impact community plans at or within the vicinity of N I-25 (SH 392 to SH 14).

D.2 MITIGATION

No mitigation will be required because no impacts would occur to local community planning.

E. TRAFFIC AND TRANSPORTATION

Appendix B includes a technical memorandum documenting the traffic analysis (Felsburg Holt & Ullevig, 2017a). The No Action Alternative includes those transportation improvements that have not been built but for which funding has been committed. Section 2.2.1 of the FEIS (CDOT, 2011a) includes a detailed description of the No Action Alternative.

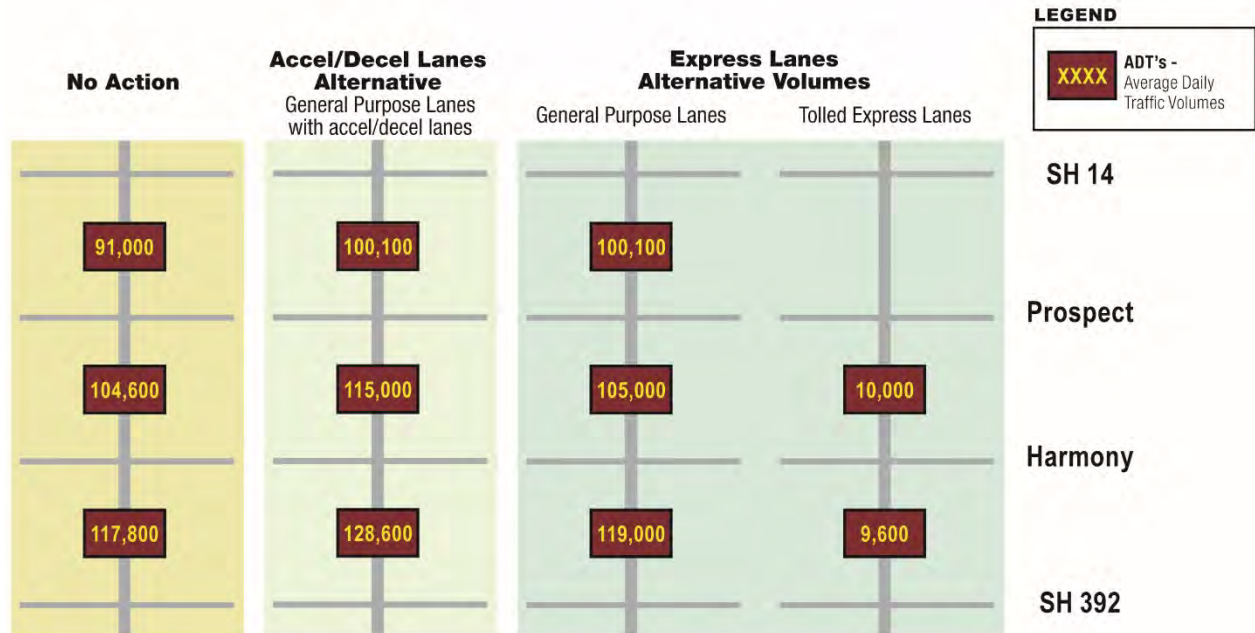
E.1 IMPACTS OF THE EXPRESS LANE ALTERNATIVE

A traffic analysis for the Accel/Decel Alternative and the Express Lane Alternative for the year 2040 was completed. In the North I-25 ROD (ROD1) (December 29, 2011), FHWA selected Phase 1 of the FEIS Preferred Alternative. This included acceleration/ deceleration lanes in both directions on I-25 from SH 392 on the south to SH 14. These lanes were considered an interim improvement and ultimately would be restriped to accommodate the express lanes in the Preferred Alternative cross section included in the FEIS. The Express Lane Alternative replaces the acceleration/deceleration lanes in both directions with express lanes, consistent with the Preferred Alternative.

The Express Lane Alternative traffic analysis evaluates 2040 traffic conditions along mainline I-25 and at the four interchanges between SH 392 and SH 14. Synchro version 9 was used to evaluate interchanges and FREEVAL was used to evaluate mainline operation. Because much of the corridor is expected to be over capacity by 2040 the analysis considered several evaluation metrics to provide a comprehensive comparison of the results. Interchange evaluation looked at post processed model volumes, delay, volume to capacity ratios, and queuing; mainline analysis considered level of service, denied entry, and the post processed model volumes when developing key findings. Together, these metrics provide a more comprehensive assessment of how well the system will work in 2040.

Figure 6 compares 2040 daily vehicles volumes for each segment of I-25 between SH 392 and SH 14. As shown, the Accel/Decel Alternative and the Express Lane Alternative both provide higher throughput than the No Action accommodating approximately 10,000 vehicles per day more.

Figure 6. I-25 Mainline Projected 2040 ADT



Source: 2017 AECOM I-25 Traffic Technical Memorandum

Table 3 summarizes the daily volume of unserved demand calculated by FREEVAL. Unserved demand is the number of vehicles in excess of available capacity in each 15 minute period. As shown, No Action has the total highest unserved demand at both the beginning of the model and at key bottlenecks. The Accel/Decel Alternative and the Express Lane Alternative have comparable volumes of denied entry vehicles but both would process approximately 10,000 more vehicles daily.

Table 3. 2040 Daily Vehicles Denied Entry

At Beginning of Model		
Scenario	Northbound	Southbound
1 – No Action	9,300	2,700
2 – Accel/Decel Alternative SH 392 – SH 14	2,700	2,500
3 – Express Lane Alternative SH 392 to SH 14	3,100	3,900
At Key Bottlenecks		
Scenario	Northbound SH 392	Southbound US 34 On Ramps
1 – No Action	5,400	2,400
2 – Accel/Decel Alternative SH 392 – SH 14	2,700	2,500
3 – Express Lane Alternative SH 392 to SH 14	2,000	2,300

Source: FREEVAL denied vehicles. Northbound bottleneck at SH 392 and southbound bottleneck at US 34.

Key findings from the traffic analysis are summarized below:

- ▶ Ramp terminal intersection operations are expected to be similar for both the Accel/Decel Alternative and the Express Lane Alternative. This is due to similar geometry which and similar peak hour traffic volumes for both alternatives.
- ▶ The Accel/Decel Alternative would operate with somewhat fewer hours of delay and better level of service than the Express Lane Alternative because the accel/decel lanes provide more capacity than express lanes.
- ▶ The Express Lane Alternative would bring the corridor's facilities incrementally closer to the FEIS Preferred Alternative. The Accel/Decel Alternative was identified as an interim improvement and is not included in the FEIS Preferred Alternative. The Express Lane Alternative is included in the FEIS Preferred Alternative.
- ▶ The Express Lane Alternative and the Accel/Decel Alternative reduce the number of vehicles unserved by approximately 5,000 and 7,000 vehicles daily (at entry into the modeling area), respectively compared to the No Action scenario.
- ▶ The Express Lane Alternative reduces the number of vehicles denied entry at key bottlenecks more than both No Action and the Accel/Decel Alternative.
- ▶ The Express Lane Alternative and the Accel/Decel Alternative are projected to serve approximately 10,000 vehicles more daily compared to the No Action scenario. Since freeway travel is generally safer than surface street travel, an improvement in safety in the region is created.
- ▶ The Express Lane Alternative would provide a non-congested alternative transportation option along the corridor with the potential to improve travel reliability for drivers.
- ▶ The Express Lane Alternative would provide travel time reliability for transit travel when compared to the No Action Alternative and the Accel/Decel Alternative.

E.2 MITIGATION

No mitigation is required.

F. ENVIRONMENTAL RESOURCES

This Revised ROD1 between SH 392 and SH 14 process included review of existing conditions; future conditions; changes in legislation, regulations, policies, or guidance; and changes in mitigation for each environmental resource examined in the FEIS and ROD1 (CDOT, 2011a; CDOT, 2011b). A summary of major findings of this review are presented here. Additional resource-specific information is contained in the North I-25 December 2011 - Record of Decision (ROD1) Reevaluation (**Appendix A**).

Resources that have not experienced a change in the affected environment or setting nor a change in environmental impacts since the FEIS or ROD1 may still have relevant mitigation that is required for environmental impacts identified in the FEIS and ROD1. These resources include:

- ▶ Land Use
- ▶ Social Conditions
- ▶ Economic Conditions
- ▶ Visual Quality
- ▶ Paleontological Resources

Resources that do not exist in the project area and do not have relevant mitigation for the Express Lane include:

- ▶ Section 6(f)

F.1 LAND USE

Existing conditions have changed little since the FEIS and ROD1 (CDOT, 2011a; CDOT, 2011c). Future land use assumptions have been updated to the year 2020. Section 3.1 in the FEIS (CDOT, 2011a) provides information on land use. Environmental consequences and mitigation for the Express Lane Alternative remain consistent with the FEIS and ROD1.

Land use changes are anticipated along the I-25 corridor between now and 2040. The amount of agricultural land will be reduced as residential and employment areas increase.

F.1.1 EXPRESS LANE ALTERNATIVE IMPACTS

Approximately 125 acres of property will be acquired and converted to a transportation use.

F.1.2 MITIGATION

While this analysis identified a number of incompatibilities between proposed transportation improvements and land use, particularly with current zoning and in some cases comprehensive plans, actions to address these incompatibilities are the responsibility of local municipal and county governments. It is important to remember that most incompatibilities are simply the result of comprehensive plans and zoning not being updated to reflect the results of this study. CDOT encourages the local governments to address the incompatibilities through their existing land use processes. Typical processes local governments use to address land use incompatibilities include public involvement and visioning, amendments to comprehensive plans, and zoning changes.

No mitigation is required.

F.2 SOCIAL CONDITIONS

Existing conditions have changed little since the FEIS and ROD1 (CDOT, 2011a; CDOT, 2011c). Section 3.2 in the FEIS (CDOT, 2011a) provides information on social conditions. Environmental consequences and mitigation for the Express Lane Alternative remain consistent with the FEIS and ROD1.

The North Front Range Metropolitan Planning Organization (NFRMPO) divides the NFRMPO municipalities and counties into seven subregions (NFRMPO, 2015). The I-25 corridor between SH 392 and SH 14 is located in the Fort Collins Subregion 3 and the Central I-25 Subregion 7. **Table 4** summarizes the population, household, and employment projections for these subregions.

Table 4. Population, Household, and Employment Projections

Subregion	2010	2040	Percent Growth (%)
<i>Population Projections</i>			
Subregion 3 – Fort Collins	171,417	259,078	51.14%
Subregion 7 – Central I-25	42,404	120,043	183.09%
<i>Household Projections</i>			
Subregion 3 – Fort Collins	64,526	99,959	54.91%
Subregion 7 – Central I-25	16,585	47,861	188.58%
<i>Employment Projections</i>			
Subregion 3 – Fort Collins	101,158	146,456	44.78%
Subregion 7 – Central I-25	18,574	55,374	198.13%

Source: NFRMPO, 2015

Persons with Disabilities and Advanced Age. In 2010, approximately 12 percent of Larimer County residents were age 65 or older. In 2040, approximately 19 percent of Larimer County will be age 65 or older. Persons with disabilities, as defined by the Americans with Disabilities Act (ADA), and advanced age (persons over 65 years of age) are higher in and around urban areas, such as Fort Collins.

Community Facilities and Services. There are no changes in community facilities and services since the FEIS (2011a) and ROD1 (CDOT, 2011c).

Neighborhoods. There are no changes in neighborhoods since the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c).

Environmental Justice. There are no changes in low-income and minority populations since the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c). Since the FEIS and ROD1 were completed, new regulations and guidance for environmental justice analysis have been issued and include:

- ▶ FHWA Guidance on Environmental Justice and NEPA, signed on December 16, 2011, supplements FHWA Technical Advisory 6640.8A, and provides guidance on the process for addressing Environmental Justice, Title VI, and Limited English Proficiency (LEP).
- ▶ On May 2, 2012, U.S. Department of Transportation (DOT) Order 5610.2(a) was issued, which updates the DOT's original Environmental Justice Order.

- ▶ On June 14, 2012, FHWA Order 6640.23A was issued to established policies and procedures to comply with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.
- ▶ The most current CDOT NEPA Manual was released in October 2015 (revised July 2015).

F.2.1 EXPRESS LANE ALTERNATIVE IMPACTS

All segments of the population would benefit from safety and access improvements to businesses, residences, and community facilities; from stronger regional community connections resulting from the interchange alternative; and from mitigation commitments that will, in some cases, improve conditions over existing conditions and over the No Action Alternative.

Social impacts and benefits would be distributed across all communities, including minority and low-income populations. During construction, detours, traffic delays, and temporary noise and visual impacts may occur. Construction phasing is planned to minimize temporary impacts to the greatest extent possible. Employment and positive indirect economic effects would occur during construction.

F.2.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 5**) are still applicable.

Table 5. Social Conditions Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>During construction, detours, traffic delays, and temporary noise and visual impacts may occur.</p>	<p>Develop a Traffic Management Plan that identifies a construction-related traffic control plan, work zone management strategies, and contingency plans.</p> <p>Stage construction activities and vary work hours to minimize disruption to traffic and local businesses. Throughout the construction phase, preserve access for each affected business.</p> <p>Mitigation for construction-related impacts to minority and low-income populations could include the provision of reduced price bus passes during construction, acceptable access modifications, and translated information on construction processes and alternate modes available during construction and pre-opening day.</p> <p>Ways to make tolling more equitable will be sought. For example, payment options will be considered to enable the broadest opportunity for all economic groups to use toll facilities. Alternate payment options will be provided so that persons who do not have a credit card can still participate in the tolled express lanes. Toll replenishment using cash or employer-based payroll deductions could also be included in the tolling program.</p> <p>A context sensitive approach to project design and mitigation is encouraged to ensure that project elements enhance the community.</p>

F.3 ECONOMIC CONDITIONS

Existing conditions have changed little since the FEIS and ROD1 (CDOT, 2011a; CDOT, 2011c). Section 3.3 in the FEIS (CDOT, 2011a) provides information on economic conditions. Environmental consequences and mitigation for the Express Lane Alternative remain consistent with the FEIS and ROD1.

The FEIS showed substantial change in employment between 2005 and 2035 in Larimer County. As summarized in **Table 4**, employment in Fort Collins and along I-25 is projected to increase by 82,098 jobs between 2010 and 2040. As noted in the FEIS, the largest increase in employment is expected to occur along the I-25 corridor within a half-mile of the highway, and this growth is anticipated to continue into the future.

F.3.1 EXPRESS LANE ALTERNATIVE IMPACTS

During construction, access to local businesses may be temporarily disrupted or a minor delay may occur that could negatively impact the performance of some businesses. Conditions will improve or return to normal after construction is complete.

F.3.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 6**) are still applicable.

Table 6. Economic Conditions Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>During construction, access to local businesses may be temporarily disrupted or a minor delay may occur that could negatively impact the performance of some businesses. Conditions will improve or return to normal after construction is complete.</p>	<p>New access will be provided for properties where existing accesses are removed. To avoid disruption of business activities during construction, the new access will be provided before the existing access is removed.</p> <p>A traffic control plan will be developed to minimize interference to traffic flow from construction equipment and activities. CDOT will provide advance notice to emergency service providers, local businesses, rail operators, and residents with regard to road delays, access, and special construction activities. Such notifications will be accomplished through radio and public announcements, newspaper notices, on-site signage, and CDOT's website.</p> <p>To minimize disruption to traffic and local businesses, construction activities will be staged and work hours varied. Throughout the construction stage, access will be preserved for each affected business.</p>

F.4 RIGHT-OF-WAY

Residential/Business ROW impacts have changed since completion of the FEIS (CDOT, 2011a) and ROD1 (FHWA and CDOT, 2011c). Section 3.4 in the FEIS (CDOT, 2011a) provides information on right-of-way.

F.4.1 EXPRESS LANE ALTERNATIVE IMPACTS

Approximately 125 acres of property will be acquired from 89 properties along the corridor. The Express Lane Alternative would partially acquire right-of-way from 86 properties and fully acquire three properties. Of those 89 properties, two properties were not previously

identified for acquisition as part of the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c). **Table 7** identifies these properties.

Table 7. Additional Properties to be Partially Acquired for ROW

Parcel I.D.	Address	Property to be Acquired for ROW
8610005701	4225 KECHTER ROAD	0.31 acre (partial acquisition)
8709400019	3808 E. MULBERRY STREET	0.00003 acre (partial acquisition)

F.4.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 8**) are still applicable.

Table 8. Right-of-Way Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>Approximately 125 acres of property will be acquired from 89 properties along the corridor. The Express Lane would partially acquire right-of-way from 86 properties and fully acquire three properties.</p>	<p>For any person(s) whose real property interests may be impacted by this project, the acquisition of those property interests will comply fully with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). The Uniform Act is a federally mandated program that applies to all acquisitions of real property or displacements of persons resulting from Federal or federally assisted programs or projects. It was created to provide for and ensure the fair and equitable treatment of all such persons.</p> <p>To further ensure that the provisions contained within this act are applied "uniformly," CDOT requires Uniform Act compliance on any project for which it has oversight responsibility regardless of the funding source. Additionally, the Fifth Amendment of the United States Constitution provides that private property may not be taken for a public use without payment of "just compensation." All impacted owners will be provided notification of the acquiring agency's intent to acquire an interest in their property including a written offer letter of just compensation specifically describing those property interests. A ROW Specialist will be assigned to each property owner to assist them with this process.</p> <p>In certain situations, it may also be necessary to acquire improvements that are located within a proposed acquisition parcel. In those instances where the improvements are occupied, it becomes necessary to "relocate" those individuals from the subject property (residential or business) to a replacement site. The Uniform Act provides for numerous benefits to these individuals to assist them both financially and with advisory services related to relocating their residence or business operation. Although the benefits available under the Uniform Act are far too numerous and complex to discuss in detail in this document, they are available to both owner occupants and tenants of either residential or business properties. In some situations, only personal property must be moved from the real property and this is also covered under the relocation program. As soon as feasible, any person scheduled to be displaced shall be furnished with a general written description of the displacing Agency's relocation program which provides at a minimum, detailed information related to eligibility requirements, advisory services and assistance, payments, and the appeal process. It shall also provide notification that the displaced person(s) will not be required to move without at least 90 days advance written notice. For residential relocatees, this notice cannot be provided until a written offer to acquire the subject property has been presented, and at least one comparable replacement dwelling has been made available. Relocation benefits will be provided to all eligible persons regardless of race, color, religion, sex or national origin. Benefits under the Act, to which each eligible owner or tenant may be entitled, will be determined on an individual basis and explained to them in detail by an assigned Right-of-Way Specialist.</p>

F.5 AIR QUALITY

Air quality has changed near N I-25 (SH 392 to SH 14) since completion of the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c). This area along I-25 is subject to the conformity requirements of the *Revised Carbon Monoxide Maintenance Plan, Fort Collins Attainment/Maintenance Area* and the *Denver Metropolitan Area and North Front Range 8-Hour Ozone State Implementation Plan*. Section 3.5 Air Quality in the FEIS (CDOT, 2011a) provides information regarding air quality, and an Air Quality Evaluation Technical Memorandum was prepared in support of the North I-25 ROD1 Reevaluation (**Appendix A**).

Changes in air quality laws, policies, and guidance since publication of the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c) include:

- ▶ Motor Vehicle Emissions Model (MOVES) version 2014a was released in November 2015. This was a major update to MOVES2010, and its minor revisions corrected errors and added the ability to evaluate additional air toxics.
- ▶ FHWA's Interim Guidance Update on Mobile Source Air Toxics Analysis in NEPA was updated on December 6, 2012, from the original guidance published in September 2009. The revised guidance reflected changes in methodology for conducting emissions analysis and updated various research topics in mobile source air toxics (MSAT) analyses.
- ▶ The U.S. Environmental Protection Agency (EPA) released Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas in November 2013.
- ▶ The National Ambient Air Quality Standards (NAAQS) for ozone was lowered from 75 parts per billion (ppb) to 70 ppb in October 2015. EPA's nonattainment designations will be made in late 2017.
- ▶ The EPA released Transportation Conformity Regulations as of April 2012.
- ▶ FHWA's Carbon Monoxide Categorical Hot-Spot Finding Memorandum was released in February 2014.

F.5.1 EXPRESS LANE IMPACTS

Regional Conformity. Reconstruction of and addition of capacity to I-25 between SH 392 and SH 14 is included in the North Front Range Metropolitan Planning Organization's fiscally-constrained, air quality conforming 2040 Regional Transportation Plan and in the 2016-2019 Transportation Improvement Program (under the North I-25 design-build project). Therefore, regional conformity for the proposed improvements has been demonstrated.

Local Conformity. For this project, local conformity applies to carbon monoxide. The proposed changes to I-25 through the Express Lanes will not affect typical carbon monoxide hot spots like congested intersections; only mainline I-25 traffic will be affected. However, nearby intersections at Harmony Road were predicted to operate at a poor level of service (LOS) for the FEIS (LOS E in the afternoon in 2035) and were evaluated as a hot spot with CAL3QHC modeling. The evaluation was updated for the Express Lane Alternative. The intersections examined were Harmony Road at West Frontage Road and the I-25 southbound ramps. A "worst case" situation was modeled where the highest emissions factors (2016) were combined with the highest traffic volumes (2040 afternoon peak). These

artificial conditions were purposely devised to ensure that the maximum potential carbon monoxide concentrations were considered.

The model results were compared to the carbon monoxide NAAQS, which are 35 parts per million (ppm) for one hour and 9.0 ppm for eight hours. Background carbon monoxide concentrations obtained from the Colorado Department of Public Health and Environment (CDPHE) were 3.0 ppm and 2.0 ppm, respectively. The highest carbon monoxide concentrations calculated for the two Harmony Road intersections were 9.0 ppm for one hour and 6.2 ppm for eight hours—these values are below their respective NAAQS. The modeling output, which contains model input data, is attached.

For the reasons above, this project was determined not to cause or contribute to an exceedance of the federal carbon monoxide NAAQS and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals.

The quantitative results presented in this document (**Appendix A**) are based on predicted 2040 traffic volumes that were current in January 2017. Subsequently, the traffic analysis was revisited and the predicted 2040 volumes were updated. However, the updated 2040 daily and peak-hour traffic volumes were approximately 37 percent lower than the earlier 2040 volumes. These (lower) updated volumes have the effect of improved traffic operations predicted in the project corridor, which would lead to lower pollutant emissions through reduced traffic congestion. Therefore, use of the earlier (higher) traffic volumes is more conservative in the evaluation of potential air quality impacts in that it is a “worse case” traffic situation. Note that the “worse case” was found not to cause exceedance of the federal carbon monoxide NAAQS and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals. For these reasons, the air quality analysis was not updated and the overall findings have not changed. The project meets conformity levels for carbon monoxide.

At the project level, the express lane Lane would not result in exceedance of the carbon monoxide standard. The express lane is not an air quality concern for PM10 and is not expected to create or worsen a PM10 violation. The express lane would reduce regional mobile source air toxics emissions due to ongoing national control programs and is not a significant source of greenhouse gas emissions. This information was submitted to the CDPHE APCD on January 17, 2017. The CDPHE APCD concurred with this finding by letter dated January 19, 2017 (**Appendix B**).

Construction. The overall construction project has the potential to last many months. Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions. Construction emissions differ from regular traffic emissions in several ways:

- ▶ Construction emissions last only for the duration of the construction period.
- ▶ Construction activities generally are short-term, and depending on the nature of the construction operations, could last from seconds (e.g., a truck passing) to months (e.g., constructing a bridge).
- ▶ Construction can involve other emission sources, such as fugitive dust from ground disturbance.
- ▶ Construction emissions tend to be intermittent and depend on the type of operation, location and function of the equipment, and the equipment usage cycle; traffic emissions are present in a more continuous fashion after construction activities are completed.

- ▶ Construction emissions tend to be from mobile sources with diesel engines.

F.5.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 9**) are still applicable.

Table 9. Air Quality Impacts and Mitigation for the Express Lane

Impacts	Mitigation
<p>Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.</p>	<p>An air quality mitigation plan will be prepared describing all feasible measures to reduce air quality emissions from the project. CDOT staff will review and endorse construction mitigation plans prior to work on a project site.</p> <p>Acceptable options for reducing emissions could include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, and after-treatment products.</p> <p>The contractor will ensure that all construction equipment is properly tuned and maintained. Idling time will be minimized to 10 minutes—to save fuel and reduce emissions.</p> <p>Hauling and trucking operations will be consolidated as much as possible to reduce fuel consumption.</p> <p>An operational water truck will be on site at all times. Water will be applied to control dust as needed to prevent dust impacts off site.</p> <p>There will be no open burning of removed vegetation. Removed vegetation will be chipped or delivered to waste energy facilities.</p> <p>Existing power sources or clean fuel generators will be used rather than temporary power generators.</p> <p>Obstructions of through-traffic lanes will be minimized. A flag person will be provided to guide traffic properly minimizing congestion and to ensure safety at construction sites.</p>

F.6 NOISE

Traffic noise analyses were previously conducted for the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c). Section 3.6 Noise and Vibration in the FEIS (CDOT, 2011a) provides information regarding noise, and a Traffic Noise Impact Assessment was prepared in support of the North I-25 ROD1 Reevaluation (**Appendix A**).

Several traffic noise impacts were identified for those analyses, and several noise abatement actions were recommended, which were described in those documents. An analysis of the Express Lane was performed to assess for possible changes in noise impacts or recommended noise abatement action. Since publication of the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c), noise guidance from FHWA and CDOT have been updated. CDOT's *Noise Analysis and Abatement Guidelines* were updated in 2013, and FHWA's revised *Highway Traffic Noise: Analysis and Abatement Guidance* was released in December 2011.

F.6.1 EXPRESS LANE ALTERNATIVE IMPACTS

Traffic Noise. To assess the Express Lane Alternative improvements for 2040, 32 points were modeled for traffic noise impacts (one home would be relocated). Overall, the calculated noise level range for the modeled points was 57.6 to 76.1 A-weighted decibels (dBA). The noise impact results are summarized in **Table 10** and on **Figure 7**. Detailed noise level results are presented in **Appendix A**.

Table 10. Summary of Traffic Noise Impacts

I-25 Segment	Numbers of Impacted Receptors (CDOT 2011 Activity Categories B/C/E)			
	2005 Conditions	No Action (2040)	ROD1 (2040)	ROD1 Revision 1 (2040)
SH 14 to SH 392	3/1/0*	9/2/2*	11/4/3*	8/3/1

* These data have been updated from ROD1 to reflect the removal of three houses.

Ten modeled points that represented 12 discrete receptors were calculated to have 2040 traffic noise levels above the respective noise abatement criteria (NAC) during the afternoon peak hour. Of these, five were Category B properties, four were Category C, and one was Category E. All of the impacted receptors were predicted to equal or exceed the relevant NAC; none were predicted to increase by 10 dBA or more over existing conditions (**Appendix A**).

The residential areas (Category B) predicted to be impacted were isolated/dispersed homes along I-25. Impacted Category C receptors included Archery Range Natural Area, Arapaho Bend Natural Area, and St. James Church along I-25. The impacted Category E receptor consisted of a commercial business along I-25.

Construction Noise. Adjoining properties could be exposed to noise from construction activities from the Express Lane. Construction noise differs from traffic noise in several ways:

- ▶ Construction noise lasts only for the duration of the construction event, with most construction activities in noise-sensitive areas being conducted during hours that are least disturbing to adjacent and nearby residents.
- ▶ Construction activities generally are short term and, depending on the nature of the construction operations, could last from seconds (e.g., a truck passing a receptor) to months (e.g., constructing a bridge).
- ▶ Construction noise is intermittent and depends on the type of operation, location, and function of the equipment, and the equipment usage cycle.

Figure 7. Express Lane Alternative – Noise Impacted Receptors



F.6.2 MITIGATION

Traffic Noise. The results from the traffic noise analysis indicated that receptors would be impacted by noise in 2040 under the Express Lane Alternative. Therefore, potential abatement actions for the impacted receptors were investigated in accordance with relevant guidelines (CDOT, 2015a; FHWA, 2011). Impacted receptors are not guaranteed abatement measures under these guidelines, but abatement measures for the areas must be evaluated for feasibility and reasonableness. Reasonableness includes the amount of noise reduction, cost/benefit of the abatement, and preferences on abatement actions from the benefitting receptors.

A potential barrier was assessed for effectiveness and feasibility. From the results, the barrier was found to be not feasible and reasonable because the cost index was too high and is not recommended for the Express Lane Alternative. Therefore, no noise abatement actions are recommended for the Express Lane Alternative.

The following mitigation measures included in the FEIS (**Table 11**) are still applicable.

Table 11. Noise Impacts and Mitigation for the Express Lane Alternative Express Lane

Impacts	Mitigation
Construction Noise	<p>To minimize construction noise levels, typical best practices should be incorporated into construction contracts where it is appropriate to do so. These may include:</p> <ul style="list-style-type: none"> Notifying neighbors in advance when construction noise may occur and its expected duration so that they may plan appropriately. Managing construction activities to keep noisy activities as far from sensitive receptors as possible. Ensuring exhaust systems on equipment are in good working order. Equipment would be maintained on a regular basis, and equipment may be subject to inspection by the construction project manager to ensure maintenance. Locating stationary equipment as far from noise sensitive receptors as possible. Performing construction activities in noise sensitive areas during hours that are least disturbing to adjacent and nearby residents.

F.7 WATER QUALITY

Impacts to and mitigation for water quality have changed with the Express Lane Alternative. The primary change in regulations since the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c) is that CDOT has negotiated a new Municipal Separate Storm Sewer System (MS4) permit with CDPHE. If a planned project creates more than one acre of ground disturbance, will increase impervious area by 20 percent or more, and is tied to a FEIS, CDOT's New Development Redevelopment Program requires implementing permanent water quality treatment.

Under the FEIS Preferred Alternative and the ROD1 Selected Alternative, water quality detention basins were designed to provide a sufficient volume to treat 101% of the impervious surfaces within the project area. The new CDOT 2015 MS4 permit requires treating 90% of the new impervious surface. This Revised ROD1 between SH 392 and SH 14 conforms to the new CDOT 2015 MS4 permit.

I-25 from SH 392 to SH 14 is located in the Cache la Poudre River watershed. The main channel of the Cache la Poudre River crosses underneath I-25 approximately 0.6 mile north of Harmony Road near milepost 266 and flows from the northwest toward the southeast/east until its eventual confluence with the South Platte River approximately 21 miles to the east. The Cache la Poudre River watershed occupies 264,736 acres, and I-25 accounts for approximately 337 acres of impervious surface within this watershed from SH 1 to SH 60. Boxelder Creek is a tributary of the Cache la Poudre River and crosses underneath I-25 approximately 0.5 mile north of Prospect Road near milepost 269. Boxelder Creek flows from east to west underneath I-25 then parallels I-25 to the west before its confluence with the Cache la Poudre River.

These segments of the Cache la Poudre River and Boxelder Creek are listed on the CDPHE Water Quality Control Commission Regulation No. 93 for the year 2016. This also is known as the Section 303(d) list for Water-Quality-Limited segments requiring a Total Maximum Daily Load (TMDL). The Cache la Poudre River Segment COSPCP12 includes the mainstem of the Cache la Poudre River from the confluence with Boxelder Creek west of I-25 to the confluence with the South Platte River. It is monitored for pH; is impaired *Escherichia coli* (*E. coli*) from May to October; and is identified as a high 303(d) priority. The Boxelder Creek Segment COSPCP13b includes the mainstem of Boxelder Creek from its source to its confluence with the Cache la Poudre River. It is impaired for selenium and *E. coli* and is identified as a low 303(d) priority. *E. coli* and selenium are not generally associated with roadway runoff.

F.7.1 EXPRESS LANE ALTERNATIVE EXPRESS LANE IMPACTS

Roadway improvements typically impact existing drainage conditions. This primarily includes impacts to natural drainageways due to the physical location of the roadway, increased stormwater runoff, and increased sediment loads. Roadway runoff typically may contain the following pollutants:

- ▶ Sediment – solids, such as sand, silt, and clays, are washed from paved surfaces or eroded from roadway slopes and become suspended in water. Sediment due to construction is a common water quality problem.
- ▶ Heavy metals – metals such as zinc and copper from fuels, brake pads, and vehicle wear.
- ▶ Magnesium chloride and salt – de-icers used on roads for winter maintenance.
- ▶ Oil and grease – petroleum hydrocarbons deposited by vehicles on roadways and parking lots.

The Express Lane Alternative will have 86.4 acres of additional impervious surface.

The Express Lane Alternative will include permanent water quality treatment features to address pollutants from roadway runoff. Consequently, it is anticipated that water quality conditions will improve for the Express Lane Alternative when compared to the No Action Alternative. Table 3.7-3 Common Highway-Related Surface Water Quality Impacts in the FEIS (CDOT, 2011a) identifies impacts common to all of the alternatives that affect water quality in the absence of BMPs.

F.7.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 12**) are still applicable.

Table 12. Water Quality Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>Increased impervious surface area</p> <p>Potential for temporary water quality impacts during construction</p> <p>Potential to encounter groundwater</p>	<p><u>Structural Best Management Practices</u> Extended detention basins have been identified as the primary structural BMP for this project. Roadway drainage improvements will be designed to minimize these impacts and impacts to adjacent properties, and to comply with local, state and federal drainage and floodplain requirements. Typical roadway drainage improvements include bridges, culverts, storm sewers, outfalls to existing drainageways, water quality detention basins. The Express Lane Alternative would provide permanent water quality treatment with a capacity to treat 90 percent of the new impervious area.</p> <p><u>Temporary Construction Best Management Practices</u> If lead paint is present, this material must not be allowed to flake off and enter receiving waters. (Section 402, Clean Water Act, CDPHE Regulation 61). If cranes and other equipment are used for bridge demolition within a river or streambank area, the equipment will be kept out of the river as much as practicable, or per compliance with Section 404 permit, and all work shall minimize temporary impacts to the river. The creation of a crane pad is necessary if cranes or other equipment cannot be kept out of the river. There is a potential for sediment to enter streams from land disruption and subsequent erosion. Therefore, BMPs such as protecting existing vegetation, placing structural BMPs, and limiting access areas will be implemented in compliance with the CDPHE general construction permit. Stormwater management plans must be developed during design and implemented during construction, and updated as needed to keep the project in compliance with the CDPS-SCP permit for the site. Caissons used to create bridge piers could require groundwater dewatering. A discharge permit and a treatment strategy may be needed before dewatering activities can occur. If other regulated materials are present within or on structures, they must be removed and appropriately recycled or disposed of prior to demolition activities. Typical materials include containerized regulated liquids such as paints, solvents, oil, grease, chemicals, pesticides, and herbicides, and chlorofluorocarbon (CFC) containing equipment (equipment must be emptied before equipment is removed) [Colorado Hazardous Waste Regulations (6 Colorado Code of Regulations [CCR] 1007-3)]. Senate Bill 40 (SB40) certification from the Colorado Division of Parks and Wildlife (CPW) is required when construction occurs in “any streams or its banks or tributaries.” This permit coordination will include identification of measures to protect existing riparian areas, such as mitigating stormwater runoff or replacing riparian vegetation (on a 1:1 basis for trees and a square footage basis for shrubs).</p> <p><u>Groundwater Quality</u> The status of groundwater well use will have to be determined prior to construction activities to identify if active wells are present. Active wells in the final right-of-way will need to be relocated and non-active wells would need to be plugged, sealed, and abandoned. If groundwater is encountered during activities associated with excavations for caisson/retaining walls, the discharge of groundwater is authorized if the following conditions are met and then a dewatering permit is not required: A Construction Stormwater Permit has been obtained; The source is groundwater and/or groundwater combined with stormwater that does not contain pollutants in concentrations exceeding the State groundwater standards in Regulations 5 CCR 1002-41 and 42; The discharge is in accordance with the CDPHE-WQCD Water Quality Policy-27, Low-Risk Discharges—September 2009; The source is identified in the SWMP; Dewatering BMPs are included in the SWMP, and These discharges do not leave the site as surface runoff or to surface waters.</p>

F.8 WETLANDS AND OTHER WATERS OF THE U.S.

Impacts to Wetlands and Other Waters of the U.S. have changed with the Express Lane Alternative. Wetlands in the project area were delineated during late spring through the early fall seasons of 2005 and 2006 (Ecotone, 2006). Wetland determinations were based on documenting the presence of diagnostic environmental characteristics for vegetation, hydrology, and soils as outlined in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987). Information regarding wetlands and other waters of the U.S. in the project area is described in Section 3.8 Wetlands in the FEIS (CDOT, 2011a).

The new Clean Water Rule: Definition of “Waters of the United States,” was published June 29, 2015, and became effective August 28, 2015, (40 CFR§230.0); however, a nationwide stay was issued by the U.S. Court of Appeals for the 6th Circuit on October 9, 2015, which blocked the implementation of the new rule. In response to this decision, EPA and the U.S. Department of the Army resumed nationwide use of the agencies’ prior regulations defining the term “waters of the United States.” Those regulations will be implemented as they were prior to August 27, 2015.

F.8.1 EXPRESS LANE ALTERNATIVE IMPACTS

The Express Lane Alternative includes major and minor structure rehabilitation and replacement (**Table 2**), construction of an Express Lane, installation of three water quality detention basins, and construction of the Poudre River Trail. Development of these components would result in permanent impacts totaling an estimated 5.29 acres.

F.8.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 13**) are still applicable.

Table 13. Wetlands and Other Waters of the U.S. Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
Permanent impacts totaling an estimated 5.29 acres	<p>All impacted wetlands and jurisdictional open waters will be mitigated in accordance with the USACE mitigation policies, and the conditions of the USACE Section 404 permit. Impacts to wetlands were previously permitted for in accordance with the North I-25 EIS Section 404 permit (NWO-2004-80110-DEN). The Clean Water Act Individual Section 404 permit permitted 16.08 acres of permanent impacts to wetlands and other waters of the U.S. and 2.06 acres of temporary impacts to wetlands and other waters of the U.S. As of February 2017, the individual projects from the FEIS Preferred Alternative have permanently impacted 0.37 acre of wetlands and other waters of the U.S. and 0.23 acre of temporary impacts. Mitigation has been created at St Vrain State Park to offset the total impact acreage to wetlands in the North I-25 EIS regional study area.</p> <p>During construction, BMPs will be used to avoid indirect construction impacts to wetlands. Materials and equipment will be stored a minimum of 50 feet from wetlands, drainages, and ditches that could carry toxics materials into wetlands. Construction fencing and appropriate sediment control BMPs will be used to mark wetland boundaries and sensitive habitats during construction.</p> <p>Sediment and erosion control will be required to be placed during all phases of construction and will remain in place until all disturbed areas have reached 70 percent of preconstruction vegetative cover.</p>

F.9 FLOODPLAINS

The proposed improvements to I-25 between SH 392 and SH 14 impact the existing Federal Emergency Management Agency (FEMA) regulated floodplains for the Cache la Poudre River and Boxelder Creek. Floodplains include both flood fringe areas and floodway areas in both watersheds, and are managed by minimum federal standards established by the National Flood Insurance Program (NFIP). NFIP flood risk management standards are administered by local agencies within their jurisdiction.

The various governmental policies listed in the FEIS still apply and guidance corresponds to the most recent editions. The CDOT *Erosion Control and Stormwater Quality Guide* was revised in 2011. An updated Flood Insurance Study (FIS) was completed for Larimer County and all incorporated areas on February 6, 2013.

The FEMA Flood zone for the Cache la Poudre River is in the process of being revised with a Risk MAP Restudy/PMR with the estimated effective date of December 2019. The Boxelder Alliance, led by the City of Fort Collins, is currently preparing a Letter of Map Revision (LOMR) for Boxelder Creek. It is anticipated that the LOMR will be submitted for FEMA review in 2017. CDOT is coordinating with the City of Fort Collins and FEMA during design of the proposed I-25 bridges over the Cache la Poudre River. Section 3.9 Floodplains in the FEIS (CDOT, 2011a) provides information regarding floodplains and FEMA zones.

F.9.1 EXPRESS LANE ALTERNATIVE IMPACTS

The proposed improvements to I-25 from SH 392 to SH 14 would impact the existing FEMA regulated floodplains for the Cache la Poudre River and Boxelder Creek. The proposed bridge will be longer, and the profile of I-25 will be raised to provide the capacity needed to pass the same 100-year flows that currently pass under the bridge.

F.9.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 14**) are still applicable.

Table 14. Floodplains Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
Floodway or Floodplain Encroachment	<p>All encroachment in the floodway portion of the floodplain will be designed with compensatory conveyance, certified to cause no rise in the BFE, and documented in an approved floodplain development permit to the local agency administering NFIP standards in the affected reach.</p> <p>CLOMRs may be required pre-construction, and LOMRs post-construction using certified as-built information from ground survey.</p> <p>All encroachment in the flood fringe portion of the floodplain will be documented in an approved floodplain development permit to the local agency administering NFIP standards in the affected reach.</p>

Table 14. Floodplains Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
100-year Cache la Poudre River Flow Splits	<p>All flow split discharges and BFEs shall be maintained in their current effective condition determined by federal, state, and local governing agencies.</p> <p>Evidence of maintaining flow splits or mitigating changes shall be documented in an approved CLOMR, floodplain development permit, and no-rise certification prior to construction.</p> <p>Evidence of NFIP compliance shall be documented in an approved LOMR, floodplain development permit, and no-rise recertification after construction, and supported by certified as-built ground survey information.</p> <p>The 100-year FEMA design flows will be used for freeboard determinations, scour design, and to ensure that flow velocities are acceptable. The 500-year design flows will be used to further assess the scour design and set the depths of piles or caissons. The design will consider the maximum allowable backwater as allowed by FEMA. Degradation, aggregation, and scour are to be determined. Adequate counter measures will be selected using criteria established by the National Cooperative Highway Research Program Report 568 (TRB, 2006).</p> <p>The design will be such that minimal disruption to the ecosystem will occur. The design will consider costs for construction and maintenance. A bridge deck drainage system that controls seepage at joints will be considered. If possible, bridge deck drains will be piped to a water quality feature before being discharged into a floodplain. The designs will comply with federal and state agencies. The designs will make every consideration towards local agency requirements and will be consistent with existing watershed and floodplain management programs.</p> <p>Floodplain impacts would include increasing the sizes of bridges, culverts, and other drainage facilities in order to better convey floodwaters. In most cases, larger drainage structures would not disturb the existing low flow channel areas where riparian habitat is located. The overbanks adjacent to the low flow channels are generally expanded with the newer structures. In order to pass the higher flows. Enlarged overbank areas are generally revegetated with a diverse planting in order to enhance the habitat. Upstream flood risks should decrease with an enlarged drainage structure. Downstream flood risks can increase due to the improved conveyance of the stormwaters. It is CDOT policy to size a drainage structure based on FEMA flows, to obey the Natural Flow Rule of Colorado, and to hold others to the same standard (CDOT Drainage Design Manual, 2004, Sec. 2.5.2 and 12.1.1). The standard flood for CDOT and FEMA is the 100-year flood. Impacts to downstream areas must be assessed at the time of preliminary and final design by using detailed hydraulic methods. All improvements are to follow the guidelines described in Section 3.9.1 of the CDOT Drainage Design Manual.</p>

F.10 VEGETATION AND NOXIOUS WEEDS

Impacts to vegetation have changed with the Express Lane Alternative. Biological resource data for the regional study area were collected from maps, databases, GIS data, aerial photography, publications (Weber, 2001), and agency information. This information was used to provide context of the resource in the region and to assist in assessing direct, indirect, and cumulative effects in the project area. Field studies were conducted in the project area and provide the basis for assessing common species present. Information regarding vegetation and noxious weeds in the project area is described in Section 3.10 Vegetation and Section 3.11 Noxious Weeds of the FEIS (CDOT, 2011a). Most of the

impacts occur on agricultural land abutting CDOT ROW or on previously disturbed vegetation and areas that have been replanted or landscaped within CDOT ROW.

F.10.1 EXPRESS LANE ALTERNATIVE IMPACTS

Due to the geographical size of the project area and the scope of the vegetation assessments, impacts to general vegetation communities are described. Impacts from the Express Lane Alternative would include the removal of approximately 206 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities. The disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources.

F.10.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 15**) are still applicable.

Table 15. Vegetation and Noxious Weeds Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>Removal of approximately 206 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.</p>	<p>Minimize the amount of disturbance and limit the amount of time that disturbed locations are allowed to be non-vegetated. The project will follow CDOT standard specifications for the amount of time that disturbed areas are allowed to be non-vegetated.</p> <p>Avoid existing trees, shrubs, and vegetation to the maximum extent possible, especially wetlands and riparian plant communities. The project team will coordinate with the CDOT landscape architect before construction to determine the types of vegetation that will be protected during construction.</p> <p>Salvage weed-free topsoil for use in seeding.</p> <p>Implement temporary and permanent erosion control measures to limit erosion and soil loss. Wildlife-friendly erosion control blankets will be used on steep, newly seeded slopes to control erosion and to promote the establishment of vegetation. Slopes will be roughened at all times.</p> <p>Revegetate all disturbed areas with native grass and forb species. Seed, mulch, and mulch tackifier will be applied in phases throughout construction.</p> <p>Develop an acceptable revegetation plan with the CDOT landscape architect and with county personnel in Larimer County. The revegetation plan must also be acceptable to municipalities, such as Fort Collins and Longmont, within their jurisdictional areas.</p> <p>Senate Bill 40 (33-5-101-107, CRS 1973 as amended) requires any agency of the state to obtain wildlife certification from the CDOW when the agency plans construction in "...any stream or its bank tributaries...". In these areas, trees and shrubs are recommended to be replaced on a 1:1 basis (trees) and square-foot basis (shrubs).</p> <p>The proposed project area falls within the Shortgrass Prairie Initiative, an agreement between CDOT, CDOW, FHWA, and USFWS. The initiative included a BA and mitigation measures for FHWA funding of CDOT's routine maintenance and upgrade of existing transportation corridors in eastern Colorado for a 20-year period beginning in 2003. The BA includes all of I-25 within Colorado.</p>

Table 15. Vegetation and Noxious Weeds Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources.</p>	<p>List B noxious weed species populations will need to be mitigated within the project area using appropriate herbicide treatments. An Integrated Noxious Weed Management Plan in the form of a <i>CDOT Standard Specifications for Road and Bridge Construction</i> (CDOT, 2011d) Project Special Provision 217 <i>Herbicide Treatment</i> will be incorporated into project design and implemented during construction. Specific BMPs will be required during construction to reduce the potential for introduction and spread of noxious weed species. These will include:</p> <p>Noxious weed mapping will be included in the construction documents along with appropriate weed control methods.</p> <p>Weed management measures will include removal of heavily infested topsoil, herbicide treatment of lightly infested topsoil as well as other herbicide and/or mechanical treatments, limiting disturbance areas, phased seeding with native species throughout the project, and monitoring during and after construction.</p> <p>Use of herbicides will include selection of appropriate herbicides and timing of herbicide spraying and use of a backpack sprayer in and adjacent to sensitive areas, such as wetlands and riparian areas.</p> <p>Certified weed-free hay and/or mulch will be used in all revegetated areas.</p> <p>No fertilizers will be allowed on the project site.</p> <p>Preventative control measures for project design and construction may include:</p> <p>Only native species will be used to revegetate sites disturbed by construction activities. Native plant species used for revegetation will be coordinated with agencies and CDOT specialists.</p> <p>Materials used for revegetating will be inspected and regulated in accordance with provisions of the Weed Free Forage Act, Title 35, Article 27.5, CRS.</p> <p>When salvaging topsoil from on-site construction locations, the potential for spread of noxious weeds will be considered. Imported topsoil must be inspected by the project's Noxious Weed Management Supervisor. If it is determined to be contaminated with weeds, or if it cannot be inspected properly, it cannot be used on the project.</p> <p>Equipment will remain on designated roadways and stay out of weed-infested areas until the areas are treated. All equipment will be cleaned of all soil and plant parts before its arrival at a project site.</p>

F.11 WILDLIFE

Three occupied bald eagle nests are located within 0.5 mile of I-25 along the Cache la Poudre River to the east and west. The Fossil Creek Reservoir Communal Roost site where bald eagles roost, is located northwest of I-25/SH 392 (**Figure 8**, **Figure 9**, and **Figure 10**). Two potential bald eagle nests are located east of I-25 along the Cache la Poudre River.

A total of 12 raptors nests were observed within 0.5 mile of the project area. The Cache la Poudre River and the Fossil Creek Reservoir are both sensitive wildlife habitat areas, and the Cache la Poudre River is a wildlife crossing area of I-25. Ditches, streams, and water bodies, such as Boxelder Creek, the Cache la Poudre River, and Fossil Creek Reservoir, support a variety of aquatic insects, macroinvertebrates, and fish.

Figure 8. Bald Eagle and Raptor Nests and Black-Tailed Prairie Dog Colonies

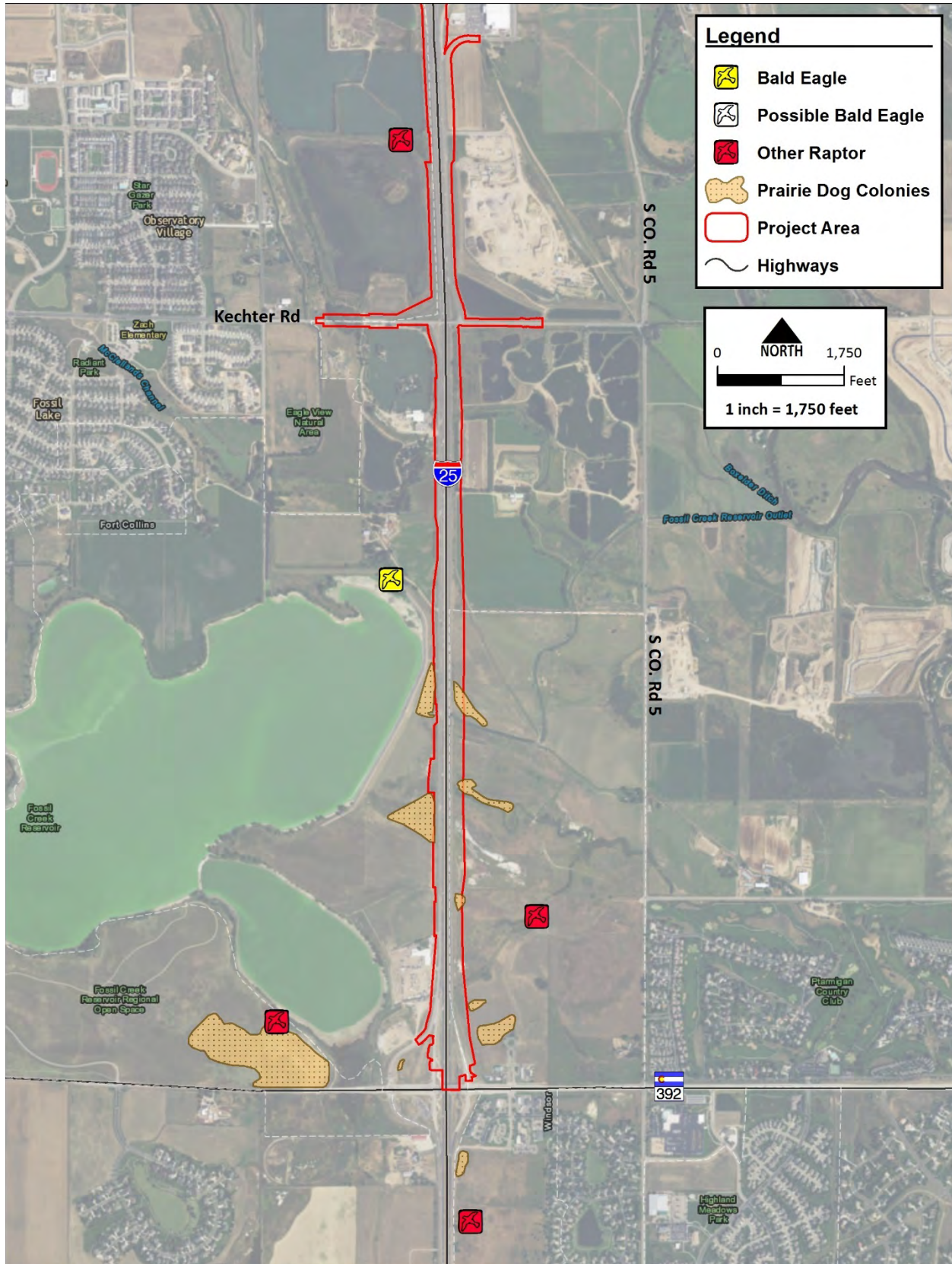


Figure 9. Bald Eagle and Raptor Nests and Black-Tailed Prairie Dog Colonies

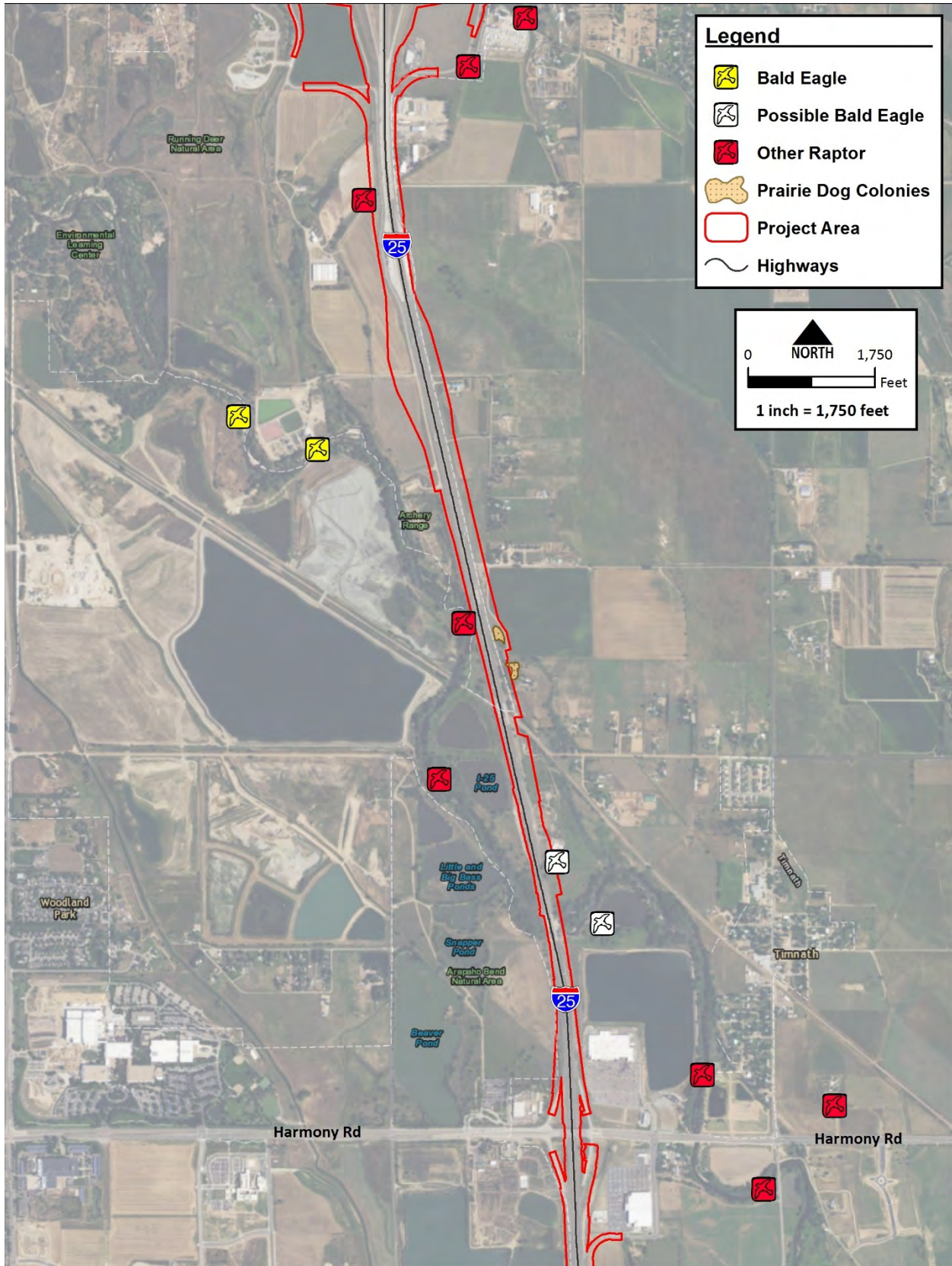
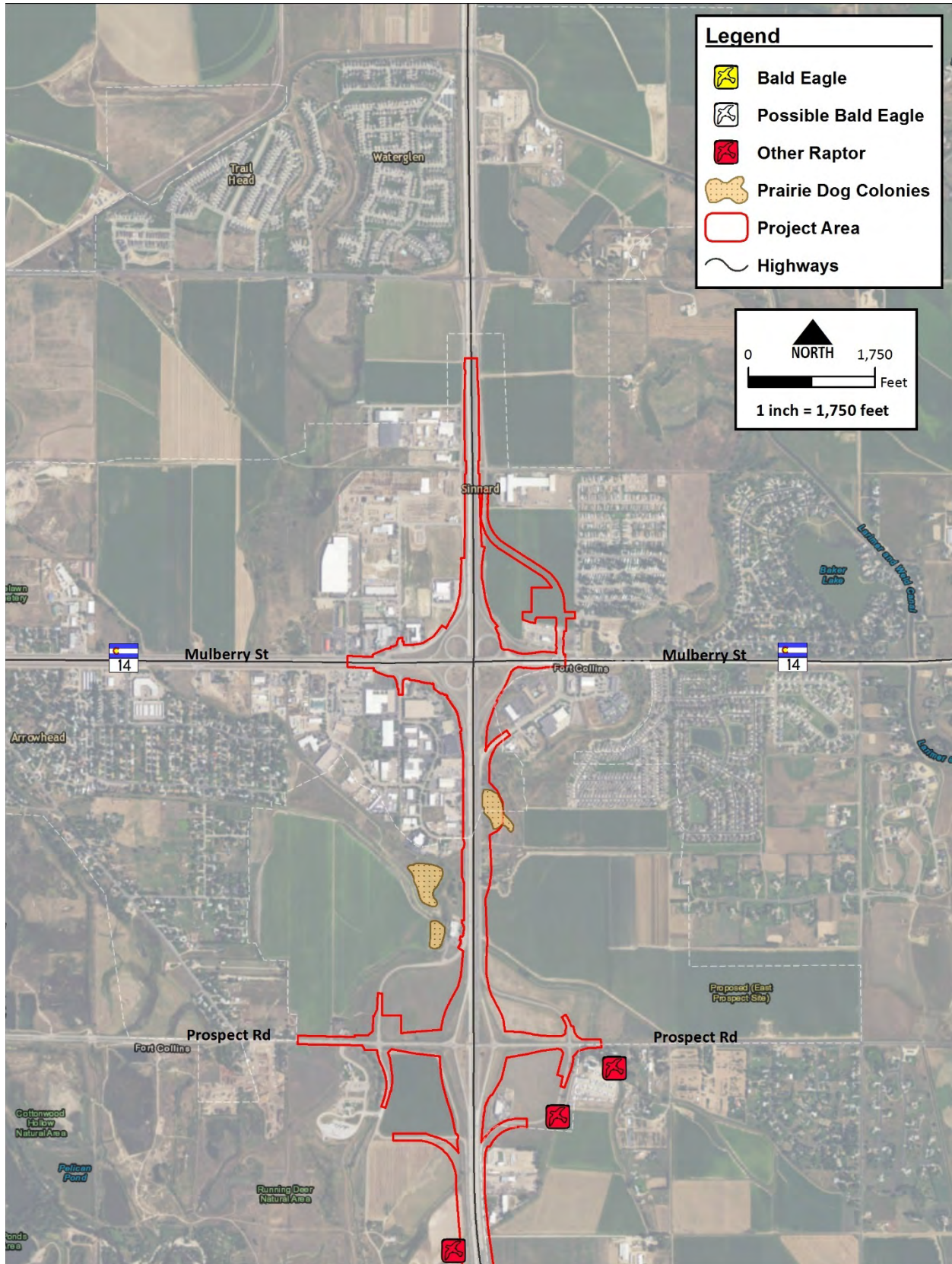


Figure 10. Bald Eagle and Raptor Nests and Black-Tailed Prairie Dog Colonies



Black-tailed prairie dogs (*Cynomys ludovicianus*) have established colonies in the southeast quadrant of the I-25/SH 14 interchange, east of I-25 at the bridge over the Cache la Poudre River, and on both the east and west sides of I-25 north of SH 392.

Information regarding wildlife in the project area is described in Section 3.12 *Wildlife and Sensitive Wildlife Habitats in the Project Area* in the FEIS (CDOT, 2011a).

F.11.1 EXPRESS LANE ALTERNATIVE IMPACTS

Migratory Birds. Direct effects to migratory birds, such as the Great blue heron (*Ardea herodias*) would occur from highway widening and bridge reconstruction. Direct effects would include habitat loss, displacement during construction and increased habitat fragmentation. Indirect effects include increased disturbance due to noise and light from vehicles, and increased mortality from collisions with vehicles.

Sensitive Wildlife Habitat Areas. Sensitive wildlife habitat in the project area is primarily riparian and wetland areas associated with major drainageways. These areas correspond closely with movement corridors for big game and other wildlife, such as the common gartersnake (*Thamnophis sirtalis*) and the Northern leopard frog (*Rana pipiens*). Effects to sensitive wildlife habitat from the Express Lane Alternative would include removal of riparian tree and shrub vegetation that provides cover for a wide variety of species. These effects would occur primarily during construction and replacement of the I-25 bridges over the Cache la Poudre River. Long-term and indirect effects would include increased fragmentation of riparian habitat. Indirect effects of increased noise, light, and human disturbance would reduce available habitat.

Other Wildlife. Effects to other wildlife, such as the black-tailed prairie dog, from disturbance of degraded habitat in areas such as highway rights-of-way would include potential direct effects such as loss of habitat—especially grassland habitat; disruption of migration and other movements, especially along riparian corridors; and increased mortality from collisions with automobiles. Potential indirect and long term effects would include increased habitat fragmentation.

Aquatic Resources. Adverse effects on fish and other aquatic organisms during construction would include temporary loss of habitat during construction of piers, bridges, culverts, and other work within streams. Increased erosion during construction could result in increased sediment loads, which would adversely affect aquatic organisms. Working directly in streams would increase sediment loads, which could change water temperature or smother and kill the eggs of fish and amphibians as well as direct mortality through crushing. Working directly in streams could also interfere with seasonal movements of sensitive fish species. These impacts would be short-term and would be mitigated through use of construction best management practices (BMPs).

Increases in traffic could result in increased contaminants in roadway runoff, including deicer, and would increase the risk of accidental spills of hazardous materials, which could affect aquatic organisms. Construction of new culverts, lengthening of existing culverts, or widening existing bridges would adversely affect fish and other aquatic species by increasing shading and/or replacing natural streambed with concrete. Stream habitat would be potentially improved with the replacement of existing concrete box culverts (CBCs) with more numerous culverts or free-spanning bridges.

F.11.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 16**) are still applicable.

Table 16. Fish and Wildlife Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p><i>Migratory Birds</i> Direct effects would include habitat loss, displacement during construction, and increased habitat fragmentation. Indirect effects include increased disturbance due to noise and light from vehicles, and increased mortality from collisions with vehicles.</p>	<p>CDOT will implement the following mitigation measures for projects that will have an impact to migratory birds:</p> <p>Tree trimming and/or removal activities will be completed before birds begin to nest or after the young have fledged. In Colorado, most nesting and rearing activities occur between April 1 and August 31. However, since some birds nest as early as February, a nesting bird survey will be conducted by a biologist before any tree trimming or removal activities begin.</p> <p>Bridge or box culvert work that may disturb nesting birds will be completed before birds begin to nest or after the young have fledged. No bridge or box culvert work will take place between April 1 and August 31. If work activities are planned between these dates, nests will be removed (before nesting begins) and appropriate measures taken to assure no new nests are constructed.</p> <p>Clearing and grubbing of vegetation that may disturb ground nesting birds will be completed before birds begin to nest or after the young have fledged. If work activities are planned between April 1 and August 31, vegetation will be removed and/or trimmed to a height of six inches or less prior to April 1. Once vegetation has been removed and/or trimmed, appropriate measures, i.e. repeated mowing/trimming, will be implemented to assure vegetation does not grow more than six inches.</p> <p>Burrowing owl surveys will be conducted prior to any work in prairie dog colonies between March 15 and October 31. If burrowing owls are present, prairie dog removal will be scheduled to occur outside this time period. If burrowing owls are found within the construction footprint during preconstruction surveys, nests will be left undisturbed and additional avoidance measures will be developed in coordination with CPW. Direct impacts to burrowing owls will be avoided by covering or destroying prairie dog burrows prior to construction (prior to March 15).</p>
<p><i>Raptors (including bald eagles)</i> Direct effects would include habitat loss, displacement during construction and increased habitat fragmentation. Indirect effects include increased disturbance due to noise and light from vehicles, and increased mortality from collisions with vehicles.</p>	<p>CPW has developed recommended buffer zones and seasonal restrictions for new surface occupancy within certain distances of nest sites of several raptor species. Surface occupancy is defined as human-occupied buildings and other structures such as oil and gas wells, roads, railroad tracks, or trails. The USFWS typically considers that implementation of the CDOW buffers and seasonal restrictions fulfill compliance requirements of the Migratory Bird Treaty Act for raptors.</p> <p>A raptor nest survey (including bald eagles) will be conducted prior to project construction to identify raptor nests and nesting activity in the vicinity of the proposed project. If an active raptor nest is found on site, the recommended buffers and seasonal restrictions recommended by the CDOW (CDOW, 2008) for raptors will be established during construction to avoid nest abandonment.</p> <p>If raptor nests will be impacted by the proposed project, specific mitigation measures for impacts to nesting raptors will be developed in coordination with the CDOW and USFWS prior to construction. If disturbance of raptor nests is unavoidable, mitigation measures will include the construction of artificial nests in suitable habitat or enhancement of prey habitat. Artificial nests will be constructed in the same general area as impacts.</p>

Table 16. Fish and Wildlife Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p><i>Prairie Dogs</i> Degraded habitat in areas such as highway rights-of-way would include potential direct effects such as loss of habitat—especially grassland habitat</p>	<p>Prairie dogs are present within the limits of disturbance of the project. The prairie dogs will be removed in accordance with CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d) Project Special Provision 201 Prairie Dog Management.</p>
<p><i>Big Game and Movement Corridors</i> Removal of riparian tree and shrub vegetation that provides cover for a wide variety of species. These effects would occur primarily during construction and replacement of the I-25 bridges over the Cache la Poudre River. Long-term and indirect effects would include increased fragmentation of riparian habitat. Indirect effects of increased noise, light, and human disturbance would reduce available habitat.</p>	<p>Impacts to big game will be minimized through construction of crossing structures that will be designed to maintain wildlife movement corridors. In areas identified as important movement corridors, the following measures will be recommended. These mitigation measures may not be feasible at all wildlife crossing areas due to cost or engineering issues. The locations where these mitigation measures will be implemented will be identified as the preferred alternative is identified and final design is undertaken. To maximize use of movement corridors by wildlife, bridge spans and culverts will have the following features:</p> <p>A minimum clearance height of 10 feet and width of 20 feet for deer crossing structures sized for deer will be adequate for most common wildlife. The recommended minimum culvert diameter is 48 inches for medium-sized carnivores and 36 inches for small carnivores.</p> <p>A minimum “openness ratio” of 0.75. The “openness ratio” is defined as the height of the structure multiplied by the structure width and divided by the structure length, measured in meters.</p> <p>Shrubs and vegetative cover placed at bridge underpass openings to attract wildlife and provide a “funnel effect.”</p> <p>For structures that periodically convey water, ledges or shelves to provide passage alternatives during high water.</p> <p>To avoid human disturbance to wildlife movement along the Cache la Poudre River, the Poudre River Trail has been placed along the southern abutment of the I-25 bridges over the Cache la Poudre on the south side of the Cache la Poudre River channel away from the vegetated riparian area that facilitates wildlife movement along the Cache la Poudre River.</p> <p>Avoiding the placement of lighting near the crossing structures. The Poudre River Trail does not include lighting for the trail to avoid impacts to wildlife movement at night along the Cache la Poudre River.</p> <p>Avoid attracting wildlife to the right-of-way by keeping roadside vegetation height to a minimum.</p>

Table 16. Fish and Wildlife Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p><i>Aquatic Resources</i> - Adverse effects on fish and other aquatic organisms during construction would include temporary loss of habitat during construction of piers, bridges, culverts, and other work within streams. Increased erosion during construction could result in increased sediment loads, which would adversely affect aquatic organisms. Increases in traffic could result in increased contaminants in roadway runoff, including deicer, and would increase the risk of accidental spills of hazardous materials, which could affect aquatic organisms.</p>	<p>To offset temporary impacts to aquatic species from habitat disturbance, aquatic habitats will be restored after construction activities have ceased. The following design measures will be implemented to mitigate potential impacts to aquatic species, including native fish:</p> <ul style="list-style-type: none"> Riffle and pool complexes will be maintained and/or created. Natural stream bottoms will be maintained. Culverts will be partially buried and the bottom will be covered with gravel/sand and have a low gradient. Culverts to be replaced will be replaced with one of equal or greater size. Culverts will not have grates, impact dissipaters, or any other features that will impede fish movement. To avoid erosion, induced siltation, and sedimentation, sediment/erosion control BMPs shall be placed during each phase of construction. Upon completion of slope, seeding in combination with mulch/mulch tackifier or blanket shall occur within the limits set in Section 208 of CDOT specifications. Erosion control blankets will be "wildlife friendly," consisting of 100 percent biodegradable materials. Access points to streams during construction will be limited to minimize degradation of the banks. No new fish passage barriers will be created. Existing drop structures that create a barrier to fish movements will be removed or redesigned where possible.

F.12 THREATENED, ENDANGERED, AND STATE SENSITIVE SPECIES

As required by the United States Department of Interior Fish and Wildlife Service (USFWS) North I-25 Programmatic Biological Opinion (PBO), individual projects that are proposed under the programmatic consultation require an updated baseline of threatened and endangered species in the project area (**Table 17**). Information regarding threatened, endangered, and state sensitive species in the project area is described in Section 3.13 *Threatened, Endangered, and State Sensitive Species* of the FEIS (CDOT, 2011a). The USFWS was informed of the changes included in the Revised ROD1 between SH 392 and SH 14 in a letter dated March 23, 2017. Concurrence from the USFWS was received on April 7, 2017 (**Appendix B**).

Table 17. Federally-Listed Threatened and Endangered Species and Colorado Sensitive Species

Common Name	Scientific Name	Status ¹	Habitat	Potential to Occur in Project Area
Interior Least Tern ²	<i>Sternula antillarum</i>	FE, SE	Platte River and surrounding habitat in Nebraska	Not present, but may be affected by depletions to the Platte River system
Piping plover ²	<i>Charadrius melodus</i>	FT, ST	Platte River and surrounding habitat in Nebraska	Not present, but may be affected by depletions to the Platte River system
Whooping crane ²	<i>Grus americana</i>	FE, SE	Platte River and surrounding habitat in Nebraska	Not present, but may be affected by depletions to the Platte River system
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	SC	Nest on cliffs and forage over adjacent coniferous and riparian forests. Migrants occur mostly around waterbodies but may also be seen in grasslands and agricultural areas.	No suitable habitat occurs in the project area.
Ferruginous hawk	<i>Buteo regalis</i>	SC	Nests in grasslands and often forages in prairie dog colonies	Likely to occur near prairie dog colonies in winter (Figures 8, 9, and 10).
Bald Eagle	<i>Haliaeetus leucocephalus</i>	ST	Reservoirs and rivers. In winter they may also occur locally in semi-deserts and grasslands, especially near prairie dog towns.	Three occupied nests are located within three miles of I-25 along the Cache la Poudre River to the east and west, and the Fossil Creek Reservoir Communal Roost site where bald eagles roost, is located northwest of I-25/SH 392. Two potential nests are located east of I-25 along the Cache la Poudre River (Figures 8, 9 and 10).
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	FT, ST	Found in or the vicinity of old growth forest.	No suitable habitat is present.
Western Burrowing Owl	<i>Athene cunicularia</i>	ST	Nests in Black-Tailed Prairie Dog colonies.	Black-Tailed Prairie Dog colonies in the southeast quadrant of the I-25/SH 14 interchange, east of I-25 at the bridge over the Cache la Poudre River, and on both the east and west sides of I-25 north of SH 392 (Figures 8, 9, and 10).
Common Garter Snake	<i>Thamnophis sirtalis</i>	SC	Streams, ditches, and Ponds.	Known to occur on major streams and rivers and other aquatic habitats in the project area.
Northern Leopard Frog	<i>Rana pipiens</i>	SC	Streams, lakes, ponds, marshes, and wet meadows.	Known to occur in the Cache la Poudre drainages.
Black-tailed Prairie Dog	<i>Cynomys ludovicianus</i>	SC	Open space and vacant land.	Have established colonies in the southeast quadrant of the I-25/SH 14 interchange, east of I-25 at the bridge over the Cache la Poudre River, and on both the east and west sides of I-25 north of SH 392 (Figures 8, 9, and 10).
Northern Pocket Gopher	<i>Thomomys talpoides</i>	SC	Found in many different habitat types from agricultural and pasture lands in lower elevations all the way up to alpine tundra. Found usually in meadows or along streams.	The project area is in a developed agricultural setting; therefore, no impacts are expected.
Swift fox	<i>Vulpes velox</i>	SC	Shortgrass prairie	Potentially occurs east of I-25 in Larimer County.

Table 17. Federally-Listed Threatened and Endangered Species and Colorado Sensitive Species

Common Name	Scientific Name	Status ¹	Habitat	Potential to Occur in Project Area
Townsend's big-eared bat	<i>Plecotus townsendii</i>	SC	Caves and mineshafts, urban areas, and riparian areas	Potentially occurs in urban areas and riparian areas
Preble's Meadow Jumping Mouse	<i>Zapus hudsonius preblei</i>	FT, ST	Riparian areas along major drainages with adequate shrub and tree cover.	Suitable habitat is present along the Cache la Poudre River but is unlikely to be occupied based on trapping data.
Canada lynx	<i>Lynx canadensis</i>	FT	None. The project area does not meet preferred elevations in Colorado (a minimum of 8,000 feet above mean sea level), does not have the preferred vegetative cover with complex structural components for denning or transients, and does not have the preferred prey base (i.e. snowshoe hare) for the species.	No suitable habitat is present.
North American wolverine	<i>Gulo luscus</i>	Federally Proposed Threatened	None. While wolverines can cover great distances and be found in a variety of habitats, the project area does not have the preferred vegetative cover, such as dense riparian areas for transients and does not have the consistent, deep snowpack for denning.	No suitable habitat is present.
Common shiner	<i>Notropis cornutus</i>	SE	Cool, clear streams with moderate gradient, gravelly bottoms, and shady areas.	May occur in the Cache la Poudre River.
Brassy minnow	<i>Hybognathus hankinsoni</i>	ST	Cool, clear streams with abundant aquatic vegetation and mud or gravel substrate	Known to occur in the Cache la Poudre River.
Iowa darter	<i>Etheostoma exile</i>	SC	Lakes with rooted aquatic vegetation and streams with cool, clear water, undercut banks, and vegetation extending from the bank into the water	Known to occur in the Cache la Poudre River.
Stonecat	<i>Noturus flavus</i>	SC	Streams with strong current and rubble, rocks, or woody debris	May occur in the Cache la Poudre River.
Pallid sturgeon ²	<i>Scaphirhynchus albus</i>	FE	Platte River and surrounding habitat in Nebraska	Not present, but may be affected by depletions to the Platte River system
Greenback cutthroat trout	<i>Oncorhynchus clarki stomias</i>	FT	None. There are no coldwater streams or rivers within the project area.	No suitable habitat is present.
Cylindrical papershell	<i>Anodontooides ferussacianus</i>	SC	Mud and sand in small Creeks.	Potentially occurs in Boxelder Creek.
North Park phacelia	<i>Phacelia formosula</i>	FE	None. The project does not meet elevation requirements (8,000 to 8,300 feet above mean sea level).	No suitable habitat is present.
Arapahoe snowfly	<i>Arsapnia arapahoe</i>	FC	None. There are no coldwater streams or rivers within the project area.	No suitable habitat is present.
Ute Ladies'-Tresses Orchid	<i>Spiranthes diluvialis</i>	FT	Open riparian areas, floodplains, and alluvial meadows.	Potential habitat along the Cache la Poudre River.

Table 17. Federally-Listed Threatened and Endangered Species and Colorado Sensitive Species

Common Name	Scientific Name	Status ¹	Habitat	Potential to Occur in Project Area
Colorado Butterfly Plant	<i>Oenothera coloradensis</i>	FT	Zone between wetlands and upland prairies in subirrigated drainage bottoms of active, meandering streambeds.	Potential habitat along the Cache la Poudre River.
Western Prairie Fringed Orchid	<i>Platanthera praeclara</i>	FT	Found most often on unplowed, calcareous prairies and sedge meadows. Soil moisture is critical for this plants' life history.	No suitable habitat is present.

Source: U.S. Fish and Wildlife Service (USFWS), Information, Planning, and Conservation System (IPAC), 2016.

Notes:

- (1) FE = Federally Endangered Species
FT = Federally Threatened Species
C = Candidate Species
SE = State Endangered
ST = State Threatened
SC = State Species of Special Concern
- (2) Water-related activities/use in the South Platte River Basin may affect the species in Nebraska. Effects to Platte River species are addressed through the South Platte Programmatic Biological Assessment (SPPBA) dated February 22, 2012. Water used for this project will be reported to the USFWS at year's end after completion of the project per the South Platte Programmatic Biological Opinion (SPPBO).

F.12.1 EXPRESS LANE ALTERNATIVE IMPACTS

Preble's Meadow Jumping Mouse Habitat. The Express Lane Alternative would impact 1.58 acres of suitable Preble's Meadows Jumping Mouse habitat.

Ute Ladies'-Tresses Orchid and Colorado Butterfly Plant Potential Habitat. The Express Lane Alternative would impact approximately 3.6 acres of riparian habitat along the Cache la Poudre River, which is potential suitable Ute Ladies'-Tresses Orchid and Colorado Butterfly Plant habitat.

Platte River Species Habitat. Given the absence of suitable habitat in the project area, the Express Lane Alternative would have no direct effects on the whooping crane, least tern, piping plover, pallid sturgeon, or western prairie fringed orchid (*Platanthera praeclara*); however, these species may be indirectly affected by water depletions to the Platte River System.

F.12.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 18**) are still applicable.

Table 18. Threatened, Endangered, and State Sensitive Species Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>1.58 acres of suitable Preble's Meadows Jumping Mouse habitat</p>	<p>Mitigation will be implemented in accordance with the North I-25 Corridor Programmatic Biological Opinion (PBO) dated October 13, 2011 and March 23, 2017 consultation, which anticipated a maximum combined permanent and temporary loss of 2.07 acres of Preble's Meadow Jumping Mouse habitat based on effects of the FEIS Preferred Alternative. These measures include:</p> <p><i>Conservation Measures</i></p> <p><i>Pre-construction habitat assessments and/or surveys for PMJM will be conducted where appropriate.</i></p> <p><i>If culverts in occupied or suitable PMJM habitat are replaced or upgraded, the new culverts will incorporate ledges to facilitate small mammal passage.</i></p> <p><i>Lighting within or near PMJM habitat will incorporate current technology and standards (e.g., Dark Skies) at the time of design to reduce lighting impacts to PMJM.</i></p> <p><i>During construction, nighttime work within 0.25 mile of PMJM habitat will be minimized.</i></p> <p><i>Any inadvertent PMJM mortalities during construction will be reported as specified in current trapping guidelines. CDOT will report all relevant information within 24 hours and subsequently submit a completed Injury/Mortality Documentation Report to the Service, Ecological Services Colorado Field Office or the Services' Division of Law Enforcement in Lakewood, Colorado (telephone 720 981-2777).</i></p> <p><i>In the unlikely event that a PMJM (dead, injured, or otherwise) is located during construction, the Colorado Field Office of the Service will be contacted immediately to identify additional measures, as appropriate, to minimize impacts to PMJM.</i></p> <p><i>Mitigation Plan</i></p> <p><i>The temporary impacts of the PMJM habitat in the Cache la Poudre River drainage will be restored at a 1:1 ratio. Any PMJM habitat permanently removed due to project activities will be replaced at a 3:1 ratio. If practicable the permanent habitat will be replaced in the vicinity of the impacts. Habitat impacts will be recalculated and separated into temporary or permanent and a restoration plan developed during final design. FHWA will submit to the USFWS the final plans showing the location and quantity of the impacts and mitigation.</i></p> <p><i>If the mitigation for permanent impacts cannot be completed within the CDOT ROW in the vicinity of the impacts, FHWA will work with CDOT to identify areas within CDOT ROW in the Cache la Poudre drainage and/or enter into an agreement with Fort Collins to mitigate the remainder of the impacts on the Fort Collins property located on the northeast quadrant of the I-25 and the Cache la Poudre River.</i></p> <p><i>Riprap will be mixed with finer grained material to avoid settling. The riprap will be covered with approximately 12 inches of soil and planted with woody and herbaceous vegetation and will not reduce the overall amount of habitat available to PMJM.</i></p> <p><i>Restoration will be conducted in accordance with the March 23, 2017 consultation with the USFWS.</i></p>
<p>Approximately 3.6 acres of riparian habitat, which is potential suitable ULTO and CBP habitat along the Cache la Poudre</p>	<p>Mitigation will be implemented in accordance with the North I-25 Corridor Programmatic Biological Opinion (PBO) dated October 13, 2011 and March 23, 2017 consultation. These measures include:</p> <p>Pre-construction habitat assessments and/or surveys for the ULTO and CBP habitat along the Cache la Poudre.</p>

Table 18. Threatened, Endangered, and State Sensitive Species Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
Indirect effects on the whooping crane, least tern, piping plover, pallid sturgeon, or western prairie fringed orchid	Depletions to the Platte River system due to CDOT activities are addressed by the State of Colorado's participation in the South Platte Water Related Activities Program (SPWRAP) through the "Memorandum of Agreement for Implementation and Operation of the Colorado Portion of the Platte River Recovery Implementation Plan (PRRIP)" (SPWRAP, 2009). All water depletions are considered an adverse effect to four downstream species (whooping crane, interior least tern, piping plover, and pallid sturgeon).

F.13 VISUAL QUALITY

There are no changes in visual quality conditions since the FEIS. The project area remains a primarily rural area with expansive views in all directions.

Guidelines for the Visual Impact Assessment of Highway Projects was published by FHWA in January 2015 as an update to the original Visual Impact Assessment document. Information regarding visual quality in the project area is described in Section 3.14 *Visual Quality* of the FEIS (CDOT, 2011a).

F.13.1 EXPRESS LANE ALTERNATIVE IMPACTS

Improvements associated with the Express Lane Alternative could result in both short-term and long-term visual impacts. Short-term impacts include disruptions during construction, while long-term impacts include increased pavement and ROW. The proposed improvement would not have a substantial effect on the overall visual quality of the corridor.

F.13.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 19**) are still applicable.

Table 19. Visual Quality Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
Short-term impacts include disruptions during construction, while long-term impacts include increased pavement and ROW.	Mitigation measures to address visual effects of highway widening will include incorporating landscaping at interchanges and along the highway. Mitigation measures to address visual effects of structural elements will include providing architectural interest or color into retaining walls and sound walls, and reducing the effect of overpasses by providing architectural detailing of the railings and other features.

F.14 HISTORIC PROPERTIES

As required by the North I-25 EIS Programmatic Agreement for Section 106, a new field survey and file search was completed in November 2016. The survey methods included archival research using the following resources to determine whether historic properties would be affected by the Express Lane Alternative:

- ▶ A file search through the Office of Archaeology and Historic Preservation (OAHP) online Compass database to determine whether previously recorded National Register of Historic Places (NRHP) eligible or listed resources were located within or near the proposed project area.
- ▶ Review of Larimer County Assessor’s Office records to determine if any buildings within the project study area met the minimum age requirement for historic eligibility. Properties 45 years and older were evaluated for the proposed project.
- ▶ Analysis of USGS historic topographical maps and historic aerial photography to determine changes in the built landscape.
- ▶ Review of previous cultural resource reports and site forms including:
 - Hermsen Consultants and Centennial Archaeology, Inc. 2007. Historic Resources Survey Report for North I-25 EIS. Prepared for CDOT.
- ▶ Site visits to verify the condition of existing and potential resources.

Ten (10) properties were documented as part of the N I-25 SH 392 to SH 14 ROD1 Revision 1 (**Appendix A**). Additional structures were found to be within the Area of Potential Effect (APE); however, only properties directly adjacent to N I-25 ROW were surveyed and evaluated for NRHP eligibility, which is consistent with the 2007 North I-25 EIS. Information regarding historic resources in the project area is described in Section 3.15 *Historic Preservation* of the FEIS (CDOT, 2011a). No newly evaluated historic properties were identified.

Sites originally evaluated as part of the 2007 North I-25 EIS were not re-evaluated for eligibility, since the ten-year threshold has not been met as outlined in the North I-25 Section 106 PA [Stipulation 1(c)(2)(a)], which states “Re-evaluations of eligibility for previously recorded historic properties shall be done ten years after the initial recording.” Other buildings were found to be either within or adjacent to the proposed project but were not documented as part of this analysis. These properties failed to meet the 45-year threshold used to evaluate properties potentially eligible to the NRHP.

Sixteen (16) previously recorded resources were found to be located within the N I-25 SH 392 to SH 14 ROD1 Revision 1 Project APE. Error! Reference source not found. summarizes the eligibility and effects determinations for these sixteen resources.

Table 20. Previously Recorded Resources Located Within the APE

(Resource No.) Site Name	Address/Location	Site Type	National Register Eligibility	Effects Determination
(5LR11394) Northern Auto Brokers	1101 Smithfield Dr. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR1731.2) Colorado Central Railroad	SE ¼ of NE ¼ T7N, R68W, Sect. 9	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR12555) Sunstate Equipment Company	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR12556) Moore Residence	3716 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>

Table 20. Previously Recorded Resources Located Within the APE

(Resource No.) Site Name	Address/Location	Site Type	National Register Eligibility	Effects Determination
(5LR12557) Culbertson Residence	3604 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR11395) Kaplan Residence	1012 SE Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR11393) Rudolph Farm	1028-1100 SE Frontage Road Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR995.4) Lake Canal	SE ¼ of NE ¼ T7N, R68W, Sect. 16	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR995.6) Lake Canal	NE ¼ of NW ¼ T7N, R68W, Sect. 22	Structure	<i>Not Eligible (Officially) 12/20/2010</i>	<i>No Historic Properties Affected</i>
(5LR1327.6) Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway	SE ¼ of SW ¼ T7N, R68W, Sect. 27	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR.11409.1) Cache la Poudre Reservoir Inlet	T7N, R68W, SE¼ Sect. 16	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR9504) Cache La Poudre River Bridge B-17-DI	SE ¼ of NW ¼ T7N, R68W, Sect. 34	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR2160.1) Boxelder Ditch	NE ¼ of SW ¼ T7N, R68W, Sect. 34	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR12561) Hoffner Veterinary Clinic/RV World	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR11411.1) Arthur Lateral Ditch	NE ¼ of SW ¼ T6N, R68W, Sect. 10	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR8931.1) Fossil Creek Reservoir Outlet (canal)	NE ¼ of NW ¼ T6N, R68W, Sect. 15	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>

F.14.1 EXPRESS LANE ALTERNATIVE IMPACTS

No adverse effects would occur to previously recorded or newly evaluated historic properties for the Express Lane Alternative.

Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2): The changes associated with the Express Lane Alternative at this location consist of wider northbound and southbound bridge structures would be required to accommodate the larger roadway template. These new bridges would each be 79 feet long and 63 feet wide, constructed as pre-stressed concrete girder type structures. The frontage roads would remain in their current locations and at-grade crossings would be maintained in their current configurations.

The widened bridges would increase the amount of railway located underneath the bridge deck. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; however, this minor impact would not diminish the qualities that render this railway segment NRHP-eligible.

No direct impacts would occur. The proposed transportation improvements associated with the Express Lane Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, FHWA and CDOT have determined that the Express Lane Alternative would result in *no adverse effect* to the Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2).

Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (Segment 5LR.1327.6): The expanded I-25 section would require replacement of the old bridges with new, larger bridge structures to span the rail line. The southbound bridge (B-17-BD) would be demolished and replaced with a wider bridge extending into the existing median. Bridge structure B-17-BC would be demolished and the new northbound bridge would be constructed adjacent to and east of that location. The alignment and operation of the railroad would not be changed, and the new bridge piers would be placed outside the historic rail corridor boundary. The frontage road would be widened approximately 12 feet to provide a paved shoulder. Where the frontage road crosses the railway, no changes to the road width or alignment are planned. The Express Lane Alternative would result in no direct impacts to this resource.

The alignment and operation of the railroad would not be changed. The entire widened I-25 roadway would continue to be carried over the historic railway on top of the new bridge structures. The new bridges would be supported by piers placed outside the historic rail corridor boundary (railroad right-of-way) resulting in no direct impacts to the historic railway.

The widened bridges would increase the amount of railway located underneath the bridge deck by approximately 165 feet. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; but would not alter the property's historic function or alignment, nor diminish the character or attributes that render the railway NRHP-eligible. Construction access across the railway property may be required for installation of new bridge piers. This temporary direct impact would not diminish qualities that render the railway NRHP-eligible.

The proposed transportation improvements associated with the Express Lane Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, FHWA and CDOT have determined that the Express Lane Alternative would result in *no adverse effect* to the Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (5LR.1327.6).

Cache la Poudre Reservoir Inlet (5LR.11409.1): The Express Lane Alternative would require an extended culvert at STA 4050. A 75-foot-long extension of double CBC farther east of the existing culvert outflow and a 10-foot-long extension west of the intake at the same double CBC would be needed to carry the widening of west frontage road shoulders and the widened Prospect Road interchange northbound I-25 on-ramp.

The qualities that make the entire resource NRHP-eligible have been compromised by modifications associated with construction of the I-25 ramps and frontage road. The Express Lane Alternative improvements are minor in relative extent, FHWA and CDOT

therefore, have determined that the Express Lane Alternative would result in *no adverse effect* to the Cache la Poudre Reservoir Inlet.

Boxelder Ditch (5LR2160.1): Under the Express Lane Alternative, the I-25/Harmony Road interchange would be modified, including widening of the on- and off-ramps. Boxelder Ditch is currently enclosed inside a pipe underneath the existing ramps, fill slopes and mainline I-25 traffic lanes. To accommodate construction of a new southbound off-ramp from I-25, which would be situated 90 feet west of the existing ramp alignment, a 124-foot-long section of the open Boxelder Ditch would need to be enclosed inside a box culvert beneath the ramp. The remainder of the ditch located within the area proposed for Express Lane Alternative highway improvements is already piped under I-25, the northbound on-ramp to I-25, and Harmony Road, and no new direct impacts would occur in those locations.

A small direct impact would occur where the ditch would pass beneath a new property access road on the southeast side of the interchange. This new access road is a cul-de-sac, required to replace the existing access from the abandoned east frontage road. A total of 70 feet of open ditch would have to be enclosed inside a box culvert beneath the proposed cul-de-sac.

Installation of the new culvert would likely require a temporary use of the historic property for equipment access and construction activities. The ditch would remain operational and irrigation water would be protected from all sediment and physical encroachment by construction. All disturbances caused by construction equipment or construction activities would be temporary in nature and affected areas would be restored to the original condition and appearance.

The two box culverts required under the Express Lane Alternative would enclose a total of 194 feet of open ditch that retain integrity, but would not alter its historic alignment. These direct impacts constitute less than one percent of the entire length of the Boxelder Ditch, and would not significantly diminish or alter characteristics that render the ditch eligible for NRHP, and FHWA and CDOT have determined that the Express Lane Alternative would result in *no adverse effect* to the resource.

F.14.2 MITIGATION

No additional mitigation is required. Mitigation will be implemented in accordance with the Section 106 Programmatic Agreement, which was signed in December 2011.

CDOT is preparing a historic context of the development and lasting significance of irrigation in Northern Colorado. The Colorado SHPO originally requested the context as a component of the Northern Colorado Historic Ditch Inventory. The historic ditch context will be accessible through the North I-25 web page. The historic ditch context will inform the public to Northern Colorado's role and importance in the development of irrigated agriculture in the western United States. This mitigation will satisfy adverse effects to all irrigation conveyance features (ditches, laterals, and related components and structures) that become eligible after the Agreement is executed.

F.15 ARCHAEOLOGICAL RESOURCES

An archaeological survey was conducted as part of the FEIS in 2010 and was conducted in accordance with the requirements of 36 CFR 800.4. Information regarding Archaeological Resources in the project area is described in Section 3.15 Historic Preservation of the FEIS (CDOT, 2011a). Improvements along Kechter Road for the Express Lane Alternative extend beyond the 2010 archaeological survey boundary. An intensive pedestrian survey was not conducted along Kechter Road because right-of-entry to the property located along the roadway was not granted.

F.15.1 EXPRESS LANE ALTERNATIVE IMPACTS

No impacts would occur to previously recorded archaeological resources, isolated finds or sites, for the Express Lane Alternative.

Subsurface (buried) archaeological remains that could not be identified as part of an intensive pedestrian survey may be exposed during any phase of construction.

F.15.2 MITIGATION

Properties that will be acquired for ROW for which right-of-entry was not previously granted will be surveyed for archaeological resources at the time of final design and prior to construction.

If subsurface archaeological remains are exposed during any phase of construction, all activities in the vicinity of the discovery will cease and the CDOT Senior Staff Archaeologist will be contacted. Consultation with the SHPO and any pertinent consulting parties will be contacted, as necessary. Work will not proceed until authorization from the CDOT Senior Staff Archaeologist has been provided.

F.16 PALEONTOLOGICAL RESOURCES

There have been no changes to paleontological resources since the FEIS (CDOT, 2011a). There are no changes in laws, regulations, or guidance that affect paleontological analyses.

F.16.1 EXPRESS LANE ALTERNATIVE IMPACTS

There have been no changes to impacts to paleontological resources since the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c). The impacts previously identified are due to varying degrees of ground disturbance associated with construction. Conversely, with the application of mitigation, disturbance of newly exposed fossils would make them available for scientific analysis and museum display, resulting in a beneficial impact (Rocky Mountain Paleontology, 2008).

Subsurface (buried) paleontological resources, such as subsurface (buried) bones or other fossils, that were not previously identified as part of the paleontological survey may be exposed during excavation in any phase of construction.

F.16.2 MITIGATION

If any subsurface bones or other potential fossils are found by construction personnel during construction, work in the immediate area will cease immediately, and the CDOT paleontologist will be contacted to evaluate the significance of the find.

F.17 HAZARDOUS MATERIALS

Impacts to sites with hazardous material concerns have changed since completion of the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c). Information regarding those hazardous materials in the project area is described in Section 3.17 Hazardous Materials of the FEIS (CDOT, 2011a).

Two properties were not previously evaluated for potential hazardous material concerns as part of the FEIS (CDOT, 2011a) and ROD1 (CDOT, 2011c) (**Appendix A**) because these properties were not included in the FEIS study area for hazardous materials. **Table 21** identifies these properties. The residential/agricultural property at 4225 Kechter Road does not have any hazardous material concerns, but the property at 3808 E. Mulberry Street is a site with hazardous material concerns. Initial Site Assessments were performed for these properties (**Appendix A**). The commercial property located at 3808 E. Mulberry Street consists of landscaping, groundwater monitoring wells, and a pad-mounted electrical transformer along the edge of a Red Lion Inn. The 3808 E. Mulberry Street property (Red Lion Inn) is a closed leaking underground storage tank (LUST) site with known petroleum soil and groundwater contamination.

Table 21. Additional Properties Evaluated for Hazardous Materials Concerns

Parcel I.D.	Address	Hazardous Material Concerns
8610005701	4225 KECHTER ROAD	None. Property consists of vacant, undeveloped agricultural land immediately adjacent to Kechter Road.
8709400019	3808 E. MULBERRY STREET	Site with recognized hazardous material concerns. Property consists of landscaping, groundwater monitoring wells, and a pad-mounted electrical transformer along the edge of a Red Lion Inn. The Red Lion Inn is a closed LUST with known petroleum soil and groundwater contamination.

F.17.1 EXPRESS LANE ALTERNATIVE IMPACTS

The Express Lane Alternative would impact 14 sites with potential and recognized hazardous materials concerns. These sites are summarized in **Table 22**. The Express Lane Alternative will partially acquire property for right-of-way from one additional site with known hazardous concerns, 3808 E. Mulberry Street (Red Lion Inn), that had not been previously identified. The portion of the property at 3808 E. Mulberry Street (Red Lion Inn) to be acquired consists of landscaping, groundwater monitoring wells, and a pad-mounted electrical transformer.

Overall, the Express Lane Alternative will impact three fewer sites with potential or known hazardous materials concerns than the ROD1 Selected Alternative (SH 392 to SH 14).

Table 22. Sites with Potential and Recognized Hazardous Materials Concerns

Parcel I.D.	Address	Hazardous Material Concerns
8716125007	901 SW FRONTAGE Rd/900 SMITHFIELD DR	Site with potential hazardous material concerns. Sign and awning manufacturer. Unknown hazardous material storage, handling, and disposal practices.
8716125007	4228 E MULBERRY ST	Site with potential hazardous material concerns. Heavy equipment rental company. Potential equipment maintenance. Unknown hazardous material storage, handling, and disposal practices.
8721000904	1815 SW FRONTAGE RD	Site with potential hazardous material concerns. Large industrial biopower and bioenergy plant located west of I-25. Ethanol, hydrogen, and other hazardous material products are produced on site. Unknown hazardous material storage, handling, and disposal practices.
8610207001	5857/5887 SW FRONTAGE RD	Site with potential hazardous material concerns. Boats, boat parts, ATV, snowmobile, RV sales. Potential equipment maintenance. Unknown hazardous material storage, handling, and disposal practices.
8615000009	7301 SW FRONTAGE RD	Site with recognized hazardous material concerns. Automobile dealership and service center. One active aboveground storage tank (AST) on the property. Potential waste oil tanks. Unknown hazardous material storage, handling, and disposal practices. LUST site.
8722200025	1800 SE FRONTAGE RD	Site with potential hazardous material concerns. Potential Waste Oil Tanks. Unknown chemical and material handling, storage, and disposal practices.
8721000904	1815 SW FRONTAGE RD	Site with potential hazardous material concerns. Large industrial biopower and bioenergy plant located west of I-25. Ethanol, hydrogen, and other hazardous material products are produced on site. Unknown hazardous material storage, handling, and disposal practices.
8716107014	1036 SMITHFIELD DR	Site with potential hazardous material concerns. Propane gas distributor with one 30,000-gallon AST, one 18,000-gallon AST, and one 1,250-gallon AST for liquefied propane gas on the property.
8722200023	1926 SE FRONTAGE RD	Site with recognized hazardous material concerns. Resource Conservation and Recovery Information Service (RCRIS)-Small Quantity Generator (SQG) (Reported Violations), (FINDS). Closed LUST. Underground Storage Tank (UST). AST. One active AST and liquefied petroleum gas (LPG) tank. Recreational Vehicle maintenance and storage. Unknown chemical and material handling, storage, and disposal.
8722200022	2028 SE FRONTAGE RD	Site with potential hazardous material concerns. RCRIS-SQG (No Reported Violations), FINDS. Unknown chemical and material handling, storage, and disposal practices.
8734000924	4414 E HARMONY RD	Site with recognized hazardous material concerns. Emergency Response Notification System (ERNS) site. No additional information reported.
8709400019	3808 E. MULBERRY STREET	Site with recognized hazardous material concerns. Property consists of landscaping, groundwater monitoring wells, and a pad-mounted electrical transformer along the edge of Red Lion Inn. The Red Lion Inn is a closed LUST with known petroleum soil and groundwater contamination.
8603000004	4305 E HARMONY RD	Site with recognized hazardous material concerns. ERNS site. A buried dump truck was being used for used oil disposal. No remediation activities were reported.

Table 22. Sites with Potential and Recognized Hazardous Materials Concerns

Parcel I.D.	Address	Hazardous Material Concerns
871000022	120 NE FRONTAGE RD	<p>Site with recognized hazardous material concerns. Potential historic former cattle operations occurred at this site. Unknown insecticide storage, use, and handling. Resource Conservation and Recovery Act (RCRA) Corrective Action (CORRACTS). Remediation complete. The facility performs roll forming and shearing of sheet metal processes, which utilize lead and chromium-based paints, xylenes, and mineral spirit solvents. An initial environmental investigation performed in January 1991 identified soil and groundwater contamination with volatile organic compounds (VOCs). Small concentrations of benzene, toluene, ethylbenzene, and chlorobenzene were detected in soils from the paint gallery area. Elevated concentrations of ethylbenzene, toluene, xylene, and chlorobenzene were detected in soils near the paint line roll-off area. Elevated concentrations of heavy metals (lead and chromium) were detected in soils at this site in the paint gallery and near the paint supply piping. Remediation activities were completed at this site and a No Further Action letter was issued by CDPHE in June 1994 indicating that they do not require any further investigation or remedial action at the time the letter was issued.</p>

F.17.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 23**) are still applicable.

Table 23. Hazardous Material Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>Potential to encounter hazardous materials during construction</p>	<p>A Materials Management Plan (MMP), as required by Section 250.03 of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d), will be prepared for areas with known soil and groundwater contamination. Construction specifications will be written to include review of the MMP by the CDOT Regional Environmental Manager.</p> <p>If dewatering is necessary, groundwater brought to the surface will be managed according to Section 107.25 of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d) and permitted by the CDPHE's Water Quality Control Division.</p> <p>Relocation of overhead electrical utility lines and pole-mounted transformers will be conducted in accordance with any easement agreement between CDOT and/or private landowners.</p> <p>All wells within the proposed construction area will be abandoned and plugged according to CDOT Section 202.02 in Standard Specifications for Road and Bridge Construction (CDOT, 2011d) and in conformance with the Colorado Department of Natural Resources Division of Water Resources State Engineer Water Well Construction Rules, specifically Rule 16.</p> <p>If contaminated soil is encountered and a responsible party is not identified, CDOT will be responsible for the cleanup in accordance with state and federal regulations. An MMP and a Health and Safety Plan, as required by Section 250.03 of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d), also is recommended for use when oil and gas facilities are encountered.</p> <p>Prior to demolition of any structures, an asbestos, lead-based paint, and miscellaneous hazardous materials survey will be conducted at each parcel, where applicable. Regulated materials abatement will be conducted in accordance with Section 250, Environmental, Health, and Safety Management, of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d) and relevant Occupational Health and Safety (OSHA) regulatory details.</p>

Table 23. Hazardous Material Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
	<p>Lead-based paint may need to be removed prior to demolition if the lead is leachable at concentrations greater than regulatory levels. Where lead-based painted surfaces will be removed via torching, additional health and safety monitoring requirements are applicable.</p> <p>If abandoned landfills or coal mines are present below and/or within 1,000 feet of construction activities, the Health and Safety Plan will need to include provisions for assessing and monitoring air quality at all utility trenches, drainage structures, and similar underground construction (i.e., caissons) areas prior to and during intrusive activities to ensure worker safety.</p>

F.18 PARKS AND RECREATION

Parks and recreational resources have not changed since the FEIS. **Table 24** lists the parks and recreational resources located within or in the vicinity of the project area are listed. Information regarding parks and recreation in the project area is described in Section 3.18 Parks and Recreation of the FEIS (CDOT, 2011a).

Table 24. Parks and Recreational Resources within 500 feet of the Express Lane Alternative

Name	Amenities	Reference Location	Resource Type	Managed By
Arapaho Bend Natural Area	Fish ponds, boating, trails, parking areas	West of I-25, north of Harmony Road, Fort Collins	Open Space	City of Fort Collins
Archery Range Natural Area	Trailhead, parking area	West of I-25, Fort Collins	Open Space	City of Fort Collins
Fossil Creek Reservoir Regional Open Space/Natural Area	Multi-use, water storage, waterfowl and wildlife refuge, trail recreation	West of Timberline, east of I-25	Regional Park and Recreation Facility/Open Space	Larimer County and City of Fort Collins
Running Deer Natural Area	Trail, recycling area (mulch)	Just west of I-25, south of Prospect Road, Fort Collins	Open Space	City of Fort Collins

F.18.1 EXPRESS LANE ALTERNATIVE IMPACTS

The Archery Range Natural Area and Fossil Creek Reservoir Regional Open Space/Natural Area would not be impacted by the Express Lane Alternative.

Arapaho Bend Natural Area. Impacts to this natural area would result from the reconfiguration and upgrades to the I-25 /Harmony Road interchange ramps, the widened template of I-25 to accommodate the express lanes and the bridge modifications at the Cache la Poudre River. Impacts as a result of these improvements would total 4.96 acres. None of the features or amenities would be used as a result of this additional acreage, and the utility of the remainder of the natural area would not be diminished. Additionally, access to Harmony Road would be improved from the existing one-lane entrance to a four-lane

entrance with right-in and right-out. No indirect effects are anticipated at Arapaho Bend Natural Area as a result of the proposed improvements.

F.18.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 25**) are still applicable.

Table 25. Parks and Recreational Resource Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
Impacts to the Arapaho Bend Natural Area	<p>Coordination with the local agencies having jurisdiction at the resources is ongoing. Any impacts incurred at these resources as a result of proposed improvements would be discussed with the local jurisdictional agencies to determine the appropriate mitigation.</p> <p>All ground disturbing and debris generating construction processes will be contained by erosion and sediment control BMPs designed as part of approved stabilization and stormwater management plans. All disturbed areas will be returned to their original contour, vegetation and landscape appearance in cooperation with and direction from the resource jurisdictional authorities.</p>

F.19 SECTION 6(F)

No properties in the project area have received Land and Water Conservation Fund (LWCF) grants. Information regarding existing Section 6(f) resources along the I-25 corridor is described in Section 3.19 Section 6(f) of the FEIS (CDOT, 2011a).

F.19.1 EXPRESS LANE ALTERNATIVE IMPACTS

No impacts would occur.

F.19.2 MITIGATION

No mitigation is needed.

F.20 FARMLANDS

Impacts to Farmlands have changed with the Express Lane Alternative. Information regarding farmlands in the project area is described in Section 3.20 Farmlands of the FEIS (CDOT, 2011a).

F.20.1 EXPRESS LANE ALTERNATIVE IMPACTS

The Express Lane Alternative would impact 0.8 acre of farmland of local importance, 2.8 acres of farmland of statewide importance, and 78.9 acres of prime farmlands (82.5 acres total). As mitigation for these impacts, the U.S. Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) offices recommended keeping construction materials, tools, and vehicles within the proposed right-of-way to reduce impacts consideration of converting non-prime farmland before impacting prime farmlands. The Express Lane Alternative reduces the impacts of the ROD1 Selected Alternative to prime farmlands by 13.7 acres in accordance with USDA-NRCS recommendations.

F.20.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 26**) are still applicable.

Table 26. Farmlands Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
Impacts to 0.8 acre of farmland of local importance, 2.8 acres of farmland of statewide importance, and 78.9 acres of prime farmlands (82.5 acres total).	Representatives from the Larimer County USDA-NRCS office was contacted to discuss mitigation measures. The USDA-NRCS Larimer County office recommended keeping construction materials, tools, and vehicles within the proposed ROW to reduce impacts and consideration of converting non-prime farmland before impacting prime farmland. The less encroachment onto agricultural land will result in less impact to farmlands. During final design of the project, the conversion of non-prime farmland will be considered before converting prime farmland to minimize overall impacts to prime farmland.

F.21 ENERGY

There are no changes in laws, regulations, or guidance that affect energy analysis. Information regarding energy in the project area is described in Section 3.21 Energy of the FEIS (CDOT, 2011a).

Energy usage will be generated for both construction and the movement of vehicles transporting people and goods along I-25. The previous energy analysis in Section 3.21 of the FEIS used the forecast year 2035 to project energy consumption. Since the release of the FEIS, the North I-25 Regional Travel Demand Model was updated using the forecast year 2040. The energy consumption analysis was revised to reflect the new projections.

F.21.1 EXPRESS LANE ALTERNATIVE IMPACTS

This section evaluates and compares energy consumption and greenhouse gas emissions of the No Action Alternative and the Express Lane Alternative using the following methodology:

- ▶ 2040 forecast year was used.
- ▶ VMT data were estimated using the North I-25 EIS Revised ROD1 between SH 392 and SH 14 Traffic Analysis (Appendix A).
- ▶ VMT was converted to miles per gallon of fuel consumed using vehicle splits from the FEIS and miles per gallon data from the Department of Energy's Transportation Energy Data Book.
- ▶ Fuel consumption in gallons was converted to carbon dioxide (CO₂) produced using the gasoline CO₂ factor from the Federal Register (8,877 grams of CO₂ per gallon of gasoline consumed).
- ▶ Passenger miles of the total regional annual VMT were assumed to 96.6 automobiles, 3.0 percent heavy trucks, and 0.4 percent buses.

The tables below summarize the energy analysis using the methodology above (**Table 27**, **Table 28**, and **Table 29**). The trends and rationale described in the FEIS remain the same.

Table 27. Daily VMT

Alternative	Total Daily VMT (Auto, Truck, and Bus)
Existing	721,104
No Action	786,016
Express Lane Alternative	850,952

Table 28. Energy Consumption by Alternative (Daily BTU)

Alternative	BTUs Consumed (millions)	Difference from Existing (millions)	Percent Difference
Existing	3,969	N/A	N/A
No Action	4,326	357	8.3%
Express Lane Alternative	4,683	714	15.2%

Table 29. Daily CO2 Production by Alternative

Alternative	CO2 Produced (tons)	Difference from Existing (tons)	Percent Difference
Existing	382	N/A	N/A
No Action	416	34	8.2%
Express Lane Alternative	450	68	15.1%

F.21.2 MITIGATION

Mitigation of energy consumption during operations will focus on a reduction in daily VMT. This reduction can be achieved through successful transit-oriented development, congestion management, and effective improvements to the roadways. These measures all work to reduce overall traffic time by increasing travel efficiency. **Table 30** summarizes the energy consumption impacts and mitigation measures to alleviate these impacts.

Table 30. Energy Impacts and Mitigation for the Express Lane Alternative

Alternative	Mitigation
Increased VMT and Energy Consumption	Reduce daily vehicle miles of travel through effective improvements to the roadways. These measures all work to increase travel efficiency and save energy.

F.22 PUBLIC SAFETY AND SECURITY

Existing conditions have changed little since the FEIS and ROD1 (CDOT, 2011a; CDOT, 2011c). Information regarding public safety and security in the project area is described in Section 3.22 Public Safety and Security of the FEIS (CDOT, 2011a). Environmental consequences and mitigation for the Express Lane Alternative remain consistent with the FEIS and ROD1.

F.22.1 EXPRESS LANE ALTERNATIVE IMPACTS

Key safety and security impacts associated with implementing the Express Lane Alternative would occur temporarily during construction and permanently after implementation. A temporary impact includes:

- ▶ There is a potential for increased theft during the construction phase.

Permanent changes include:

- ▶ There is a potential for modest increases to police services in response to increases in crime.
- ▶ An increased security presence would be needed on buses and at the proposed park-and-rides.

F.22.2 MITIGATION

Table 31 summarizes the public safety and security impacts and mitigation measures to alleviate these impacts.

Table 31. Public Safety and Security Impacts and Mitigation for the Express Lane Alternative

Alternative	Mitigation
Potential for increased theft during the construction phase	Potential losses at construction sites will be mitigated through fencing and on-site security provided by contractors. All construction contractors will be responsible for safety at their respective sites and be required to follow all Occupational Safety and Health Administration (OSHA) requirements applicable to construction site safety. Each contractor's site safety plans will be approved by the appropriate agencies or a construction management consultant, if chosen. The appropriate agencies will provide a site safety officer to monitor site safety.
Potential for modest increases to police services in response to increases in crime.	Local police will be encouraged to use the park and ride lots when they need to fill out paperwork in order to increase their visibility.

F.23 CONSTRUCTION

Information regarding construction in the project area is described in Section 3.23 Construction of the FEIS (CDOT, 2011a).

F.23.1 EXPRESS LANE ALTERNATIVE IMPACTS

Construction of the Express Lane Alternative would create various temporary impacts within the project area.

Transportation. Construction detours and delays can create short-term impacts on local traffic circulation and congestion and inter- and intra-state travelers using the I-25 corridor for commuting. These impacts may include delays or the need for alternative travel routes to reach residences and community facilities. Emergency service response may be negatively impacted as a result of construction, as well. Delays to the traveling public and

inconvenience to corridor residents would occur. A primary goal of CDOT during construction of the project would be to minimize inconvenience to the public through construction traffic planning during final design, and by monitoring and adjusting these plans throughout the construction phase.

Pedestrian and bicycle mobility is important along the east-west corridors crossing I-25 between SH 392 and SH 14. Construction activities could temporarily affect local residents who use these facilities and those who use these corridors for commuting and recreation.

Land Use. Construction of the Express Lane Alternative would temporarily affect access to the different land uses within the project area throughout the duration of the project. These impacts would mostly be limited to areas that are in close proximity to large-scale construction activities, generally not greater than 300 feet outside of the work areas.

Economic Conditions. By implementing the Express Lane Alternative, the economic benefit of additional employment within the project area due to construction would be evident. This additional employment includes construction-related jobs that are directly and indirectly related to the project. Jobs created that are directly related would include jobs that pertain to the actual construction activities of the project. Jobs that are indirectly related would include positions that would help support the construction efforts by supplying goods and services to construction workers.

Restricted access to businesses located adjacent to the rights-of-way during construction could negatively impact the performance of some of the businesses. The severity of this impact would vary depending on the type and health of the business and the length of time of construction. These businesses may see a partial offset by increased retail sales due to the presence of construction workers.

Right-of-Way. Some additional land would be required in areas adjacent to the existing rights-of-way for construction staging purposes. These staging areas would be used to store equipment and materials and would also be used to provide parking for construction workers. These necessary areas would be purchased or leased, usually as temporary construction easements, before the start of construction.

Air Quality. Without mitigation, excavation, grading, and fill activities associated with construction could increase local fugitive dust emissions. Fugitive dust is airborne particulate matter, generally of a relatively large size (greater than 100 microns in diameter). Because of their large size, these soil particles typically settle within 30 feet of their source. Smaller particles could travel as much as hundreds of feet, depending on winds.

Construction activity would increase emissions from additional traffic and detouring. Also, construction would require the disturbance of soil, which would produce fugitive dust or particulate pollution. Construction-related activities that may cause soil material to become airborne include the following:

- ▶ Digging and dumping of soil and discarded construction materials (asphalt, concrete, etc.)
- ▶ Material hauling
- ▶ Wind erosion over exposed construction sites
- ▶ Re-entrainment of construction dirt deposited on local streets by vehicular traffic on the streets

The amount of airborne dust generated and the airborne concentration of particulate matter that human receptors would be exposed to would depend on a variety of factors and would vary from day-to-day, depending on site and climate conditions. Factors influencing fugitive dust emissions include:

- ▶ Soil type
- ▶ Area of exposed soil
- ▶ Location of construction activities relative to potential receptors
- ▶ Volume of dirt/material to be moved
- ▶ Wind speed and direction
- ▶ Soil moisture
- ▶ Time of day
- ▶ Season of the year

The length of time that any particular receptor would be exposed to construction-related dust would be relatively short, lasting only during construction activities. Construction would likely proceed in a linear fashion with site excavation, bed preparation, and track installation beginning at one or more locations and working along the alignment.

Construction vehicles and equipment would generate the same exhaust emissions as motor vehicles on area roadways. The emissions contribution of these vehicles would be short-term and minor when compared to usual emission levels from day-to-day traffic in the project area. Additionally, construction equipment would generally be diesel-powered, emitting relatively low levels of carbon monoxide, but higher levels of particulate emissions.

Exhaust emissions could temporarily impact sensitive receptors located adjacent to the areas of construction.

Noise and Vibration. Construction noise would present the potential for short-term impacts to receptors located along the existing rights-of-way and along the designated construction access routes. The primary source of construction noise is expected to be diesel-powered equipment, such as trucks, earth-moving machinery, and demolition equipment.

Demolition and pile driving could be the loudest construction operations. Demolition of structures, such as existing bridges, is generally conducted at night because of safety issues requiring full or partial closure of the highway and local streets. Piles could be required at most major bridge installations and could have both noise and vibration impacts. Alternative construction methods, such as the use of caissons or pre-drilling for piling, could replace pile driving in noise-sensitive locations. The majority of noise receptors are located greater than 50 feet from areas where pile driving or other high-noise activities are expected. Increased noise impacts are expected to occur only in areas near residential developments that are in the vicinity of interchanges requiring demolition and replacement or major renovation.

Vibration caused by construction activities would present the potential for short-term impacts in areas where pile driving and compaction equipment are being used. The potential for building damage from pile-driving vibration is estimated to exist only within about 50 feet of the activity. Vibration from compaction equipment is less severe because it does not propagate through the lower soil layers like pile driving does. Construction

activities in close proximity to buildings (i.e., within 50 feet) must be sensitive to vibration damage potential. Extra care would be necessary when in close proximity to buildings. Details would be developed during subsequent design efforts.

The potential for construction noise impacts would vary by location and land use. It is likely that noise impacts would occur in residential areas within 50 feet of the railroad alignment as a result of construction of the commuter rail system. These impacts would be intermittent and temporary. Potential noise impacts to commercial or industrial areas could occur within 50 feet of the rail alignment from construction activities in areas where pile-driving activity would take place.

Construction vibration impacts would result from the use of construction equipment such as a pile driver, a bulldozer, or a jack hammer. The vibration would be generally intermittent and temporary, and therefore, would not result in an appreciable impact to receivers along the alignment with the exception of properties in close proximity to construction activities.

Ecosystems. Wildlife habitats adjacent to the railway or roadway improvements would be impacted during construction. Some wildlife would be driven away during construction activities due to the increased noise and activity. These impacts would be primarily limited to the undeveloped areas of the project area.

Farmlands. Farmlands adjacent to the alignments would be impacted if construction activities are required to extend beyond the right-of-way or if access must be modified. Also, dust generated from construction activities could settle on agricultural lands, possibly temporarily altering soil composition. The impacted farmland areas are scattered throughout the project area where land is undeveloped or primarily rural.

Cultural Resources. Construction could damage or remove archaeological or paleontological resources that have become buried beneath the soil surface. The amount of damage would vary, depending upon soil strata, type, and condition, materials, and type of structure. Construction could have both short- and long-term impacts on cultural landscapes by introducing intrusive elements into the landscape, or by removing character-defining elements of that landscape, such as large trees, irrigation features, or open spaces.

Parks and Recreational Resources. Parks located adjacent to construction activity could experience temporary impacts during construction. Impacts to these areas could include construction noise, dust, visual degradation, and increased traffic congestion inhibiting access to the park and recreation areas.

Visual Setting. Short-term construction-related visual impacts would likely occur as a result of the Express Lane Alternative. These impacts would include the presence of construction equipment and material storage, temporary barriers, guardrail, detour pavement and signs, temporary shoring and retaining walls, lighting for night construction, and removal of existing vegetative cover in the construction zone. Residential areas near construction activities could experience visual impacts resulting from construction activities.

It is assumed that the construction of Express Lane Alternative would be conducted in phases so the entire corridor would not be undergoing construction at one time. The greatest visual impacts during construction would be associated with construction lay-down yards (staging areas), construction traffic/equipment along I-25, clearing/demolition of the bridge structures, safety barriers, signage and flag-persons. The impacts would be visible to residents along the I-25 corridor as well as travelers on the roadway network within the project area.

Floodplains and Water Resources. During construction, stormwater runoff could present the potential for violations of water quality standards if discharge occurs without the application of best management practices. Without mitigation measures, stormwater runoff could cause erosion and sedimentation and transport spilled fuels or other hazardous materials off the construction site. Groundwater could be encountered during relocation of deep utilities, excavation, and construction of tunnels and below-grade roadways. Dewatering and treatment could be required where groundwater is present. Final design would include runoff prevention measures to minimize the amount of sediment reaching surface water bodies as a result of rail or road construction.

Wetlands and Other Waters of the U.S. Temporary impacts to wetlands could occur within the drainage of the Cache la Poudre River. These impacts would primarily be from construction equipment adjacent to wetland areas. Wetlands would be restored to the extent possible if damage from the equipment occurs.

Hazardous Materials. Hazardous materials could be encountered during construction in several ways. The movement of earth, particularly excavation, could uncover sites with hazardous chemicals or petroleum products. Former or current gas stations can frequently contain petroleum contamination that could be encountered during construction.

During construction, it is expected that there would be excavation and drilling for caissons to support underpasses, overpasses, and bridge development. Any of these activities could cause an impact to soils or groundwater containing hazardous waste and, possibly, a potential impact to human health and safety.

Prior to construction and right-of-way acquisition, soil sampling would be performed to determine the nature and extent of contamination at sites with recognized environmental conditions. The results of this sampling would be incorporated into a health and safety plan that would be implemented during construction to minimize the potential exposure of workers to contaminants and hazards. Storm Water Management Plans would be developed to minimize runoff and impacts to uncontaminated soils. Contaminated materials would be disposed according to Colorado Department of Public Health and Environment (CDPHE) requirements.

Utilities. Construction associated with the Express Lane Alternative would require excavation, grading, boring and other activities that would have short-term effects on utilities. This would include crossing existing lines, relocation, modification, and usage of temporary easements. The process of relocating these utilities could cause temporary planned or accidental disruptions in service to local residents in the project area.

CDOT would coordinate with the entities responsible for utility relocations and replacements required by the Express Lane Alternative. Mitigation would include meeting and consulting with the municipalities and utility representatives during the final design and construction phases to coordinate planning and construction activities. CDOT's goal is to minimize and, to the extent possible, avoid interruptions in service to corridor residents and businesses.

Energy. The Express Lane Alternative would require substantial one-time energy expenditures related to the manufacture of construction materials, transporting of materials to the site, and construction of new facilities. Construction energy consumption is based on the number of lane-miles and track-miles proposed for each construction type; at-grade and on elevated structure. The Express Lane Alternative require energy to construct additional lanes.

F.23.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 32**) are still applicable.

Table 32. Construction Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>Construction noise would present the potential for short-term impacts to receptors located along the existing right-of-way and along the designated construction access routes. The primary source of construction noise is expected to be diesel-powered equipment, such as trucks, earth-moving machinery, and demolition equipment.</p> <p>Vibration caused by construction activities would present the potential for short-term impacts in areas where pile driving and compaction equipment are being used. The potential for building damage from pile-driving vibration is estimated to exist only within about 50 feet of the activity. Vibration from compaction equipment is less severe because it does not propagate through the lower soil layers like pile driving does. Construction activities in close proximity to buildings (i.e., within 50 feet) must be sensitive to vibration damage potential. Extra care would be necessary when in close proximity to buildings. Details would be developed during subsequent design efforts.</p> <p>The potential for construction noise impacts would vary by location and land use. It is likely that noise impacts would occur in residential areas within 50 feet of the railroad alignment as a result of construction of the commuter rail system. These impacts would be intermittent and temporary. Potential noise impacts to commercial or industrial areas could occur within 50 feet of the rail alignment from construction activities in areas where pile-driving activity would take place.</p> <p>Construction vibration impacts would result from the use of construction equipment such as a pile driver, a bulldozer, or a jack hammer. The vibration would be generally intermittent and temporary, and therefore, would not result in an appreciable impact to receivers along the alignment with the exception of properties in close proximity to construction activities.</p>	<p>Implement construction BMPs.</p> <p>Use noise blankets on equipment and quiet-use generators.</p> <p>Combine noisy operations to occur in the same time period.</p> <p>Use alternative construction methods, such as sonic or vibratory pile-driving in sensitive areas, when possible.</p> <p>In residential areas, construction activities will be minimized during the evening, nighttime, weekends, and holidays when receptors are usually in these areas.</p> <p>Nighttime construction will be desirable (e.g., commercial areas where businesses may be disrupted during daytime hours) or necessary to avoid major traffic disruption.</p> <p>The major noise source on construction sites is typically diesel motors; therefore, all engines will use commercially available effective mufflers and enclosures, as possible.</p> <p>Modern equipment will be used with improved noise muffling and all equipment items will be evaluated to ensure that they have the manufacturers' recommended noise abatement measure, such as mufflers, engine covers, and engine vibration isolators intact and operational. Generally, newer equipment would create less operational noise than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise-control devices (e.g., mufflers and shrouding).</p> <p>The use of impact pile driving will be avoided near noise-sensitive areas, where possible. Alternative foundation preparation technologies will be used, such as vibratory pile driving or cast in drilled hole.</p> <p>Temporary barriers will be used and relocated, as required, to protect sensitive receptors from excessive construction noise. Noise barriers should be made of heavy plywood or moveable insulated sound blankets.</p> <p>Plans will be made to conduct truck loading, unloading, and hauling operations so that noise will be kept to a minimum.</p> <p>Frequent updates of all construction activities will be provided to the public.</p> <p>A community noise and vibration monitoring plan and a noise and vibration control plan will be prepared before initiating any construction.</p>

Table 32. Construction Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>Restricted access to businesses located adjacent to the rights-of-way during construction could negatively impact the performance of some of the businesses. The severity of this impact would vary depending on the type and health of the business and the length of time of construction. These businesses may see a partial offset by increased retail sales due to the presence of construction workers.</p>	<p>Use enhanced signing. Use alternate access enhancements. Use advertising/public relations. Do not close multiple interchanges concurrently.</p>
<p>Construction detours and delays can create short-term impacts on local traffic circulation and congestion and inter- and intra-state travelers using the I 25 corridor for commuting. These impacts may include delays or the need for alternative travel routes to reach residences and community facilities. Emergency service response may be negatively impacted as a result of construction. Delays to the traveling public and inconvenience to corridor residents would occur. A primary goal of CDOT during construction of the project would be to minimize inconvenience to the public through construction traffic planning during final design, and by monitoring and adjusting these plans throughout the construction phase.</p>	<p>Limit detours. Place detours on major arterial streets and ensure no local street detours are implemented. Schedule construction during periods of least traffic. Use geometric enhancements including wider lanes and better visibility. Limit construction vehicles to major arterials. Enforce speed restrictions; provide adequate space for enforcement; make prime contractor accountable. Use courtesy patrol. Use enhanced signing. Phase construction to limit traffic in neighborhoods. Comply with AASHTO guidance and Manual on Uniform Traffic Control Devices. Coordinate work activities to ensure they do not coincide with sporting, school, or special events. Implement advanced traffic diversion. Use intelligent management systems and variable message signs to advise/redirect traffic. Work with RTD to offer enhanced operations during peak construction. Develop traffic management plans. Maintain access to local businesses/residents. Coordinate with emergency service providers to minimize delay and ensure access to properties.</p>
<p>Pedestrian and bicycle mobility is important along the east-west corridors crossing I-25 between SH 392 and SH 14. Construction activities could temporarily affect local residents who use these facilities and those who use these corridors for commuting and recreation.</p>	<p>Provide well-defined detours for pedestrians/bicyclists. Enhance safety through the use of adequate signing, fencing, and lighting. Implement a public relations program. Comply with Americans with Disabilities Act requirements. Construct new bike/pedestrian overpass as a detour before old is demolished.</p>
<p>Without mitigation, excavation, grading, and fill activities associated with construction could increase local fugitive dust emissions. Fugitive dust is airborne particulate matter, generally of a relatively large size (greater than 100 microns in diameter). Because of their large size, these soil particles typically settle within 30 feet of their source. Smaller particles could travel as much as hundreds of feet, depending on winds. Construction</p>	<p>Use wetting/chemical inhibitors for dust control. Provide early investigation of subsurface conditions. Prepare a well-defined materials handling plan. Employ an educated contractor with trained personnel. Require prompt and safe disposal of waste products. Implement water quality BMPs.</p>

Table 32. Construction Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>activity would increase emissions from additional traffic and detouring. Also, construction would require the disturbance of soil, which would produce fugitive dust or particulate pollution. The amount of airborne dust generated and the airborne concentration of particulate matter that human receptors would be exposed to would depend on a variety of factors and would vary from day-to-day, depending on site and climate conditions.</p> <p>Construction vehicles and equipment would generate the same exhaust emissions as motor vehicles on area roadways. The emissions contribution of these vehicles would be short-term and minor when compared to usual emission levels from day-to-day traffic in the project area. Additionally, construction equipment would generally be diesel-powered, emitting relatively low levels of carbon monoxide, but higher levels of particulate emissions. Exhaust emissions could temporarily impact sensitive receptors located adjacent to the areas of construction.</p> <p>Temporary impacts to wetlands could occur within the drainage of the Cache la Poudre River. These impacts would primarily be from construction equipment adjacent to wetland areas. Wetlands would be restored to the extent possible if damage from the equipment occurs.</p> <p>Hazardous materials could be encountered during construction in several ways. The movement of earth, particularly excavation, could uncover sites with hazardous chemicals or petroleum products. Former or current gas stations can frequently contain petroleum contamination that could be encountered during construction.</p> <p>During construction, it is expected that there would be excavation and drilling for caissons to support underpasses, overpasses, and bridge development. Any of these activities could cause an impact to soils or groundwater containing hazardous waste and, possibly, a potential impact to human health and safety.</p> <p>Prior to construction and right-of-way acquisition, soil sampling would be performed to determine the nature and extent of contamination at sites with recognized environmental conditions. The results of this sampling would be incorporated into a health and safety plan that would be implemented during construction to minimize the potential exposure of workers to contaminants and hazards. Storm Water Management Plans would be developed to minimize runoff and impacts to uncontaminated soils. Contaminated materials would be disposed according to CDPHE requirements.</p>	<p>Prepare well-defined stormwater management plan.</p> <p>Conduct monitoring.</p> <p>Institute resource reuse and allocation.</p> <p>Ensure regulatory compliance.</p> <p>Cover trucks hauling soil and other materials.</p> <p>Stabilize and cover stockpile areas.</p> <p>Minimize offsite tracking of mud, debris, hazardous material, and noxious weeds by washing construction equipment in contained areas.</p> <p>Avoid impacts to wetlands or other areas of important habitat value in addition to those impacted by the project itself.</p> <p>Control and prevent concrete washout and construction wastewater. As projects are designed, ensure that proper specifications are adhered to and reviewed to ensure adequacy in the prevention of water pollution by concrete washout.</p> <p>Store equipment and materials in designated areas only.</p> <p>Promptly remove any unused detour pavement or signs.</p> <p>Follow CDOT Standard Specifications for Road and Bridge Construction (2005), including sections regarding water quality control, erosion control, and environmental health and safety.</p> <p>Prepare or revegetate exposed areas as soon as possible after construction.</p> <p>Remove soil and other materials from paved streets.</p> <p>Incorporate recommendations as appropriate from the Regional Air Quality Council (RAQC) report, Reducing Diesel Emissions in the Denver Area (RAQC, 2002).</p> <p>Operate equipment mainly during off-peak hours.</p> <p>Limit equipment idling time.</p> <p>Use recycled materials for project activities to the extent allowed by good practice and CDOT construction specifications.</p> <p>Use construction equipment that use ultra-low sulfur fuels to the extent practicable.</p>

Table 32. Construction Impacts and Mitigation for the Express Lane Alternative

Impacts	Mitigation
<p>During construction, stormwater runoff could present the potential for violations of water quality standards if discharge occurs without the application of best management practices. Without mitigation measures, stormwater runoff could cause erosion and sedimentation and transport spilled fuels or other hazardous materials off the construction site. Groundwater could be encountered during relocation of deep utilities, excavation, and construction of tunnels and below-grade roadways. Dewatering and treatment could be required where groundwater is present. Final design would include runoff prevention measures to minimize the amount of sediment reaching surface water bodies as a result of rail or road construction.</p>	<p>BMPs used will be consistent with the MS4 permitting requirements, as well as practices mentioned in CDOT's Erosion Control and Stormwater Quality Guide (CDOT, 2002). Section 107.25 of CDOT's Standard Specifications for Road and Bridge Construction (CDOT, 2011d) deals with contractor's requirements for water quality control.</p>

F.24 SHORT-TERM USES VERSUS LONG-TERM PRODUCTIVITY

The approach this project is using by identifying the FEIS Preferred Alternative for the entire North I-25 Corridor and phasing construction provides a systematic approach to minimize short-term uses and gain the most for long-term productivity. By knowing what kinds of improvements are planned, the investment and impacts to resources can be minimized through implementing coordinated solutions for long-term benefits.

F.24.1 EXPRESS LANE ALTERNATIVE IMPACTS

Short-term uses of the environment under the Express Lane Alternative would include:

- ▶ Loss of soil through erosion and fugitive dust
- ▶ Temporary disruption of traffic and businesses in the proposed construction areas
- ▶ Temporary visual impacts during construction
- ▶ Temporary noise and vibration impacts
- ▶ Temporary use of land for construction staging and storage of materials

Long-term benefits under the Express Lane Alternative would include:

- ▶ Improving travel safety within the region
- ▶ Increasing the efficiency of movement within large and critical transportation corridors
- ▶ Decreasing the overall travel times throughout the corridor
- ▶ Improving product and material distribution
- ▶ Improving access to businesses within the travel corridor
- ▶ Improving emergency vehicle access
- ▶ Modernizing existing transportation infrastructure to accommodate future demands
- ▶ Creating more environmentally sound and aesthetically pleasing transportation corridors

- ▶ Improving air quality within the corridors by reducing traffic congestion

The Express Lane Alternative would increase the capacity for freight transport and distribution resulting in increased commercial productivity and would influence development and add density to cities along the I-25 corridor.

F.24.2 MITIGATION

No mitigation is required.

F.25 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The terms “irreversible and irretrievable” refer to commitments of resources that cannot be corrected or reversed; cannot be retrieved; are impossible to recoup, repair or overcome (Reinke and Swartz, 1999). Natural resources would be incorporated permanently in the project, such as aggregate, concrete, and asphalt.

F.25.1 EXPRESS LANE ALTERNATIVE IMPACTS

Irreversible and irretrievable commitments of funds, labor, funding, energy, and materials would occur during the construction of the Express Lane Alternative. The Express Lane Alternative will be constructed in a manner that will not need to be reconstructed when future projects associated with the FEIS Preferred Alternative are implemented.

Implementation of any of the Express Lane Alternative would involve a commitment of a wide range of natural, physical, biological, human, and fiscal resources. The commitment of these resources would be based on the concept that residents in the region and the State of Colorado would benefit from the improved quality of the transportation corridors. Benefits would include improvements to safety and accessibility, an increase in travel efficiency, and increased availability of services. The benefits of the Express Lane Alternative are anticipated to outweigh the irreversible and irretrievable commitment of resources.

Land that would be used in the construction of transportation improvements associated with the Express Lane Alternative would be considered an irreversible commitment of resources, since it is unlikely that this land would ever be converted to another use. The removal of vegetation for construction of the Express Lane Alternative would result in an irretrievable loss of vegetation from the region; however, much of this would be considered shortgrass and is mitigated within the CDOT shortgrass prairie initiative. The shortgrass prairie initiative is a proactive conservation/mitigation measure developed by the USFWS, the Nature Conservancy, FHWA, and CDOT. As part of the initiative, CDOT directs funds to purchase priority habitat conservation sites to offset habitat loss caused by future transportation improvements.

Wetlands may be removed or degraded by construction and roadway activities, and though regulations and policy regarding wetlands compensation are designed to ensure no net-loss of wetlands, the original wetlands would be considered an irretrievable loss. The Arapaho Bend Natural Area would be impacted by the Express Lane Alternative resulting in irretrievable losses of these areas in their present state.

Fossil fuels would be irretrievably expended in several ways under the Express Lane Alternative. Fossil fuels would be consumed during the construction of transportation improvements during grading, material movement (e.g., hauling aggregate for concrete), and other activities.

Construction materials, such as aggregate for concrete and petroleum products used in asphalt and in the operation of construction equipment, would not be retrievable. Irreversible use of resources may occur at gravel mining sites that are used by contractors. In addition, considerable labor and natural resources would be used in the fabrication and preparation of construction materials. These irretrievable losses are in exchange for the benefits provided by the Express Lane Alternative.

Fiscal resources, such as state and federal funds required for the implementation of the Express Lane Alternative would be consumed and unavailable for other projects in the region. However, the funds invested would benefit the travelers of the roadway and transit facilities and the communities relying on the roadway and transit facilities for connectivity to other communities.

F.25.2 MITIGATION

No mitigation is required.

F.26 CUMULATIVE IMPACTS

This section examines the cumulative impacts on resources of concern. A cumulative impacts analysis considers all aspects of the environment affected by project alternatives in the context of other past, present, and reasonably foreseeable future actions in an area. Leading up to the FEIS in 2011, agency scoping and coordination efforts identified six resources of concern to be evaluated for cumulative impacts, including: land use, water quality, wildlife, wetlands, air quality, and historic properties and districts. This section evaluates the cumulative impacts to these resources.

F.26.1 EXPRESS LANE ALTERNATIVE IMPACTS

Land Use. The FEIS documented a general trend of increasing urbanization. Since the FEIS in 2011, new commercial, residential, and retail developments have occurred in several locations adjacent to I-25, replacing agricultural land uses. A substantial increase in oil and gas development, particularly in Weld County has occurred. The towns of Berthoud and Windsor and the City of Loveland have adopted comprehensive land use plans. It is expected that the general trend of urbanization will continue.

Plans for land development in the foreseeable future demonstrate that the pattern of urbanization is continuing regardless of whether Express Lane Alternative is implemented and, therefore, the project will not contribute to cumulative land use impacts.

Water Quality. Since the 2011 FEIS, there has been a change in CDOT's MS4 permit that allows the use of new alternative water treatment technologies. Water treatment techniques can successfully mitigate surface runoff. The continued urbanization and highway widening in the project area will result in additional impervious surfaces. Water that runs off impervious surfaces has the potential to carry pollutants into bodies of water as a result of highway widening. In addition, new commercial, residential, and retail developments have

occurred in several locations adjacent to I-25, replacing agricultural land uses. A substantial increase in oil and gas development, particularly in Weld County has occurred. The construction of Express Lane Alternative will modestly increase impervious surfaces as a result of the new Express Lane; the Poudre River Trail; and the Harmony Road, southbound I-25 on-ramp, and northbound I-25 off-ramp improvements. The improvements identified in Express Lane Alternative are not anticipated to result in an increase of pollutants in project area streams. Future impacts to water quality could arise from maintenance activities, such as snow plowing, sanding, and deicing. Because of the BMPs and other mitigation, the cumulative effects to water quality remain the same as determined in the 2011 FEIS.

Wildlife. The increased residential and commercial land uses and highway construction can displace wildlife, fragment wildlife habitat and alter wildlife movement. The urbanization trend will continue to impact wildlife. The increase of land development in Larimer county affects wildlife movement and habitat in those areas. As reported earlier in the section, land use changes are expected to occur regardless of Express Lane Alternative. As a result, no cumulative impacts to wildlife associated with land use development will result from Express Lane Alternative improvements

Construction of the Poudre River Trail will have a minimal impact on wildlife passage along the Cache la Poudre due to its low profile, and the proposed I-25 bridge over the Cache la Poudre will be longer with a raised profile to provide the capacity needed to pass the same 100-year flows that currently pass under the bridge.

Black-Tailed Prairie Dogs will be impacted by the construction of Express Lane Alternative. The wildlife crossing at the Cache la Poudre river will be temporarily impacted by construction. Because the impact is temporary, no cumulative impacts will result.

Highway construction may have an impact on raptors. The implementation of mitigation measures will provide relief from some of the highway construction and expansion impacts. This mitigation, coupled with the impact's brief occurrence within the past and foreseeable future timeframe, will minimize impacts to raptor nesting so as not to cause cumulative impacts.

Wetlands and Other Waters of the U.S. Wetlands are directly and indirectly impacted as urbanization and development occurs in the project area. As described in the land use section above, development is expected to continue into the foreseeable future and wetlands will continue to be impacted.

The incremental impact to wetlands from the project represents a very small percentage of the total wetlands in the FEIS study area. In addition, development that impacts wetlands is expected to continue into the foreseeable future regardless of the implementation of the Express Lane. The Express Lane is not expected to change development patterns. Because development is expected to continue expanding irrespective of Express Lane implementation, no development-related cumulative impacts to wetlands will be caused by the project.

With mitigation, no cumulative impacts to wetlands result from the Express Lane. Therefore, there would be no net loss of wetlands as a result of the impacts associated with the Express Lane.

Air Quality. The area has experienced degradation in air quality since the 2011 FEIS due primarily to increased oil and gas development, producing methane, volatile organic compounds, and benzene gases, as well as regional coal-fired power plants. This has

resulted in higher ozone concentrations. Effective November 20, 2007, the EPA designated the Denver Metro Area and the North Front Range as a non-attainment area for the 8-hour ozone (O₃). This designation was re-affirmed in 2012 when the U.S. Environmental Protection Agency (EPA) designated the region as a “marginal” nonattainment area for the more stringent ozone standard adopted by EPA in 2008.

Changes in air quality laws, policies, and guidance since publication of the FEIS in 2011 include:

- ▶ On August 2, 2016, the U. S. Council on Environmental Quality (CEQ) issued Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews, which describes how agencies should address climate change in NEPA reviews.
- ▶ The MOVES 2014a model was released in November 2015. This was a major update to MOVES2010 and its minor revisions that corrected errors and added the ability to evaluate additional air toxics (MOVES2010a and MOVES2010b). MOVES2014 includes three new emission control programs associated with regulations promulgated since the release of MOVES2010b, and its minor revision, MOVES2014a, incorporates significant improvements in calculating on-road and non-road equipment emissions. Technical and policy guidance in the use of MOVES2014 for a variety of purposes and pollutants has also been updated.
- ▶ The NAAQS for Ozone was lowered from 75 ppb to 70 ppb in October 2015 (EPA's nonattainment designations will be made in late 2017).
- ▶ Carbon Monoxide Categorical Hot-Spot Finding (February 2014) allows project sponsors the option to rely on the categorical hot-spot finding in place of doing a carbon monoxide hot-spot analysis as part of a project-level conformity determination in carbon monoxide maintenance areas.
- ▶ Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas (EPA, November 2013) was released to be used by state and local agencies to conduct quantitative PM (particulate matter) hot spot analyses for new highway and transit projects.
- ▶ FHWA's Interim Guidance Update on Mobile Source Air Toxics Analysis in NEPA was updated on December 6, 2012, from the original guidance published in September 2009. The revised guidance reflects changes in methodology for conducting emissions analysis and updates various research topics in mobile source air toxics analyses.
- ▶ Transportation Conformity Regulations as of April 2012 (PDF) (EPA, April 2012) includes updated requirements for the preparation, adoption, and submittal of implementation plans.
- ▶ In 2016, the Denver-Metro/North Front Range Region was downgraded to a moderate non-attainment area for air quality.

The project is located in the moderate non-attainment area for the Denver-North Front Range Area for the 2008 ozone standard. Since ozone is a regional pollutant, there is no requirement to analyze potential project-level impacts. No cumulative impacts to ozone are expected due to this project.

None of the other six criteria pollutants are of a concern to this project. Concentrations of lead, sulfur dioxide, and nitrogen dioxide are not significantly affected by transportation projects. This project was determined not to cause or contribute to an exceedance of the federal carbon monoxide NAAQS and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals.

During construction, dust and other emissions will cause temporary and localized air pollution generated by construction vehicles and earth disturbances. Construction activities associated with the Express Lane will be temporary, with none lasting longer than the construction period.

The analysis done for this Express Lane confirms the original finding from the 2011 FEIS, which is that no carbon monoxide or PM10 violations of the NAAQS are expected to occur as a result of implementation of the Express Lane.

Historic Properties. An updated field survey and file search was completed for the ROD1 Revision 1. None of these properties were historic. The Express Lane will have no adversely affected historic properties. Cumulative impacts to historic properties and districts have occurred and will continue to occur in the regional study area due to the conversion of agricultural lands and farmsteads to urban land uses and limited local historic preservation regulations. Planned transportation and development actions will, over time, result in the additional loss of historic properties and will alter the historic character of small farming communities. These impacts will occur regardless of whether or not the Express Lane is implemented. The construction of the Express Lane would not contribute to cumulative impacts to historic resources in comparison to what is already anticipated through land development projects and other roadway improvements. For reasonably foreseeable future projects that are federally funded or require a federal action, federal legislation protects historic resources [National Historic Preservation Act of 1966, as amended and Section 4(f) of the U.S. Department of Transportation Act] and requires that adverse effects be mitigated.

F.26.2 MITIGATION

The following mitigation measures included in the FEIS (**Table 33**) are still applicable.

Table 33. Cumulative Impacts and Mitigation for the Express Lane

Impacts	Mitigation
Water Quality	Increased impervious surfaces and highway maintenance activities will increase run-off into streams. Impacts to water quality would be reduced through implementation of maintenance programs and best management practices in both construction and design. The construction of the project will include several BMPs to reduce impacts to water resources and improve water quality conditions. A combination of mitigation measures consisting of permanent structural, non-structural, and temporary construction BMPs will be implemented in the project area. This Revised ROD1 between SH 392 and SH 14 requires treatment to 90% of the new impervious surface, not treatment to 101% as stated in the FEIS.

Table 33. Cumulative Impacts and Mitigation for the Express Lane

Impacts	Mitigation
Wildlife	<p>To mitigate for impacts to migratory birds, the MBTA will be followed. CDOT has proposed special provisions creating a new Standards and Specification Section 240—Protection of Migratory Birds to address the requirements of the MBTA. The implementation of mitigation measures will provide relief from some of the highway construction and expansion impacts. This mitigation, coupled with the impact’s brief occurrence within the past and foreseeable future timeframe, will minimize impacts to raptor nesting so as not to cause cumulative impacts.</p> <p>CDOT will follow its Impacted Black-Tailed Prairie Dog Policy (CDOT, 2009). Any prairie dog relocation or removal activities will be carried out in accordance with CRS 35-7-203, as well as any other applicable laws or regulations, and with close coordination with CPW.</p>
Wetlands and Other Waters of the U.S.	<p>CDOT requires mitigation on a one-to-one basis for any wetland impact regardless of jurisdictional status. Therefore, there would be no net loss of wetlands as a result of the impacts associated with the Express Lane.</p>
Air Quality	<p>Construction activities associated with the Express Lane will be temporary, with none lasting longer than the construction period. Mitigation measures will be implemented to reduce the impacts to air quality from construction.</p> <p>The Colorado Air Quality Control Commission recently adopted stricter methane rules intended to reduce methane pollution from the oil and gas development. Over time, these rules are expected to reduce the methane pollution from oil and gas.</p>
Historic	<p>Historic properties will continue to be impacted into the foreseeable future due to urbanization and limited local historic preservation regulations. Planned transportation and development actions will, over time, result in the additional loss of historic properties and will alter the historic character of small farming communities.</p> <p>CDOT has a Section 106 Programmatic Agreement for North I-25 that includes stipulations for mitigating adverse effects on historic properties. These mitigations will significantly reduce cumulative impacts on historic properties.</p>

F.27 SECTION 4(F)

The Revised 4(f) Evaluation is incorporated by reference into ROD1. FHWA has determined that there is no feasible and prudent avoidance alternative and the FEIS Preferred Alternative includes all possible planning to minimize harm to the Section 4(f) properties resulting from such use. In addition, Section 6.8 of the *Revised Section 4(f) Evaluation* concluded that the FEIS Preferred Alternative is the alternative with the least overall harm to the Section 4(f) properties. The FEIS Preferred Alternative uses eight Section 4(f) properties between SH 392 and SH 14 and has a *de minimis* impact on 29 Section 4(f) properties.

Between SH 392 and SH 14, impacts of the FEIS Preferred Alternative to Section 4(f) properties are limited to *de minimis* impacts to three properties (two historic properties and one recreational property) as described below.

F.27.1 HISTORIC PROPERTIES

Table 5 of the *Revised Section 4(f) Evaluation*, October 27, 2011 (CDOT, 2011b) lists historic properties for which a *de minimis* impact will occur. Between SH 392 and SH 14, two historic properties that will have a *de minimis* impact are Cache la Poudre Reservoir Inlet (5LR.11409) and Boxelder Ditch (5LR.2160).

FHWA finds that all the uses described below for the two historic properties and the Arapaho Bend Natural Area to be *de minimis*.

Cache la Poudre Reservoir Inlet (5LR.11409.1). The Express Lane would require an extended culvert at STA 4050. A 75-foot-long extension of double CBC farther east of the existing culvert outflow and a 10-foot-long extension west of the intake at the same double CBC would be needed to carry the widening of west frontage road shoulders and the widened Prospect Road interchange northbound I-25 on-ramp.

The qualities that make the entire resource NRHP-eligible have been compromised by modifications associated with construction of the I-25 ramps and frontage road. The Express Lane improvements are minor in relative extent; therefore, the Express Lane would result in *no adverse effect* to the Cache la Poudre Reservoir Inlet.

Boxelder Ditch (5LR2160.1). Under the Express Lane, the I-25/Harmony Road interchange would be modified, including widening of the on- and off-ramps. Boxelder Ditch is currently enclosed inside a pipe underneath the existing ramps, fill slopes and mainline I-25 traffic lanes. To accommodate construction of a new southbound off-ramp from I-25, which would be situated 90 feet west of the existing ramp alignment, a 124-foot-long section of the open Boxelder Ditch would need to be enclosed inside a box culvert beneath the ramp. The remainder of the ditch located within the area proposed for the Express Lane highway improvements is already piped under I-25, the northbound on-ramp to I-25, and Harmony Road, and no new direct impacts would occur in those locations.

A small direct impact would occur where the ditch would pass beneath a new property access road on the southeast side of the interchange. This new access road is a cul-de-sac, required to replace the existing access from the abandoned east frontage road. A total of 70 feet of open ditch would have to be enclosed inside a box culvert beneath the proposed cul-de-sac.

Installation of the new culvert would likely require a temporary use of the historic property for equipment access and construction activities. The ditch would remain operational and irrigation water would be protected from all sediment and physical encroachment by construction. All disturbances caused by construction equipment or construction activities would be temporary in nature and affected areas would be restored to the original condition and appearance.

The two box culverts required under the Express Lane would enclose a total of 194 feet of open ditch that retain integrity, but would not alter its historic alignment. These direct impacts constitute less than one percent of the entire length of the Boxelder Ditch, and would not significantly diminish or alter characteristics that render the ditch eligible for NRHP; therefore, the Express Lane would result in *no adverse effect* to the resource.

F.27.2 ARAPAHO BEND NATURAL AREA

Table 6 of the Revised Section 4(f) Evaluation (CDOT, 2011b) lists the park, recreational area, and wildlife and waterfowl refuge area properties for which a *de minimis* impact will occur. Between SH 392 and SH 14, the one recreation property that will have a *de minimis impact* is Arapaho Bend Natural Area. Although there are additional impacts to this resource due to design changes made since the FEIS, the activities, features, and attributes of the resource will not be adversely affected by the Express Lane, consistent with the *de minimis* determination made in the FEIS.

Measures to minimize harm identified in the FEIS included retaining walls of approximately 2,000 feet in length along the Harmony Road/I-25 interchange ramps north of Harmony Road to minimize use of the resource. Since the FEIS, the City of Fort Collins, as Official

with Jurisdiction over the Arapaho Bend Natural Area, expressed concern that the retaining walls would introduce a large, unnatural, and imposing structure that would be counter to the purpose of the Natural Area. The City felt that the retaining walls would highlight, rather than screen, the proposed I-25 infrastructure. Therefore, the City requested that CDOT consider a sloped embankment instead of the walls, even if it resulted in greater acreage impacts to the resource. In response to the City's request, CDOT's updated design in this reevaluation includes a sloped embankment instead of retaining walls, which results in an additional 1.89 acres of use of the approximate 287-acre Arapaho Bend Natural Area, for a total of approximately 4.96 acres of use. None of the features or amenities would be used as a result of this additional acreage, and the utility of the remainder of the natural area would not be diminished.

In conclusion, there is no change to the *de minimis* determination as a result of this design change. The mitigation measures identified previously in the FEIS remain relevant. Correspondence between CDOT and the City of Fort Collins is included in **Appendix B**.

G. STATUS OF FEDERAL AND STATE APPROVALS

The following subsections describe whether or not there are changes to necessary federal or state approvals since ROD1.

G.1 AIR QUALITY

To demonstrate that the FEIS Preferred Alternative would not cause significant air quality impacts regionally and would comply with the current State Implementation Plan when it is fully constructed, the entire FEIS Preferred Alternative was modeled for air pollutant emissions through a separate, non-fiscally constrained 2035 regional travel demand model. The modeling results indicated that all currently applicable emission conformity tests would still be met if the FEIS Preferred Alternative is constructed in its entirety before 2035. The CDPHE APCD concurred with the finding that there would not be any significant regional air quality impacts once all phases of the project are funded and completed. **Appendix B** of ROD1 includes this concurrence. ROD1 Revision 1 does not change the planned improvements in the FEIS Preferred Alternative and, therefore, does not change the results of this air quality analysis.

The *North Front Range Fiscally Constrained 2035 Plan Update* adopted September 1, 2011 by the NFRMPO Council included all I25 FEIS components including the Express Lane in future years. The subsequent North Front Range 2040 Transportation Plan was adopted on September 3, 2015 and amended on February 2, 2107 and June 1, 2017 to include all newly identified funding for inclusion in the Fiscally Constrained Plan. At the project level, the Express Lane would not result in exceedance of the carbon monoxide standard and meets project level conformity for CO. The Express Lane is not an air quality concern for PM10 and is not expected to create or worsen a PM10 violation. The Express Lane would reduce regional mobile source air toxics emissions due to ongoing national control programs and is not a significant source of greenhouse gas emissions. This information was submitted to the CDPHE APCD on January 17, 2017. The CDPHE APCD concurred with this finding by letter dated January 19, 2017 (**Appendix B**). The requirements of the Clean Air Act Amendments of 1990 Transportation Conformity Rule have been met.

G.2 SECTION 106 CONSULTATION

The lead agencies consulted with the State Historic Preservation Officer (SHPO) and consulting parties on determinations of eligibility and effects. The change from continuous accel/decel lanes between SH 392 and SH 14 in ROD1 to Express Lanes in the Revised ROD1 between SH 392 and SH 14 does not change or affect the historic properties. This information was submitted to the SHPO and the consulting parties on February 14, 2017. Concurrence from SHPO was received on March 23, 2017 (**Appendix B**).

G.3 CDOT 1601 PROCESS

The CDOT 1601 process (required by Policy Directive 1601, which addresses new interchanges or interchange modifications on all state and federal highways) is required for all interchange modifications. The CDOT Chief Engineer signed this analysis on August 8, 2011, for interchanges included in ROD1. No additional modifications are anticipated to the interchanges between SH 392 and SH 14 as a result of this Revised ROD1 between SH 392 and SH 14; therefore, no additional 1601 process is needed.

G.4 SECTION 404 PERMIT

The North I-25 EIS was conducted using a NEPA/Section 404 merger process as documented in a letter dated February 5, 2004, from FHWA to the USACE. This included coordination with the USACE, EPA, and USFWS. A Clean Water Act Individual Section 404 permit (NWO-2004-80110-DEN) was issued for the entire FEIS Preferred Alternative. The Revised ROD1 between SH 392 and SH 14 decision does not modify the FEIS Preferred Alternative and, therefore, does not change the Section 404 permit.

All impacted wetlands and jurisdictional open waters will be mitigated in accordance with the USACE mitigation policies, and the conditions of the USACE Section 404 permit. The Individual Section 404 permit (NWO-2004-80110-DEN) permitted 16.08 acres of permanent impacts to wetlands and other waters of the U.S. and 2.06 acres of temporary impacts to wetlands and other waters of the U.S. As of February 2017, the individual projects from the FEIS Preferred Alternative have permanently impacted 0.37 acre of wetlands and other waters of the U.S. and 0.23 acre of temporary impacts. Mitigation has been created at St Vrain State Park to offset the total impact acreage to wetlands in the North I-25 EIS regional study area. Tracking and reporting of impacts will continue in accordance with the conditions of the USACE Section 404 permit.

G.5 ENDANGERED SPECIES ACT CONSULTATION

Appendix E of ROD1 included the PBO, dated October 13, 2011. This PBO provides concurrence from USFWS with the findings of effect for threatened or endangered species. The Revised ROD1 between SH 392 and SH 14 does not change or impact this finding. The USFWS was informed of the changes included in the Revised ROD1 between SH 392 and SH 14 in a letter dated March 23, 2017. Concurrence from the USFWS was received on April 7, 2017 (**Appendix B**).

G.6 SENATE BILL 40 (SB 40) CERTIFICATION

An SB 40 certification will be required by CPW for the crossing of streams or adjacent streambanks to avoid adverse effects to waterways, stream banks, or associated tributaries.

This legislation is designed to protect fishing waters and to recognize the importance of the entire stream ecosystem, including wetland and riparian areas. An SB 40 wildlife certification application would need to be submitted to CPW 60 days before construction begins.

G.7 CONCURRENCE FOR INTERCHANGE MODIFICATIONS

Concurrence from FHWA needs to be made before any final design or construction of I-25 interchange modifications. This includes FHWA concurrence for the I-25/Prospect interchange and the I-25/SH 14 interchange for the Express Lane between SH 392 and SH 14.

H. CLARIFICATIONS AND CORRECTIONS FROM FEIS

ROD1 includes a full list of clarifications and corrections to specific items in the FEIS. These issues were brought up during the public and agency review process for the FEIS. No additional clarifications and corrections to specific items in the FEIS are included in this Revised ROD1 between SH 392 and SH 14.

The lead agencies identified a FEIS Preferred Alternative for the project in the FEIS, which is described in **Section 2.2.4, Preferred Alternative**, of the FEIS. **Figure 5** shows the FEIS Preferred Alternative.

In this Revised ROD1 between SH 392 and SH 14, FHWA modifies the decision made in ROD1 by replacing the selection of the continuous accel/decel lanes between SH 392 and SH 14 with the Express Lanes portion of the FEIS Preferred Alternative. Accel/decel lanes will now be from MP 267 (Port-of-Entry) to MP 269 (SH 14) This is the only modification being made at this time to ROD1. To implement the continuous accel/decel lanes, a new ROD will be required.

I. MITIGATION MEASURES

This section discusses the mitigation measures identified by CDOT and FHWA to eliminate or minimize social and environmental impacts for the Express Lane. The impacts and mitigation for each resource are summarized in **Section F** of this document and **Section 3.28 Summary of Direct and Indirect Impacts** of the FEIS (CDOT, 2011a). Mitigation measures also are included in Attachment G of the N I-25 ROD1 between SH 392 and SH 14 Reevaluation (**Appendix A**).

Mitigation measures that warrant monitoring have also been identified below. Monitoring has been identified where it is appropriate for specific resources to ensure implementation, meet permitting requirements, and/or help identify trends and possible means for improvement. As described in this section, monitoring has been identified for air quality (during construction), water quality (per CDOT Region and statewide program/permit requirements), wetlands (per Section 404 permit requirements), noxious weeds (during construction and revegetation), hazardous materials (during construction), paleontology (during construction) and a number of construction activities.

CDOT and FHWA will ensure the mitigation commitments outlined herein will be implemented as part of the project design, construction, and post-construction monitoring.

These commitments will be incorporated, as appropriate, into the construction plans and specifications for this project. CDOT and FHWA will ensure that these commitments are implemented by reviewing project construction plans and specifications, as well as periodically inspecting during construction. Inspections during construction will involve both a review of project construction documentation and observation of construction activities.

CDOT and FHWA will monitor mitigation effectiveness and success through a combination of field reviews, pre-construction and post-construction inspections and post-construction monitoring, as appropriate. CDOT will be preparing annual reports, by agreement with some resource agencies. CDOT and FHWA will report effectiveness, in accordance with agency requirements. If mitigation is not successful or mitigation commitments are not met, CDOT will rectify as needed.

The public has been afforded a number of opportunities to comment on proposed mitigation measures, including public meetings, newsletters, and project website. CDOT and FHWA worked with the public and agencies to avoid and minimize impacts. The distribution of the Draft and FEIS documents has provided the primary opportunity to inform the public on the proposed project and the environmental analysis associated with each identified alternative. Following the distribution of each document, a public comment period was provided. Further opportunities for public information and involvement will exist through updated information provided on the CDOT website, and through public involvement activities that will be initiated during the design and construction phases.

J. MONITORING AND ENFORCEMENT PROGRAM

Transportation projects must comply with a wide range of federal and state environmental laws and regulations, permits, reviews, notifications, consultations, and other approvals. This section summarizes the permits that may be potentially applicable to regulated project activities with the Express Lane Alternative. It is not an all-inclusive list nor does it include reviews, consultations, and other types of approval that do not involve granting or denying a permit. No additional permits are anticipated as a result of this Revised ROD1 between SH 392 and SH 14.

J.1 WATER QUALITY/WATER RESOURCES

J.1.1 COLORADO DISCHARGE PERMIT SYSTEM (CDPS)

A CDPS permit is required by State and Federal regulations for stormwater discharged from any construction activity that disturbs at least one acre of land. This discharge permit is required to ensure the quality of stormwater runoff from the construction site. Under CDPS permit stipulations, a site-specific stormwater management plan would be prepared outlining in detail specific BMPs for inclusion in project plans and implementation in the field. Included in the stormwater management plan are such aspects as BMP locations, turbidity and monitoring requirements, seed mix, concrete wash-out provisions, and other relevant information. Permits would be obtained from CDPHE's Water Quality Control Division.

J.1.2 SECTION 404 PERMIT

A Section 404 permit, which is issued by the USACE, was received on May 17, 2013. The permit number is NWO-2004-80110-DEN. All requirements in this permit will be followed, including the requirement to submit additional information to the USACE for individual projects. This will be done during the final design process.

J.1.3 SECTION 401 WATER QUALITY CERTIFICATION

A Section 401 Water Quality Certification is required in conjunction with an Individual Section 404 Permit (dredge and fill permit) for any transportation construction project or maintenance activity where work occurs below the ordinary high water line or adjacent to wetlands. As part of its Section 401 Certification, Regulation No. 82 states that CDOT is required to notify the CDPHE and the owners and operators of municipal and domestic water treatment intakes or diversions downstream if potential impacts to nearby receiving waters may occur during construction, e.g., when blasting occurs near receiving streams. Unless specified by the Water Quality Control Division of CDPHE, in-stream turbidity monitoring typically is not required. The Section 401 Certification must be obtained from the Water Quality Control Division of the CDPHE.

J.1.4 SECTION 402 PERMIT

A Section 402 permit is required for dewatering of construction areas, if necessary. The following activities would likely require a Section 402 permit:

- ▶ Construction dewatering operations associated with utility excavation, bridge pier installation, foundation or trench digging, or other subsurface activities.
- ▶ If discharge from a point source is expected to occur due to vehicle washing, or from industrial discharges.
- ▶ A Section 402 permit would be obtained from CDPHE's Water Quality Control Division.

J.1.5 FLOODPLAIN PERMITS

Floodplain permits, including a floodplain development permit, CLOMR, and LOMR, is required for any floodplain encroachment.

J.2 AIR QUALITY

J.2.1 STATIONARY SOURCE PERMITTING AND AIR POLLUTION EMISSIONS NOTICE (APEN)

A stationary source permit and APEN requirements stipulate that a construction permit must be obtained from CDPHE for any and all emissions associated with construction activities, including operations of portable sources. CDOT will submit an APEN to the CDPHE APCD if more than 25 acres of land would be impacted and/or project construction would last longer than 6 months. CDPHE will respond whether or not a permit would be required before commencing construction.

J.2.2 OTHER AIR QUALITY PERMITS

A portable source construction permit would likely need to be obtained from CDPHE for the operation of portable sources (e.g., asphalt plants, generators, rock crushers).

A fugitive dust permit and bridge demolition permit will be required for construction projects. Additionally, an asbestos abatement permit from the CDPHE would also be required for demolition of structures that potentially have friable asbestos containing material.

J.3 BIOLOGICAL RESOURCES

J.3.1 PRAIRIE DOG RELOCATION PERMIT

A prairie dog relocation permit, issued by CPW, will be required for the relocation, transportation, or donation of any prairie dog(s) or colonies that may be affected by project activities. Local permits may also be needed for this activity.

J.4 ACCESS

J.4.1 STATE ACCESS PERMIT

A state Access Permit, issued by CDOT, would be required for all requests for new or modified access to all state highway roadways. Owners of any existing accesses adversely affected by the project would be notified of the proposed changes.

J.4.2 CONSTRUCTION ACCESS PERMIT

Construction access permits likely would be required for temporary access needs outside the project limits.

J.5 OTHER LOCAL PERMITS

Other local permits would likely be required by cities and counties as needed, such as construction, grading, erosion control, utility, or survey permits either prior to the beginning or during construction phases.

K. PUBLIC AND AGENCY INVOLVEMENT

K.1 AGENCY COORDINATION

The *North I-25 Final Environmental Impact Statement and Final Section 4(f) Evaluation* (CDOT, 2011a) was released on August 19, 2011. Details on comments received on the FEIS are included in ROD1. An RCC meeting was held September 8, 2014. 21 representatives from cities, counties, and agencies along the northern I-25 corridor attended this meeting. The meeting presented information on ROD1 as well as the Revised ROD1 between SH 392 and SH 14 decision to provide Express Lanes between SH 392 and SH 14 on I-25 instead of continuous accel/decel lanes. The RCC concurred with the Revised ROD1 between SH 392 and SH 14 decision to include Express Lanes instead of continuous accel/decel lanes between SH 392 and SH 14.

Several meetings have been held to coordinate with the other projects being planned and designed along the North I-25 corridor. No negative impact was identified with the proposal to change the decision in ROD1. Participants generally agreed that Express Lanes would:

- ▶ Contribute to additional managed-lane capacity on I-25,
- ▶ Improve ease of constructability and phasing,
- ▶ Provide travel time savings to CDOT's new regional express bus, and
- ▶ Potentially attracting a PPP to complete the Express Lanes between Fort Collins and Denver.

K.2 PUBLIC INVOLVEMENT

A public meeting was held October 8, 2014, and was attended by approximately 40 people. The meeting included discussion on ROD1, as well as the Revised ROD1 between SH 392 and SH 14 decision to provide Express Lanes between SH 392 and SH 14 on I-25 instead of continuous accel/decel lanes. No comments were received on this revision.

L. REFERENCES

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**APPENDIX A:
NORTH I-25 ROD1 BETWEEN SH 392 TO SH 14
REEVALUATION**

COLORADO DEPARTMENT OF TRANSPORTATION REEVALUATION FORM	Original NEPA Approval Date: 12-29-2011	Reevaluation Date: 08-15-17	Project Code: 18357
Project Name and Location: North I-25: SH 392 to SH 14 IM 0253-221			
NEPA Document Title: North I-25 Environmental Impact Statement - Record of Decision 1 (ROD1)			
Region/Program/Residency: Region 4/North Program/North I-25			
Project Description: <p>The North I-25 (SH 392 to SH 14) project is part of the multi-modal corridor improvements identified in the North I-25 Final Environmental Impact Statement (FEIS) (August 2011) and ROD1 (December 2011). ROD1 included continuous acceleration/deceleration lanes between State Highway (SH) 392 (MP 262) and SH 14 (MP 269). This project, referred to herein as the Express Lane Alternative, adds one buffer separated express lane in each direction from SH 392 to SH 14 and changes the limits of the accel/decel lanes to MP 267 (Port-of-Entry) to MP 269 (SH 14). The express lanes were evaluated as part of the FEIS Preferred Alternative but were not included in ROD1.</p> <p>This Reevaluation evaluates any changes to the affected environment and the impacts of the Express Lane Alternative to determine if there are any new significant impacts that were not previously analyzed as part of the FEIS, and the evaluation of the accel/decel lanes in ROD1. Attachment A provides a comparison of the Express Lane Alternative, the Accel/Decel Alternative, the FEIS Preferred Alternative, and the No-Action Alternative for 2040 operations metrics, community plans, and environmental resources.</p> <p>The Express Lane Alternative includes the widening of I-25 between SH 392 and SH 14 with one buffer separated express lane in each direction; a connection to the express lanes from SH 392 to SH 60 (ROD4); tolling and intelligent transportation system (ITS) infrastructure needed to efficiently operate the new express lanes; continuous accel/decel lanes between the Port-of-Entry and SH 14; resurfacing from SH 392 to SH 14; median barrier features; and water quality treatment.</p> <p>Key Project Elements</p> <p>The Express Lane Alternative includes a 12-foot (ft) inside shoulder, a 12-ft express lane, a 4-ft wide buffer, two 12-ft general purpose lanes, and a 12-ft outside shoulder along northbound and southbound I-25 from SH 392 to SH 14. From the Port-of-Entry to SH 14, a 12-ft auxiliary lane is included (Figure 1).</p> <p>Key structure work involves the replacement or reconstruction of 11 concrete box culverts or bridges along I-25 between SH 392 and SH 14 (Table 1). The northbound and southbound I-25 bridges over the Cache la Poudre River and approaching roadway will be raised to fit the 100-year flood criteria.</p> <p>The project is located in a Municipal Separate Storm Sewer Systems (MS4) permit area; therefore, water quality elements have been incorporated into the design. Three water quality detention basins are included. Open roadside ditches will collect and convey the majority of the roadway stormwater drainage to the basins.</p>			

Figure 1 Express Lane Alternative Cross-Sections

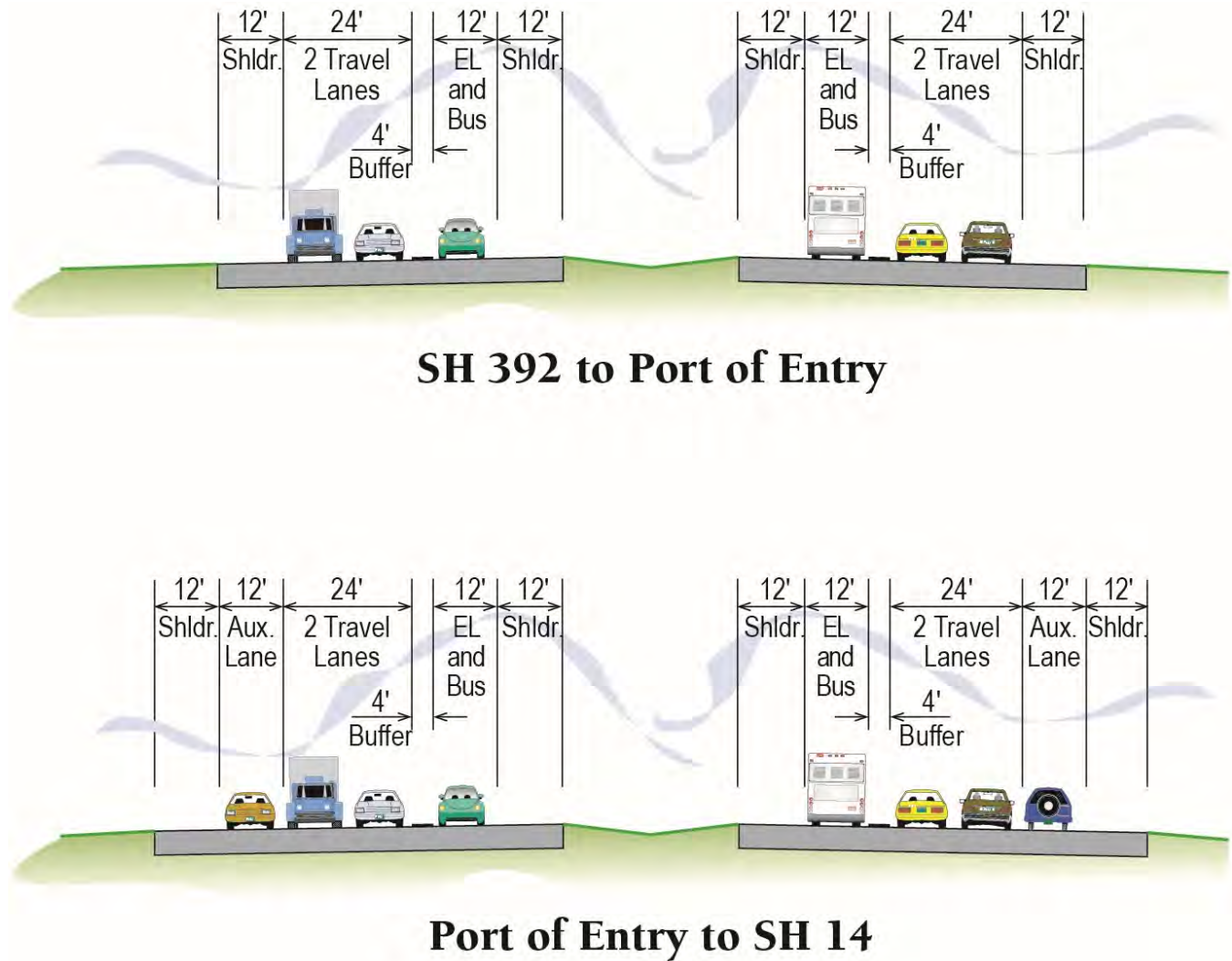


Table 1 lists structures that will be replaced or reconstructed.

Table 1. Express Lane Alternative – Structures between SH 392 and SH 14

Replacement or Reconstruction
I-25 over Cache la Poudre Floodway concrete box culvert
I-25 northbound over Cache la Poudre River
I-25 southbound over Cache la Poudre River
I-25 northbound over Great Western Rail Road (two locations)
I-25 southbound over Great Western Rail Road (two locations)
Prospect Road over I-25
Lake Canal north of Prospect Road concrete box culvert
Timnath Ditch (Cache la Poudre Reservoir Inlet) concrete box culvert
Box Elder Creek concrete box culvert
SH 14 over I-25
SH 14 over Frontage Road Connector

Project Phasing Plan and Portions Completed (if warranted):

The North I-25 FEIS was completed in August 2011 and the ROD for Phase 1 of the FEIS Preferred Alternative (ROD1) was completed in December 2011.

Phase 1 Portions Completed:

- The Express Bus Service has been initiated with the Commuter Bus Service (Bustang) from Fort Collins to Denver Union Station currently operating six southbound trips and six northbound trips per day.
- Park-n-Ride installations at Fort Lupton and Evans on US 85.
- Interim I-25 express lanes from US 36 to SH 128 (120th Avenue), with tolling currently operating.

Phase 1 Portions in Design:

- Park-n-Ride installations at Harmony Road and Prospect on I-25.
- Reconstruction of the US 34/Centerra Parkway Interchange.
- Reconstruction of the I-25/SH 7 Interchange.

Other Phase 1 portions will be designed and constructed as funding becomes available.

Phase 2 Portions in Design:

- Addition of one express lane in each direction on I-25 from SH 56 to SH 392.
- Interim I-25 express lanes from SH 56 to SH 392.
- Replacement of the I-25 bridge over CR 48 (Vine Drive).

Phase 2 Portions Under Construction:

- Interim I-25 express lanes from SH 128 (120th Avenue) to E-470 scheduled for completion in February 2018 and toll collection commencing in May 2018.
- Replacement of the I-25 bridges over Crossroads Boulevard and relocation of Byrd Drive scheduled for completion in November 2018.

As portions of the FEIS Preferred Alternative Phase 2 and Phase 3 are added to the fiscally-constrained plan, additional RODs will be initiated to implement those portions.

Portion of Project Currently Being Advanced:

The Express Lane project consists of adding one Express Lane in each direction and changing the limits of the accel/decel lanes to MP 267 (Port-of-Entry) - MP 269 (SH 14).

Date(s) of Prior Reevaluations:

North I-25 ROD1. December 2011.

North I-25 ROD1: Interim Tolloed Express Lanes (US 36 to 120th Avenue) Reevaluation. June 2013.

North I-25 ROD2: 120th Avenue to SH 7. September 2015.

North I-25 ROD2: I-25 SH 128 (120th Avenue) to SH 7 Reevaluation. December 2015.

North I-25 ROD3: Crossroads Boulevard. June 2016.

I. Document Type

- Categorical Exclusion (CE)
- Environmental Assessment (EA)
- Finding of No Significant Impacts (FONSI)
- Draft Environmental Impact Statement (DEIS)
- Final Environmental Impact Statement (FEIS)
- Supplemental Environmental Impact Statement (SEIS)
- Record of Decision (ROD)
- Other (such as: local funding, etc.) _____

II. Reason for Reevaluation

- Project is proceeding to the next major approval or action [23 CFR 771.129(c)]
- Project changes such as laws, policies, guidelines, design, environmental setting, impacts or mitigation (describe:)
- Greater than three years have elapsed since FHWA's approval of the DEIS [23 CFR 771.129(a)] or FHWA's last major approval action for the FEIS [23 CFR 771.129(b)]
- Other: Proposed change to the selected alternative in the ROD1. 23 CFR 771.127(b) and 23 CFR 771.129(c)

III. Conclusion and Recommendation

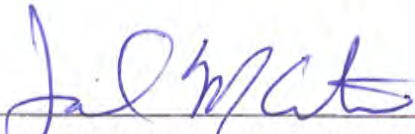
- The above environmental document has been reevaluated as required by 23 CFR 771.129 and it was determined that no substantial changes have occurred in the social, economic, or environmental impacts of the proposed action that would substantially impact the quality of the human, socio-economic, or natural environment. Therefore, the original environmental document or CE designation remains valid for the proposed action. It is recommended that the project identified here-in be advanced to the next phase of project development. A summary of the review is documented in Section IV.
- The above environmental document has been reevaluated as required by 23 CFR 771.129 and it was determined that the environmental document or CE designation is no longer valid or more information is required. Additional required documentation is identified in Section VII.



Regional Planning Environmental Manager or Designee

8.15.17

Date



Federal Highway Administration Division Administrator or Designee

8/16/2017

Date

IV. Evaluation

- Level 1: Less than three years since last major step to advance the action (e.g. approval of NEPA document, authority to undertake final design, authority to acquire significant portion of ROW, approval of PS and E) and there are no changes in project scope, environmental conditions, environmental impacts or regulations and guidelines. - OR - The document being re-evaluated is a programmatic Categorical Exclusion regardless of time since the last major step to advance the action (as long as the project would still be covered by a programmatic Categorical Exclusion). All decisions in the prior NEPA document remain valid. No FHWA concurrence is required. Note to file and to distribution below.
- Level 2: Less than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
- Level 3: More than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
- Level 4: Major changes in project scope or environmental commitments, or for EISs when greater than three years have elapsed since the last major project action. Updates or new studies maybe required. A Level 4 Reevaluation may require a separate document. FHWA concurrence is required.

ENVIRONMENT SETTING, AFFECTED ENVIRONMENT, AND ENVIRONMENTAL IMPACT ASSESSMENT:

Document changes to human, socio economic, or natural environment for environmental setting or circumstances.

Document changes in impact status. Place check-mark or description where relevant. Note: this list may be expanded or adjusted to match the headings in the original environmental document reviewed.

Setting/Resource / Circumstance	Change in Affected Environment or Setting		Change in Environmental Impact		Date Reviewed	Highlight Section VI Additional Studies Required or Section IX Attachments
	Yes	No	Yes	No		
Air Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment B. See change in environmental conditions below. No change in impacts.
Geologic Resources and Soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Water Quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in impacts below.
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in impacts below.
Wetlands/Waters of U.S.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in environmental conditions and impacts below.
Vegetation and Noxious Weeds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in environmental conditions and impacts below.
Fish and Wildlife	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in environmental conditions and impacts below.
Threatened/Endangered Species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in environmental conditions and impacts below.
Historic Resource (includes bridges)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment C. See change in environmental conditions and impacts below.
Archaeological Resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in environmental conditions and impacts below.
Paleontological Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Social Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.

Setting/Resource / Circumstance	Change in Affected Environment or Setting		Change in Environmental Impact		Date Reviewed	Highlight Section VI Additional Studies Required or Section IX Attachments
	Yes	No	Yes	No		
Economic Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Environmental Justice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Residential/Business Right-of- Way Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in acquisition and impacts below.
Transportation Resources (roadway, rail, bus, bike, pedestrian, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Utilities and Railroads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Section 4(f)/6(f)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in environmental conditions and impacts below.
Farmlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment A. See change in environmental conditions and impacts below.
Noise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment D. See change in environmental conditions below and impact assessment below.
Visual Resources/Aesthetics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment A. No change in environmental conditions or impacts.
Hazardous Materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	Attachment E. See change in environmental conditions below.
Cumulative Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	December 2016	No change in environmental conditions or impacts.
Other(s) Traffic/Operations/Travel Patterns	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	December 2016	Attachment F. See change in conditions and impacts below.

DESIGN ALTERATIONS:

Document changes to project scope and or design criteria:

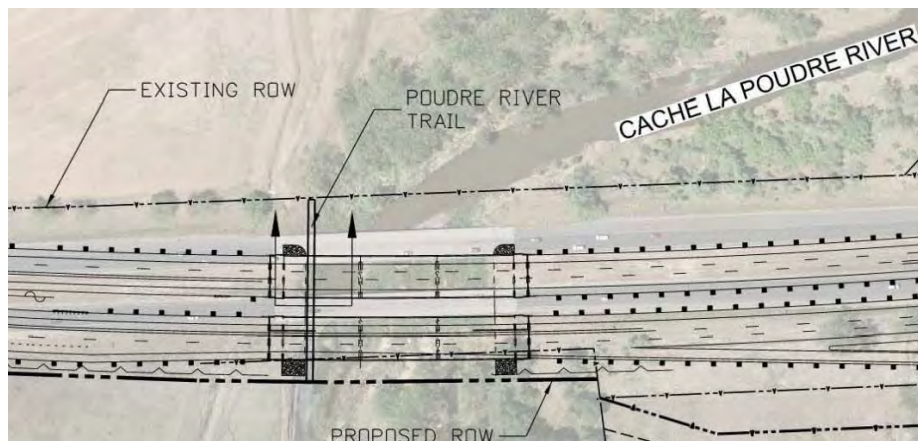
The Express Lane Alternative includes:

- Widening I-25 to accommodate a new inside express lane (12-ft) in each direction with a 4-ft buffer, full standard inside and outside shoulders (12-ft each), two full standard general purpose lane widths (12-ft each) for approximately seven miles on I-25 between SH 392 and SH 14 (**Figure 1**);
- Tolling and ITS infrastructure to operate the express lanes;
- Three permanent water quality detention basins. The number of water quality detention basins will be reduced from 25 to 3 due to consolidation of the water quality facilities, reduced additional impervious surface by approximately seven acres and updated MS4 permanent water quality treatment requirements. Under the FEIS Preferred Alternative and the Accel/Decel Alternative, water quality detention basins were designed to provide a sufficient volume to treat 101% of the impervious surfaces within the project area. The new CDOT 2015 MS4 permit requires treating 90% of the new impervious surface. This Reevaluation conforms to the new CDOT 2015 MS4 permit.
- Changes the limits of the accel/decel lanes to MP 267 - MP 269.
- The width of the center median will vary over the length of the project.
- Vertical alignment corrections to maintain minimum roadway grade.
- Horizontal alignment shift over the length of the project to accommodate wider cross-section, passing sight distance, and superelevation.
- Construction of the Poudre River Trail (10-ft wide concrete trail) within CDOT right-of-way on the south side of the Cache la Poudre River (**Figure 2**). The Poudre River Trail has not yet been constructed to the east or west of this segment but will be constructed at a later date by other parties.
- Construction of and restriping for an additional left-turn lane (three left-turns total) from eastbound Harmony Road to the northbound I-25 on-ramp.
- Extension north of the reconstruction of the southbound I-25 on-ramp from Harmony Road with widening of the ramp to accommodate an additional (two left-turn lanes total) left-turn from eastbound Harmony Road to the southbound I-25 on-ramp.
- Extension north of the reconstruction of the northbound I-25 off-ramp to Harmony Road to accommodate widening of the ramp for an additional lane (three lanes total) for the northbound to westbound movement.
- Construction of carpool/Park-n-Ride lots at the I-25/SH 14, I-25/Prospect and I-25/Harmony interchanges.

The following elements of the Express Lane Alternative were not included in the FEIS:

- Construction of the Poudre River Trail;
- Construction of and restriping for an additional left-turn lane (two left-turns total) from eastbound Harmony Road to the northbound I-25 on-ramp (**Figure 3**);
- Extension north of the reconstruction of the southbound I-25 on-ramp from Harmony Road with widening of the ramp to accommodate an additional left-turn (two left-turn lanes total) from westbound Harmony Road to the southbound I-25 on-ramp; and
- Extension north of the reconstruction of the northbound I-25 off-ramp to Harmony Road to accommodate widening of the ramp for an additional lane (three lanes total) for the northbound to westbound movement.

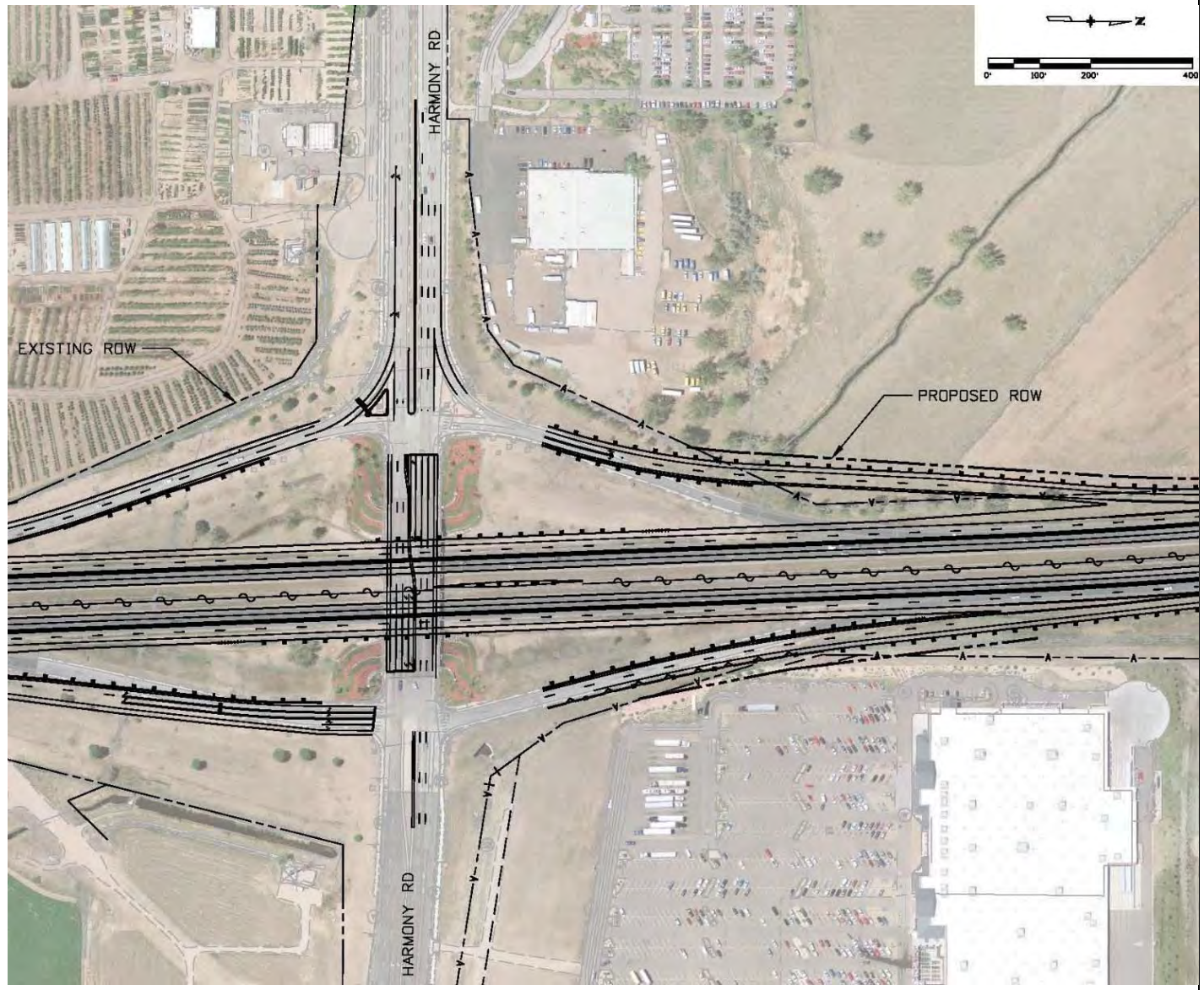
Figure 2 *Express Lane Alternative Poudre River Trail*



The FEIS Preferred Alternative included widening I-25 between SH 392 to SH 14 (approximately seven miles) with full reconstruction of the existing cross-section. The FEIS Preferred Alternative included:

- Widening I-25 to accommodate full standard inside and outside shoulders (12-ft), three full standard general purpose lane widths (12-ft), an inside express lane (12-ft) with a 4-ft buffer in each direction on I-25 between SH 392 and SH 14;
- Vertical and horizontal alignment corrections;
- Tolling and ITS infrastructure to operate the express lanes;
- Reconstruction of the frontage roads along I-25 with a 40-ft offset from the I-25 mainline and relocation east or west away from the interchange ramp terminals;
- Construction of Park-and-Ride carpool lots at the I-25/SH 14, I-25/Prospect Road, I-25/Harmony Road, and I-25/SH 392 interchanges;
- Reconstruction of the I-25/SH 14, I-25/Prospect Road, and I-25/Harmony Road interchanges;
- Modification of the ramps at the I-25/SH 392 interchanges;
- Construction of accel/decel lanes from MP 267 (Port-of-Entry) - MP 269 (SH 14);
- Replacement or rehabilitation of 13 structures (**Table 1**); and
- Twenty-five permanent water quality detention basins.

Figure 3 *Express Lane Alternative I-25/Harmony Road Improvements*



The Accel/Decel Alternative included widening I-25 between SH 392 to SH 14 (approximately seven miles) with full reconstruction of the existing cross-section plus pavement to accommodate the continuous accel/decel lanes.

- Widening I-25 to accommodate full standard inside and outside shoulders (12-ft), two full standard general purpose lane widths (12-ft), and one outside accel/decel lane (12-ft) in both the southbound and northbound directions on I-25 between SH 392 and SH 14;
- Resurfacing, reconstruction, and restriping of I-25 in this section;
- Vertical alignment corrections;
- Replacement or rehabilitation of 13 structures (**Table 1**); and
- Twenty-five permanent water quality detention basins.

The continuous accel/decel lanes between SH 392 and SH 14 were included in the FEIS as an interim improvement in Phase 1 of the FEIS Preferred Alternative where the additional pavement would ultimately be used for the express lanes.

Note that the Express Lane Alternative includes two general purpose lanes and one express lane in the southbound and northbound directions. The FEIS Preferred Alternative included three general purpose lanes and one express lane in the southbound and northbound directions. The Accel/Decel Alternative included two general purpose lanes and one continuous accel/decel lane in the southbound and northbound directions. Thus, the FEIS Preferred Alternative includes one additional continuous lane in each direction, relative to the Express Lane Alternative and the Accel/Decel Alternative. Due to limited funding, the third general purpose lanes in the southbound and northbound direction, as included in the FEIS Preferred Alternative, are not being considered for implementation at this time.

REGULATORY CHANGES:

Document changes to laws, regulations, and/or guidelines:

- In July 2011, the FHWA/CDOT noise regulations and evaluation methodology were changed. The noise impact assessment report was updated to reflect this change.
- In June 2013, the Memorandum of Agreement between Colorado Parks and Wildlife (CPW) and CDOT was updated for Senate Bill 40 (SB 40) resources and SB 40 Wildlife Certification Guidelines.
- In March 2015, the CDOT air quality evaluation methodology was changed. The air quality evaluation technical memorandum was updated to reflect this change.
- A new CDOT MS4 permit was issued on July 28, 2015.
- In 2015, FHWA issued *Guidelines for the Visual Impact Assessment of Highway Projects*.

IMPACTS ASSESSMENT:

For items checked as changed above, assess the affected natural and socio-economic environment, impacts and new issues/concerns, which may now exist.

Attachment A provides a comparison of the Accel/Decel, Express Lane and No-Action Alternatives for 2040 operations metrics, interchange safety, modal alternatives, community plans, and environmental resource impacts. Resources that have not experienced a change in the affected environment or setting nor a change in environmental impacts since the FEIS or ROD1 but still have relevant mitigation that is required for environmental impacts identified in the FEIS and ROD1. These resources include:

- Geologic Resources and Soils
- Paleontological Resources
- Land Use
- Social Resources
- Economic Resources
- Environmental Justice
- Transportation Resources (roadway, rail, bus, bike, pedestrian, etc.)
- Utilities and Railroad
- Visual Resources/Aesthetics
- Energy

The relevant mitigation measures for these resources in relation to the environmental resources are included in **Attachment G**. Resources that do not exist in the project area, are not impacted, and do not have relevant mitigation for the Express Lane Alternative include:

- Section 6(f)

Air Quality

Air quality has changed (SH 392 to SH 14) since completion of the FEIS and ROD1. The area along I-25 is subject to the conformity requirements of the *Revised Carbon Monoxide Maintenance Plan, Fort Collins Attainment/Maintenance Area* and the *Denver Metropolitan Area and North Front Range 8-Hour Ozone State Implementation Plan*.

Express Lane Alternative Impacts

Reconstruction of and addition of capacity to I-25 between SH 392 and SH 14 is included in the North Front Range Metropolitan Planning Organization's fiscally-constrained, air-quality conforming 2040 Regional Transportation Plan and in the 2016-2019 Transportation Improvement Program (under the North I-25 design-build project). Therefore, regional conformity for the proposed improvements has been demonstrated. **Attachment B** includes an *Air Quality Evaluation Technical Memorandum* detailing the air quality analysis for the project.

The quantitative results presented in this document (**Attachments A and B**) are based on predicted 2040 traffic volumes that were current in January 2017. Subsequently, the traffic analysis was revisited and the predicted 2040 volumes were updated. However, the updated 2040 daily and peak-hour traffic volumes were approximately 37 percent lower than the earlier 2040 volumes. These (lower) updated volumes have the effect of improved traffic operations predicted in the project corridor, which would lead to lower pollutant emissions through reduced traffic congestion. Therefore, use of the earlier (higher) traffic volumes is more conservative in the evaluation of potential air quality impacts in that it is a "worse case" traffic situation. Note that the "worse case" was found not to cause exceedance of the federal carbon monoxide National Ambient Air Quality Standards (NAAQS) and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals. For these reasons, the air quality analysis was not updated and the overall findings have not changed, as summarized in **Attachments A and B**.

The Poudre River Trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements, which are included in the Express Lane Alternative, will not impact air quality.

FEIS Preferred Alternative Impacts

Since there is not enough funding in the fiscally-constrained and air-quality conforming North Front Range Metropolitan Planning Organization's Regional Transportation Plan, only the portion of the FEIS Preferred Alternative that is included in the fiscally-constrained and air-quality conforming Regional Transportation Plan can be approved by FHWA. To ensure that air quality conformity would not be an issue if funding were to become available to completely build out the FEIS Preferred Alternative or other alternative evaluated in the FEIS, conformity analysis was performed based on 2035 traffic volumes for the FEIS. The air quality modeling results indicate that applicable regional conformity emissions tests for relevant air pollutants would be met if the FEIS Preferred Alternative were to be completely build out.

This project was determined not to cause or contribute to an exceedance of the federal carbon monoxide NAAQS and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

The air quality modeling results indicate that applicable regional conformity emissions tests for relevant air pollutants would be met with the proposed changes in place. Furthermore, the Fort Collins carbon monoxide plan is a Limited Maintenance Plan, which means there essentially is no carbon monoxide budget for mobile sources for the region to meet.

This project was determined not to cause or contribute to an exceedance of the federal carbon monoxide NAAQS and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals.

Summary

The Express Lane Alternative would have no additional air quality impacts compared with the FEIS Preferred Alternative or the Accel/Decel Alternative.

Mitigation

The mitigation identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Water Quality

Water quality has changed (SH 392 to SH 14) since completion of the FEIS and ROD1.

I-25 from SH 392 to SH 14 is located in the Cache la Poudre River Watershed. The main channel of the Cache la Poudre River crosses underneath I-25 approximately 0.6 mile north of Harmony Road near MP 266 and flows from the northwest toward the southeast/east until its eventual confluence with the South Platte River approximately 21 miles to the east. Boxelder Creek is a tributary of the Cache la Poudre River and crosses underneath I-25 approximately 0.5 mile north of Prospect Road near MP 269. Boxelder Creek flows from east to west underneath I-25 then parallels I-25 to the west before its confluence with the Cache la Poudre River. These segments of the Cache la Poudre River and Boxelder Creek are listed on the Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Commission Regulation No. 93 for the year 2016. This also is known as the Section 303(d) list for Water-Quality-Limited segments requiring a Total Maximum Daily Load (TMDL). The Cache la Poudre River Segment COSPCP12 includes the mainstem of the Cache la Poudre River from the confluence with Boxelder Creek west of I-25 to the confluence with the South Platte River. It is monitored for pH; impaired *Escherichia coli* (*E. coli*) from May to October; and is identified as a high 303(d) priority. The Boxelder Creek Segment COSPCP13b includes the mainstem of Boxelder Creek from its source to its confluence with the Cache la Poudre River. It is impaired for selenium and *E. coli* and is identified as a low 303(d) priority. *E. coli* and selenium are not generally associated with roadway runoff.

Roadway improvements typically impact existing drainage conditions. This primarily includes impacts to natural drainageways due to the physical location of the roadway, increased stormwater runoff, and increased sediment loads. The existing interstate between SH 392 and SH 14 has approximately 135 acres of impervious surface, which is currently untreated.

Express Lane Alternative Impacts

The Revised ROD1 proposed Alternative will have 86.4 acres of additional impervious surface, which includes 0.06 acres for the Poudre River Trail and 0.32 acres for the Harmony Road/southbound I-25 on-ramp/northbound I-25 off-ramp improvements and will include permanent water quality treatment features to treat 90 percent of the new impervious area. The Revised ROD1 proposed Alternative includes three permanent water quality detention basins. Each of the three proposed basins will be new permanent water quality treatment facilities within CDOT ROW.

FEIS Preferred Alternative Impacts

The FEIS Preferred Alternative will have 112 acres of additional impervious surface and will include permanent water quality features to treat 90 percent of the new impervious surface. The number of water quality detention basins identified in the FEIS will be reduced due to consolidation of the water quality facilities, reduced additional impervious surface and updated MS4 permanent water quality treatment requirements. Under the FEIS Preferred Alternative, water quality detention basins were designed to provide a sufficient volume to treat 101% of the impervious surfaces within the project area. The new CDOT 2015 MS4 permit requires treating 90% of the new impervious surface.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Revised ROD 1 proposed Alternative and the ROD 1 Selected Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Acel/Decel Alternative Impacts

The ROD1 Selected Alternative will have 79 acres of additional impervious surface and will include permanent water quality treatment features to treat 90 percent of the new impervious area. The number of water quality detention basins identified in ROD1 will be reduced due to consolidation of the water quality facilities, reduced additional impervious surface and updated MS4 permanent water quality treatment requirements. Under the ROD1 Selected Alternative, water quality detention basins were designed to provide a sufficient volume to treat 101% of the impervious surfaces within the project area. The new CDOT 2015 MS4 permit requires treating 90% of the new impervious surface.

Summary

The Express Lane Alternative has 26 less acres of impervious surface than the FEIS Preferred Alternative. The decrease in permanent impacts is due to the 24-ft wider cross-section of the FEIS Preferred Alternative and reconstruction of the I-25/SH 392, I-25/Harmony Road, I-25/Prospect Road, and I-25/SH 14 interchanges in the FEIS Preferred Alternative. As noted, the FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

The Express Lane Alternative has seven additional acres of impervious surface than the Accel/Decel Alternative. The increase in permanent impacts is due to the 8-ft wider cross-section of the Express Lane Alternative compared to the Accel/Decel Alternative.

Mitigation

Under the FEIS Preferred Alternative and the Accel/Decel Alternative, water quality detention basins were designed to provide a sufficient volume to treat 101% of the impervious surfaces within the project area. The new CDOT 2015 MS4 permit requires treating 90% of the new impervious surface. This Reevaluation conforms to the new CDOT 2015 MS4 permit. The number of water quality detention basins will be reduced from 25 to 3 due to consolidation of the water quality facilities, reduced additional impervious surface by approximately seven acres and updated MS4 permanent water quality treatment requirements. The remaining mitigation identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Floodplains

The Cache la Poudre drainage and floodplain was affected by major flooding in 2013.

The Express Lane Alternative design has changed compared to the FEIS and ROD1 Selected Alternative in relation to floodplains.

Express Lane Alternative Impacts

The Express Lane Alternative would result in replacement of two bridges over the Cache la Poudre river and the Cache la Poudre Floodway concrete box culvert. The proposed improvements to I-25 from SH 392 to SH 14 would impact the existing FEMA regulated floodplains for the Cache la Poudre River and Boxelder Creek. The proposed I-25 bridges over the Cache la Poudre River will be longer, and the profile of I-25 will be raised to provide the capacity needed to pass the same 100-year flows that currently pass under the bridges. The Poudre River Trail will be constructed within the floodplain. There will be no floodplain impacts from the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements. All encroachment in the floodway portion of the floodplain will be designed with compensatory conveyance, certified to cause no rise in the base flood elevation, and documented in an approved floodplain development permit to the local agency.

FEIS Preferred Alternative Impacts

The FEIS Preferred Alternative would result in replacement or rehabilitation of two bridges over the Cache la Poudre river and the Cache la Poudre Floodway concrete box culvert. The FEIS Preferred Alternative would impact the existing FEMA regulated floodplains for the Cache la Poudre River and Boxelder Creek. The proposed I-25 bridges over the Cache la Poudre River will be longer, and the profile of I-25 will be raised to provide the capacity needed to pass the same 100-year flows that currently pass under the bridges. All encroachment in the floodway portion of the floodplain will be designed with compensatory conveyance, certified to cause no rise in the base flood elevation, and documented in an approved floodplain development permit to the local agency.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

The Accel/Decel Alternative would result in replacement or rehabilitation of two bridges over the Cache la Poudre River and the Cache la Poudre floodway concrete box culvert. The Accel/Decel Alternative would impact the existing FEMA regulated floodplains for the Cache la Poudre River and Boxelder Creek. The proposed I-25 bridges over the Cache la Poudre River will be longer, and the profile of I-25 will be raised to provide the capacity needed to pass the same 100-year flows that currently pass under the bridges. All encroachment in the floodway portion of the floodplain will be designed with compensatory conveyance, certified to cause no rise in the base flood elevation, and documented in an approved floodplain development permit to the local agency.

Summary

The Express Lane Alternative would have the same floodplain impacts as the FEIS Preferred Alternative or the Accel/Decel Alternative, except for the construction of the Poudre River Trail within the floodplain which is included in the Express Lane Alternative.

Mitigation

The mitigation identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Wetlands and Other Waters of the U.S.

Impacts to Wetlands and Other Waters of the U.S. have changed with the Express Lane Alternative since the FEIS and ROD1.

Express Lane Alternative

The Express Lane Alternative includes major and minor structure rehabilitation and replacement (**Table 1**) and construction of an express lane. Development of these components would result in permanent impacts totaling an estimated 5.23 acres. In addition, the Poudre River Trail will permanently impact 0.06 acres of wetlands and other waters of the U.S., while the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements Impacts will not have any impacts. Thus, the total permanent impact of the Express Lane Alternative, which includes the Poudre River Trail and Harmony Road improvements, will be 5.29 acres of wetlands and other waters of the US.

FEIS Preferred Alternative Impacts

The FEIS Preferred Alternative includes major and minor structure rehabilitation and replacement (**Table 1**) and construction of an express lane, additional general purpose lane, and interchange reconstruction. Development of these components would result in permanent impacts totaling an estimated 3.28 acres.

As noted previously, the FEIS Preferred Alternative included three general purpose in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

The Accel/Decel Alternative includes major and minor structure rehabilitation and replacement (**Table 1**) and construction of accel/decel lanes. Development of these components would result in permanent impacts totaling an estimated 3.2 acres.

Summary

The Express Lane Alternative, which includes the Poudre River Trail and Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements, would have an additional 2.01 acres of impacts more than the FEIS Preferred Alternative and an additional 2.09 acres of impacts more than the Accel/Decel Alternative (SH 392 to SH 14).

The increase in permanent impacts is due to the 8-ft wider cross-section of the Express Lane Alternative compared to the Accel/Decel Alternative, as well as the shift in the alignment to the east to facilitate construction of the

I-25 bridges over the Cache la Poudre River. The shift of the I-25 Bridges over the Cache la Poudre River to the east of the existing location has numerous benefits. The shift of the structures will allow for more efficient phasing of the construction of the bridges by allowing the new structures to be built off line of the existing structures. An additional beneficial result of the revised structure location is improved highway geometry that allows the use of a larger radius curve and a reduction in superelevation. The shift to the east also improves the hydraulic conditions of the area by allowing the river to cross under the bridges closer to a perpendicular angle. The improved angle of approach for the river allows for better hydraulic characteristics at this location through the reduction of sedimentation and scour potential near the abutments of the new structure. In addition, the design helps facilitate a future project by the local floodplain administrator that would consolidate the split flow that happens at this location during heavy flood events.

Mitigation

A Clean Water Act Individual Section 404 permit (NWO-2004-80110-DEN) was obtained for impacts to wetlands and waters of the U.S. identified in the North I-25 FEIS (**Attachment G**). The Clean Water Act Individual Section 404 permit (NWO-2004-80110-DEN) permitted 16.08 acres of permanent impacts to wetlands and other waters of the U.S. and 2.06 acres of temporary impacts to wetlands and other waters of the U.S. As of February 2017, the individual projects from the FEIS Preferred Alternative have permanently impacted 0.37 acre of wetlands and other waters of the U.S. and 0.23 acre of temporary impacts. Because the permit accounts for impacts cumulatively, rather than by individual crossing, the total wetland impacts are anticipated to fall within the permit. The mitigation identified in the FEIS and ROD1 is still relevant (**Attachment G**).

Vegetation and Noxious Weeds

Impacts to vegetation have changed with the Revised ROD1 proposed Alternative compared to the FEIS and ROD1 Selected Alternative.

Express Lane Alternative Impacts

Impacts from the construction of an Express Lane would include the removal of approximately 206 acres of riparian, woodland, grassland, agricultural, and various wetland vegetation communities, included 0.1 acres for the Poudre River Trail and 0.52 acre for the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp improvements. The disturbance of soils due to construction activities could contribute to the spread of noxious weed species or introduction of new weed species from outside sources.

FEIS Preferred Alternative Impacts

Impacts from the construction of an Express Lane, an additional general purpose lane, and interchange reconstruction would include the removal of approximately 231.5 acres of riparian, woodland, agricultural, and various wetland vegetation communities. The disturbance of soils due to construction activities could contribute to the spread of noxious weed species or introduction of new weed species from outside sources.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions.

Accel/Decel Alternative Impacts

Impacts from the construction of a continuous accel/decel lane would include the removal of approximately 198.5 acres of riparian, woodland, agricultural, and various wetland vegetation communities. The disturbance of soils due to construction activities could contribute to the spread of noxious weed species or introduction of new weed species from outside sources.

Summary

The Express Lane Alternative would impact an additional seven acres of vegetation than the Accel/Decel Alternative and 26 acres less than the FEIS Preferred Alternative. As noted, the FEIS Preferred Alternative included a third general purpose lane in both the southbound and northbound directions, which is not being considered for implementation at this time due to funding limitations.

Mitigation

Native vegetation and riparian habitat along the Cache la Poudre River and Boxelder Creek are protected under conditions of the Senate Bill (SB) 40 permit, regulated by the Colorado Parks and Wildlife (CPW). The mitigation identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Fish and Wildlife

Three occupied bald eagle nests are located within 0.5 mile of I-25 along the Cache la Poudre River to the east and west, and the Fossil Creek Reservoir Communal Roost site where bald eagles roost, is located northwest of I-25/SH 392. Two potential bald eagle nests are located east of I-25 along the Cache la Poudre River.

A total of 12 raptors nests were observed within 0.5 mile of the project area. The Cache la Poudre River and the Fossil Creek Reservoir are both sensitive wildlife habitat areas, and the Cache la Poudre River is a wildlife crossing area of I-25. Ditches, streams, and water bodies, such as Boxelder Creek, the Cache la Poudre River, and Fossil Creek Reservoir, support a variety of aquatic insects, macroinvertebrates, and fish.

Black-tailed prairie dogs (*Cynomys ludovicianus*) have established colonies in the southeast quadrant of the I-25/SH 14 interchange, east of I-25 at the bridge over the Cache la Poudre River, and on both the east and west sides of I-25 north of SH 392.

Express Lane Alternative

The Express Lane Alternative may impact migratory birds, including bald eagles and other raptors, and aquatic species at the Cache la Poudre River and Boxelder Creek. The Express Lane Alternative would impact several black-tailed prairie dog colonies within the project area. While not observed, Western Burrowing Owls may be present in association with the black-tailed prairie dog colonies; therefore, impacts are possible. The Poudre River Trail will be located adjacent to the southern abutment of the I-25 bridges over the Cache la Poudre, which is a wildlife crossing area of I-25, and will not include lighting.

FEIS Preferred Alternative Impacts

The FEIS Preferred Alternative may impact migratory birds, including bald eagles and other raptors, and aquatic species at the Cache la Poudre River and Boxelder Creek. The FEIS Preferred Alternative would impact several black-tailed prairie dog colonies within the project area. While not observed, Western Burrowing Owls may be present in association with the black-tailed prairie dog colonies; therefore, impacts are possible.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

The Accel/Decel Alternative may impact migratory birds, including bald eagles and other raptors, and aquatic species at the Cache la Poudre River and Boxelder Creek. The Accel/Decel Alternative would impact several black-tailed prairie dog colonies within the project area. While not observed, Western Burrowing Owls may be present in association with the black-tailed prairie dog colonies; therefore, impacts are possible.

Summary

Since the I-25 bridges over the Cache la Poudre River will be longer with a higher profile for I-25 than the existing I-25 bridges over the Cache la Poudre, creating a wider passage for wildlife movement, and the Poudre River Trail will not include lighting and is located adjacent to the southern abutment of the I-25 bridges over the Cache la Poudre River across the Cache la Poudre River channel from the vegetated riparian area that would facilitate wildlife movement, the Express Lane Alternative would have a minimal effect on wildlife movement along the Cache la Poudre River compared to the FEIS Preferred Alternative or the Accel/Decel Alternative.

Mitigation

The mitigation identified in the FEIS and ROD1 is still relevant (**Attachment G**).

Threatened/Endangered Species

As required by the United States Department of Interior Fish and Wildlife Service (USFWS) North I-25 Programmatic Biological Opinion (PBO) Terms and Conditions, individual projects that are proposed under the programmatic consultation require an updated baseline of threatened and endangered species in the project area. Since the FEIS, the project area has seen additional land development and the Cache la Poudre drainage was affected by major flooding in 2013.

On August 15, 2016, a general field reconnaissance was conducted at the Cache la Poudre River to review site conditions and identify any changed conditions for the PMJM, Ute ladies' -tresses orchid (ULTO), and Colorado butterfly plant (CBP) compared to the FEIS. Based on the conditions of the site at the time of inspection and upon available known occurrence and trapping data for the surrounding areas, it was determined that this site presents marginally suitable habitat not likely to support a resident population of PMJM, but may provide connectivity to upstream and downstream habitat for PMJM.

Express Lane Alternative Impacts

The Express Lane Alternative would impact 1.58 acres of suitable Preble's Meadows Jumping Mouse (PMJM) habitat, which includes the Poudre River Trail. The Express Lane Alternative would impact approximately 3.6 acres of riparian habitat along the Cache la Poudre River, which also is potential suitable UTLO and CBP habitat.

FEIS Preferred Alternative Impacts

Approximately 1.16 acres of PMJM suitable habitat was identified along the Cache la Poudre River as impacted in the FEIS and the North I-25 Corridor Programmatic Biological Assessment (PBA) dated July 2011. The FEIS Preferred Alternative would impact potential suitable ULTO and CPB habitat along the Cache la Poudre. Direct impacts to potential suitable UTLO and CPB habitat were not identified as part of the FEIS. For the purposes of this Reevaluation, the FEIS Preferred Alternative would impact approximately 3.9 acres of riparian habitat along the Cache la Poudre River, which also is potential suitable UTLO and CBP habitat.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

The Accel/Decel Alternative would impact approximately 1.16 acres of PMJM suitable habitat was identified along the Cache la Poudre River. The Accel/Decel Alternative would impact approximately 3.5 acres of riparian habitat along the Cache la Poudre River, which also is potential suitable UTLO and CBP habitat.

Summary

The Express Lane Alternative, which includes the Poudre River Trail, would impact 0.42 acre more of suitable PMJM habitat than the FEIS Preferred Alternative and the Accel/Decel Alternative (SH 392 to SH 14). This additional impact is due to the shift in the alignment of I-25 to the east to facilitate construction of the I-25 bridges over the Cache la Poudre River.

The Express Lane Alternative, which includes the Poudre River Trail, would impact 0.1 acre more of riparian habitat along the Cache la Poudre River. This additional impact is due to the shift in the alignment of I-25 to the east to facilitate construction of the I-25 bridges over the Cache la Poudre River and the additional pavement required for construction of the two 4-ft buffer lanes north of the Cache la Poudre River.

Appendix E of ROD1 included the PBO, dated October 13, 2011. This PBO provides concurrence from USFWS with the findings of effect for threatened or endangered species for the FEIS Preferred Alternative and subsequent ROD1 Selected Alternative. The USFWS concurred with the determination that the proposed project (FEIS Preferred Alternative and ROD1 Selected Alternative), is likely to adversely affect the Platte River species and the PMJM. In addition, the USFWS concurred with the determination that the proposed project (FEIS Preferred Alternative and ROD1) is not likely to adversely affect the CBP and ULTO. The Express Lane Alternative does not change or impact these findings. The USFWS was informed of the changes included in the Express Lane Alternative in a letter dated March 23, 2017. Concurrence from the USFWS was received on April 7, 2017 (**Attachment H**). Indirect effects to Platte River species are addressed through the South Platte Programmatic Biological Assessment (SPPBA) dated February 22, 2012. Water used for this project will be reported to the USFWS at year's end after completion of the project per the South Platte Programmatic Biological Opinion (SPPBO).

Mitigation

The Express Lane Alternative including the Poudre River Trail will impact 1.58 acres of suitable PMJM habitat at the Cache la Poudre River. The USFWS was informed of the changes included in the Express Lane Alternative in a letter dated March 23, 2017. Concurrence from the USFWS was received on April 7, 2017.

Mitigation will be implemented in accordance with the North I-25 Corridor Programmatic Biological Opinion (PBO) dated October 13, 2011, and the March 23, 2017 and April 7, 2017 consultation. The North I-25 Corridor PBO anticipated a maximum combined permanent and temporary loss of 2.07 acres of PMJM suitable habitat based on effects of the FEIS Preferred Alternative for the entire corridor. The FEIS Preferred Alternative would permanently and temporarily impact 1.16 acres of suitable PMJM habitat at the Cache la Poudre River. Permanent and temporary impacts to potential suitable ULTO and CBP habitat was not identified in the N I-25 PBA and PBO.

The mitigation measures for impacts to PMJM suitable habitat include:

- Pre-construction habitat assessments and/or surveys for PMJM will be conducted where appropriate.
- If culverts in occupied or suitable PMJM habitat are replaced or upgraded, the new culverts will incorporate ledges to facilitate small mammal passage.
- Lighting within or near PMJM habitat will incorporate current technology and standards (e.g., Dark Skies) at the time of design to reduce lighting impacts to PMJM.
- During construction, nighttime work within 0.25 mile of PMJM habitat will be minimized.
- Any inadvertent PMJM mortalities during construction will be reported as specified in current trapping guidelines. CDOT will report all relevant information within 24 hours and subsequently submit a completed Injury/Mortality Documentation Report to the Service, Ecological Services Colorado Field Office or the Services' Division of Law Enforcement in Lakewood, Colorado (telephone 720 981-2777).
- In the unlikely event that a PMJM (dead, injured, or otherwise) is located during construction, the Colorado Field Office of the Service will be contacted immediately to identify additional measures, as appropriate, to minimize impacts to PMJM.

Mitigation Plan

- The temporary impacts of the PMJM habitat in the Cache la Poudre River drainage will be restored at a 1:1 ratio. Any PMJM habitat permanently removed due to project activities will be replaced at a 3:1 ratio. If practicable the permanent habitat will be replaced in the vicinity of the impacts. Habitat impacts will be recalculated and separated

into temporary or permanent and a restoration plan developed during final design. FHWA will submit to the USFWS the final plans showing the location and quantity of the impacts and mitigation.

- If the mitigation for permanent impacts cannot be completed within the CDOT ROW in the vicinity of the impacts, FHWA will work with CDOT to identify areas within CDOT ROW in the Cache la Poudre drainage and/or enter into an agreement with Fort Collins to mitigate the remainder of the impacts on the Fort Collins property located on the northeast quadrant of the I-25 and the Cache la Poudre River.
- Riprap will be mixed with finer grained material to avoid settling. The riprap will be covered with approximately 12 inches of soil and planted with woody and herbaceous vegetation and will not reduce the overall amount of habitat available to PMJM.
- Restoration will be conducted in accordance with the March 23, 2017 consultation with the USFWS.

The mitigation measures for impacts to potential CBP and ULTO habitat include:

- Pre-construction habitat assessments and/or surveys for the ULTO and CBP habitat along the Cache la Poudre.

Historic Resources

As required by the North I-25 EIS Programmatic Agreement for Section 106, a new field survey and file search was completed in November 2016 (**Attachment C**). Ten (10) additional properties were documented as part of the Express Lane Alternative. Sites originally evaluated in the FEIS were not reevaluated for eligibility since the ten-year threshold has not been met as outlined in the North I-25 Programmatic Agreement for Section 106. Sixteen (16) previously recorded resources were found to be located within the Express Lane Alternative APE. None of the ten (10) additional properties inventoried were eligible for the NRHP for the purposes of this project, as shown in Table 2.

Table 2. Newly Evaluated Resources within the APE

(Resource No.) Site Name	Address/Location	Site Type	National Register Eligibility	Effects Determinations
(5LR14088) Centennial Livestock Auction	113 NW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14089) Econolodge Motel	3836 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14090) Shell Gas and Schrader's Country Store	3733 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14091) Shell Gas Station	3809 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14092) Colorado State University Research Farm	3829 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14093) North Poudre Irrigation Company Property	4433 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14094) Fort Collins Archery Association	2825 SW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14095) Stephen Weber Property	4400 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR14097) Harmony-McMurray LLC Property	4308 E. County Road 36 Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>
(5LR.14128) John Jensen Property	5905 SW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible</i>	<i>No Historic Properties Affected</i>

Express Lane Alternative Impacts

No adverse effects would occur to previously recorded or newly evaluated historic properties for the Express Lane Alternative. The Poudre River Trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements would not adversely affect historic properties.

Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2): The changes associated with the Express Lane Alternative at this location consist of wider northbound and southbound bridge structures that would be required to accommodate the larger roadway template. These new bridges would each be 79 ft long and 63 ft wide, constructed as pre-stressed concrete girder type structures. The frontage roads would remain in their current locations and at-grade crossings would be maintained in their current configurations. The widened bridges would increase the amount of railway located underneath the bridge deck. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; however, this minor impact would not diminish the qualities that render this railway segment NRHP-eligible.

No direct impacts would occur. The proposed transportation improvements associated with the Express Lane Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, the Express Lane Alternative would result in *no adverse effect* to the Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2).

Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (Segment 5LR.1327.6): The expanded I-25 section of the Express Lane Alternative would require replacement of the old bridges with new, larger bridge structures to span the rail line. The southbound bridge (B-17-BD) would be demolished and replaced with a wider bridge extending into the existing median. Bridge structure B-17-BC would be demolished and the new northbound bridge would be constructed adjacent to and east of that location. The alignment and operation of the railroad would not be changed, and the new bridge piers would be placed outside the historic rail corridor boundary. The frontage road would be widened approximately 12 ft to provide a paved shoulder. Where the frontage road crosses the railway, no changes to the road width or alignment are planned. The Express Lane Alternative would result in no direct impacts to this resource.

The alignment and operation of the railroad would not be changed. The entire widened I-25 roadway would continue to be carried over the historic railway on top of the new bridge structures. The new bridges would be supported by piers placed outside the historic rail corridor boundary (railroad right-of-way) resulting in no direct impacts to the historic railway.

The widened bridges would increase the amount of railway located underneath the bridge deck by approximately 165 ft. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; but would not alter the property's historic function or alignment, nor diminish the character or attributes that render the railway NRHP-eligible. Construction access across the railway property may be required for installation of new bridge piers. This temporary direct impact would not diminish qualities that render the railway NRHP-eligible.

The proposed transportation improvements associated with the Express Lane Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, the Express Lane Alternative would result in *no adverse effect* to the Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (5LR.1327.6).

Cache la Poudre Reservoir Inlet (5LR.11409.1): The Express Lane Alternative would require an extended culvert at STA 4050. A 75-foot-long extension of double CBC farther east of the existing culvert outflow and a 10-foot-long extension west of the intake at the same double CBC would be needed to carry the widening of west frontage road shoulders and the widened Prospect Road interchange northbound I-25 on-ramp.

The qualities that make the entire resource NRHP-eligible have been compromised by modifications associated with construction of the I-25 ramps and frontage road. The Express Lane Alternative improvements are minor in relative extent; therefore, the Express Lane Alternative would result in *no adverse effect* to the Cache la Poudre Reservoir Inlet.

Boxelder Ditch (5LR2160.1): Under the Express Lane Alternative, the I-25/Harmony Road interchange would be modified, including widening of the on- and off-ramps. Boxelder Ditch is currently enclosed inside a pipe underneath the existing ramps, fill slopes and mainline I-25 traffic lanes. To accommodate construction of a new southbound off-ramp from I-25, which would be situated 90 ft west of the existing ramp alignment, a 124-foot-long section of the open Boxelder Ditch would need to be enclosed inside a box culvert beneath the ramp. The remainder of the ditch located within the area proposed for the Express Lane Alternative highway improvements is already piped under I-25, the northbound on-ramp to I-25, and Harmony Road, and no new direct impacts would occur in those locations.

A small direct impact would occur where the ditch would pass beneath a new property access road on the southeast side of the interchange. This new access road is a cul-de-sac, required to replace the existing access from the abandoned east frontage road. A total of 70 ft of open ditch would have to be enclosed inside a box culvert beneath the proposed cul-de-sac.

Installation of the new culvert would likely require a temporary use of the historic property for equipment access and construction activities. The ditch would remain operational and irrigation water would be protected from all sediment and physical encroachment by construction. All disturbances caused by construction equipment or construction activities would be temporary in nature and affected areas would be restored to the original condition and appearance.

The two box culverts required under the Express Lane Alternative would enclose a total of 194 ft of open ditch that retain integrity, but would not alter its historic alignment. These direct impacts constitute less than one percent of the entire length of the Boxelder Ditch, and would not significantly diminish or alter characteristics that render the ditch eligible for NRHP; therefore, the Express Lane Alternative would result in *no adverse effect* to the resource.

FEIS Preferred Alternative Impacts

No adverse effects would occur to previously recorded or newly evaluated historic properties for the FEIS Preferred Alternative.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2): The changes associated with the FEIS Preferred Alternative at this location consist of wider northbound and southbound bridge structures that would be required to accommodate the larger roadway template. These new bridges would each be 79 ft long and 63 ft wide, constructed as pre-stressed concrete girder type structures. The frontage roads would remain in their current locations and at-grade crossings would be maintained in their current configurations. The widened bridges would increase the amount of railway located underneath the bridge deck. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; however, this minor impact would not diminish the qualities that render this railway segment NRHP-eligible.

No direct impacts would occur. The proposed transportation improvements associated with the FEIS Preferred Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, the FEIS Preferred Alternative would result in *no adverse effect* to the Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2).

Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (Segment 5LR.1327.6): The expanded I-25 section of the FEIS Preferred Alternative would require replacement of the old bridges with new, larger bridge structures to span the rail line. The southbound bridge (B-17-BD) would be demolished and replaced with a wider bridge extending into the existing median. Bridge structure B-17-BC would be demolished and the new northbound bridge would be constructed adjacent to and east of that location. The alignment and operation of the railroad would not be changed, and the new bridge piers would be placed outside the historic rail corridor boundary. The frontage road would be widened approximately 12 ft to provide a paved shoulder. Where the frontage road crosses the railway, no changes to the road width or alignment are planned. The FEIS Preferred Alternative would result in no direct impacts to this resource.

The alignment and operation of the railroad would not be changed. The entire widened I-25 roadway would continue to be carried over the historic railway on top of the new bridge structures. The new bridges would be supported by piers placed outside the historic rail corridor boundary (railroad right-of-way) resulting in no direct impacts to the historic railway.

The widened bridges would increase the amount of railway located underneath the bridge deck by approximately 165 ft. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; but would not alter the property's historic function or alignment, nor diminish the character or attributes that render the railway NRHP-eligible. Construction access across the railway property may be required for installation of new bridge piers. This temporary direct impact would not diminish qualities that render the railway NRHP-eligible.

The proposed transportation improvements associated with the FEIS Preferred Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, FEIS Preferred Alternative would result in *no adverse effect* to the Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (5LR.1327.6).

Cache la Poudre Reservoir Inlet (5LR.11409.1): The FEIS Preferred Alternative would require an extended culvert at STA 4050. A 75-foot-long extension of double CBC farther east of the existing culvert outflow and a 10-foot-long

extension west of the intake at the same double CBC would be needed to carry the widening of west frontage road shoulders and the widened Prospect Road interchange northbound I-25 on-ramp.

The qualities that make the entire resource NRHP-eligible have been compromised by modifications associated with construction of the I-25 ramps and frontage road. The FEIS Preferred Alternative improvements are minor in relative extent; therefore, the FEIS Preferred Alternative would result in *no adverse effect* to the Cache la Poudre Reservoir Inlet.

Boxelder Ditch (5LR2160.1): Under the FEIS Preferred Alternative, the I-25/Harmony Road interchange would be modified, including widening of the on- and off-ramps. Boxelder Ditch is currently enclosed inside a pipe underneath the existing ramps, fill slopes and mainline I-25 traffic lanes. To accommodate construction of a new southbound off-ramp from I-25, which would be situated 90 ft west of the existing ramp alignment, a 124-foot-long section of the open Boxelder Ditch would need to be enclosed inside a box culvert beneath the ramp. The remainder of the ditch located within the area proposed for the FEIS Preferred Alternative highway improvements is already piped under I-25, the northbound on-ramp to I-25, and Harmony Road, and no new direct impacts would occur in those locations.

A small direct impact would occur where the ditch would pass beneath a new property access road on the southeast side of the interchange. This new access road is a cul-de-sac, required to replace the existing access from the abandoned east frontage road. A total of 70 ft of open ditch would have to be enclosed inside a box culvert beneath the proposed cul-de-sac.

Installation of the new culvert would likely require a temporary use of the historic property for equipment access and construction activities. The ditch would remain operational and irrigation water would be protected from all sediment and physical encroachment by construction. All disturbances caused by construction equipment or construction activities would be temporary in nature and affected areas would be restored to the original condition and appearance.

The two box culverts required under the FEIS Preferred Alternative would enclose a total of 194 ft of open ditch that retain integrity, but would not alter its historic alignment. These direct impacts constitute less than one percent of the entire length of the Boxelder Ditch, and would not significantly diminish or alter characteristics that render the ditch eligible for NRHP; therefore, the FEIS Preferred Alternative would result in *no adverse effect* to the resource.

Accel/Decel Alternative Impacts

No adverse effects would occur to previously recorded or newly evaluated historic properties for the Accel/Decel Alternative.

Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2): The changes associated with the Accel/Decel Alternative at this location consist of wider northbound and southbound bridge structures that would be required to accommodate the larger roadway template. These new bridges would each be 79 ft long and 63 ft wide, constructed as pre-stressed concrete girder type structures. The frontage roads would remain in their current locations and at-grade crossings would be maintained in their current configurations. The widened bridges would increase the amount of railway located underneath the bridge deck. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; however, this minor impact would not diminish the qualities that render this railway segment NRHP-eligible.

No direct impacts would occur. The proposed transportation improvements associated with the Accel/Decel Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, the FEIS Preferred Alternative would result in *no adverse effect* to the Colorado & Southern Railroad Black Hollow Branch (5LR.1731.2).

Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (Segment 5LR.1327.6): The expanded I-25 section of the Accel/Decel Alternative would require replacement of the old bridges with new, larger, bridge structures to span the rail line. The southbound bridge (B-17-BD) would be demolished and replaced with a wider bridge extending into the existing median. Bridge structure B-17-BC would be demolished and the new northbound bridge would be constructed adjacent to and east of that location. The alignment and operation of the railroad would not be changed, and the new bridge piers would be placed outside the historic rail corridor boundary. The frontage road would be widened approximately 12 ft to provide a paved shoulder. Where the frontage road crosses the railway, no changes to the road width or alignment are planned. The Accel/Decel Alternative would result in no direct impacts to this resource.

The alignment and operation of the railroad would not be changed. The entire widened I-25 roadway would continue to be carried over the historic railway on top of the new bridge structures. The new bridges would be supported by piers placed outside the historic rail corridor boundary (railroad right-of-way) resulting in no direct impacts to the historic railway.

The widened bridges would increase the amount of railway located underneath the bridge deck by approximately 165 ft. This increased overhead cover due to a wider bridge deck would be an indirect effect to the historic setting of the railway; but would not alter the property's historic function or alignment, nor diminish the character or attributes that render the

railway NRHP-eligible. Construction access across the railway property may be required for installation of new bridge piers. This temporary direct impact would not diminish qualities that render the railway NRHP-eligible.

The proposed transportation improvements associated with the Accel/Decel Alternative would not substantially diminish or alter characteristics that render the property eligible for the NRHP; therefore, the Accel/Decel Alternative would result in *no adverse effect* to the Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway (5LR.1327.6).

Cache la Poudre Reservoir Inlet (5LR.11409.1): The Accel/Decel Alternative would require an extended culvert at STA 4050. A 75-foot-long extension of double CBC farther east of the existing culvert outflow and a 10-foot-long extension west of the intake at the same double CBC would be needed to carry the widening of west frontage road shoulders and the widened Prospect Road interchange northbound I-25 on-ramp.

The qualities that make the entire resource NRHP-eligible have been compromised by modifications associated with construction of the I-25 ramps and frontage road. The Accel/Decel Alternative improvements are minor in relative extent; therefore, the Accel/Decel Alternative would result in *no adverse effect* to the Cache la Poudre Reservoir Inlet.

Boxelder Ditch (5LR2160.1): Under the Accel/Decel Alternative, the I-25/Harmony Road interchange would be modified, including widening of the on- and off-ramps. Boxelder Ditch is currently enclosed inside a pipe underneath the existing ramps, fill slopes and mainline I-25 traffic lanes. To accommodate construction of a new southbound off-ramp from I-25, which would be situated 90 ft west of the existing ramp alignment, a 124-foot-long section of the open Boxelder Ditch would need to be enclosed inside a box culvert beneath the ramp. The remainder of the ditch located within the area proposed for the Accel/Decel Alternative highway improvements is already piped under I-25, the northbound on-ramp to I-25, and Harmony Road, and no new direct impacts would occur in those locations.

A small direct impact would occur where the ditch would pass beneath a new property access road on the southeast side of the interchange. This new access road is a cul-de-sac, required to replace the existing access from the abandoned east frontage road. A total of 70 ft of open ditch would have to be enclosed inside a box culvert beneath the proposed cul-de-sac.

Installation of the new culvert would likely require a temporary use of the historic property for equipment access and construction activities. The ditch would remain operational and irrigation water would be protected from all sediment and physical encroachment by construction. All disturbances caused by construction equipment or construction activities would be temporary in nature and affected areas would be restored to the original condition and appearance.

The two box culverts required under the Accel/Decel Alternative would enclose a total of 194 ft of open ditch that retain integrity, but would not alter its historic alignment. These direct impacts constitute less than one percent of the entire length of the Boxelder Ditch, and would not significantly diminish or alter characteristics that render the ditch eligible for NRHP; therefore, the Accel/Decel Alternative would result in *no adverse effect* to the resource.

Summary

Since the historic resources affected by the Express Lane Alternative, FEIS Preferred Alternative, and Accel/Decel Alternative are related to bridge, pipe, and culvert replacement or reconstruction, the impacts are the same for each alternative.

Mitigation

No additional mitigation is required. Mitigation will be implemented in accordance with the Section 106 Programmatic Agreement, which was signed in December 2011.

Archaeological Resources

Improvements along Kechter Road for the Express Lane Alternative extend beyond the 2010 archaeological survey boundary. An intensive pedestrian survey was not conducted along Kechter Road because right-of-entry to the property located along the roadway was not granted. Properties that will be acquired for right-of-way for which right-of-entry was not previously granted will be surveyed for archaeological resources at the time of final design and prior to construction.

Express Lane Alternative Impacts

There are no impacts to known archaeological resources. Poudre River Trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements would not impact known archaeological resources.

FEIS Preferred Alternative Impacts

There are no impacts to known archaeological resources.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

There are no impacts to known archaeological resources.

Summary

The Express Lane Alternative would have no additional impacts to known archaeological resources compared to the FEIS Preferred Alternative or Accel/Decel Alternative.

Mitigation

The mitigation identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Residential/Business Right of Way Impacts

Residential/Business Right-of-Way impacts have changed since completion of the FEIS and ROD1.

Express Lane Alternative Impacts

Approximately 125 acres will be acquired from 89 properties along the corridor. The Express Lane Alternative would partially acquire right-of-way from 86 properties and fully acquire three properties. Of those 89 properties, two properties were not previously identified for acquisition as part of the FEIS or ROD1. The Poudre River Trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp improvements would not require additional property acquisition.

FEIS Preferred Alternative Impacts

Approximately 132 acres will be acquired from 152 properties along the corridor. The FEIS Preferred Alternative would partially acquire right-of-way from 148 properties and fully acquire four properties.

As noted previously, the FEIS Preferred Alternative included three general purpose lanes in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

Approximately 125 acres will be acquired from 87 properties along the corridor. The Accel/Decel Alternative would partially acquire right-of-way from 84 properties and fully acquire three properties.

Summary

The Express Lane Alternative would acquire eight less acres of right-of-way and one less full acquisition than the FEIS Preferred Alternative. As noted, the FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

The Accel/Decel Alternative would acquire the same amount of property for right-of-way as the Revised ROD1 proposed Alternative, from two fewer properties.

Mitigation

The mitigation identified in the FEIS and ROD1 is still relevant (**Attachment G**).

Section 4(f)

The Express Lane Alternative uses of Section 4(f) properties are limited to *de minimis* use of three properties (two historic properties and one recreational property).

Historic Properties

The two historic properties with a *de minimis* use are the Cache la Poudre Reservoir Inlet (5LR.11409) and Boxelder Ditch (5LR.2160).

Cache la Poudre Reservoir Inlet (5LR.11409.1): The Express Lane Alternative would require an extended culvert at STA 4050. A 75-foot-long extension of double CBC farther east of the existing culvert outflow and a 10-foot-long extension west of the intake at the same double CBC would be needed to carry the widening of west frontage road shoulders and the widened Prospect Road interchange northbound I-25 on-ramp.

The qualities that make the entire resource NRHP-eligible have been compromised by modifications associated with construction of the I-25 ramps and frontage road. The Express Lane Alternative improvements are minor in relative extent; therefore, the Express Lane Alternative would result in *no adverse effect* to the Cache la Poudre Reservoir Inlet.

Boxelder Ditch (5LR2160.1): Under the Express Lane Alternative, the I-25/Harmony Road interchange would be modified, including widening of the on- and off-ramps. Boxelder Ditch is currently enclosed inside a pipe underneath the existing ramps, fill slopes and mainline I-25 traffic lanes. To accommodate construction of a new southbound off-ramp from I-25, which would be situated 90 ft west of the existing ramp alignment, a 124-foot-long section of the open Boxelder Ditch would need to be enclosed inside a box culvert beneath the ramp. The remainder of the ditch located within the area proposed for the Express Lane Alternative highway improvements is already piped under I-25, the northbound on-ramp to I-25, and Harmony Road, and no new direct impacts would occur in those locations.

A small direct impact would occur where the ditch would pass beneath a new property access road on the southeast side of the interchange. This new access road is a cul-de-sac, required to replace the existing access from the abandoned east frontage road. A total of 70 feet of open ditch would have to be enclosed inside a box culvert beneath the proposed cul-de-sac.

Installation of the new culvert would likely require a temporary use of the historic property for equipment access and construction activities. The ditch would remain operational and irrigation water would be protected from all sediment and physical encroachment by construction. All disturbances caused by construction equipment or construction activities would be temporary in nature and affected areas would be restored to the original condition and appearance.

The two box culverts required under the Express Lane Alternative would enclose a total of 194 ft of open ditch that retain integrity, but would not alter its historic alignment. These direct impacts constitute less than one percent of the entire length of the Boxelder Ditch, and would not significantly diminish or alter characteristics that render the ditch eligible for NRHP; therefore, the Express Lane Alternative would result in *no adverse effect* to the resource.

Arapaho Bend Natural Area

Although the Express Lane Alternative would use additional land from the Arapahoe Bend Natural Area, the Official with Jurisdiction (see concurrence dated March 16, 2017) believes that this minimizes harm to the features that qualify this property as a Section 4(f) resource. The activities, features, and attributes of the resource will not be adversely affected by the Express Lane Alternative, consistent with the *de minimis* determination made in the FEIS. Measures to minimize harm identified in the FEIS included retaining walls of approximately 2,000 ft in length along the Harmony Road/I-25 interchange ramps north of Harmony Road to minimize use of the resource. Since the FEIS, the City of Fort Collins, as Official with Jurisdiction over the Arapaho Bend Natural Area, expressed concern that the retaining walls would introduce a large, unnatural, and imposing structure that would be counter to the purpose of the Natural Area. The City felt that the retaining walls would highlight, rather than screen, the proposed I-25 infrastructure. Therefore, the City requested that CDOT consider a sloped embankment instead of the walls, even if it resulted in greater acreage use of the resource. In response to the City's request, CDOT's updated design in this reevaluation includes a sloped embankment instead of retaining walls, which results in an additional 1.89 acres of use of the approximate 287-acre Arapaho Bend Natural Area, for a total of approximately 4.96 acres of use. None of the features or amenities would be used as a result of this additional acreage, and the utility of the remainder of the natural area would not be diminished. In conclusion, there is no change to the *de minimis* determination as a result of this design change. The mitigation measures identified previously in the FEIS remain relevant.

The Poudre River Trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp Improvements will not introduce any additional Section 4(f) use.

Summary

The Express Lane Alternative would use additional land from the Arapaho Bend Natural Area compared to the Accel/Decel Alternative and the FEIS Preferred Alternative. Although the Express Lane Alternative would use additional land from the Arapahoe Bend Natural Area, the Official with Jurisdiction believes that this minimizes harm to the features that qualify this property as a Section 4(f) resource. This *de minimis* use does not contribute to the overall harm and does not affect the least harm analysis in the Revised Section 4(f) Evaluation (2011).

The Express Lane Alternative does not change that the FEIS Preferred Alternative is the alternative with the least overall harm to the Section 4(f) properties. As noted, the FEIS Preferred Alternative included a third general purpose lane in both

the southbound and northbound directions, which is not being considered for implementation at this time due to funding limitations.

Mitigation

The mitigation measures identified in the FEIS and ROD1 have not changed and remain in effect.

Farmlands

Impacts to Farmlands have changed with the Express Lane Alternative.

Express Lane Alternative Impacts

The Express Lane Alternative would impact 0.8 acre of farmland of local importance, 2.8 acres of farmland of statewide importance, and 78.9 acres of prime farmlands (82.5 acres total). Poudre River and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp improvements will not impact farmlands.

FEIS Preferred Alternative Impacts

The FEIS Preferred Alternative would impact 0.6 acre of farmland of local importance, 1.0 acre of farmland of statewide importance, and 92.6 acres of prime farmlands (94.2 acres total).

As noted previously, the FEIS Preferred Alternative included three general purpose in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Impacts

The Accel/Decel Alternative would impact 0.2 acre of farmland of local importance, 1.8 acres of farmland of statewide importance, and 87.2 acres of prime farmlands (89.2 acres total).

Summary

As mitigation for impacts to prime farmlands, the U.S. Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) offices recommended keeping construction materials, tools, and vehicles within the proposed right-of-way to reduce impacts consideration of converting non-prime Farmland before impacting prime farmlands. The Express Lane Alternative reduces the impacts of the FEIS Preferred Alternative and Accel/Decel Alternative to prime farmlands in accordance with USDA-NRCS recommendations.

Mitigation

The mitigation identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Noise

Traffic noise analyses were previously conducted for the FEIS and ROD1. Traffic noise impacts were identified and noise abatement actions were recommended.

Express Lane Alternative Impacts

For the Revised ROD1 proposed Alternative, an analysis was performed using 2040 traffic and the updated CDOT Noise Analysis and Abatement Guidelines. (**Attachment D**). The calculated noise level range for the modeled points was 57.6 to 76.1 dBA (A-weighted decibels). Twelve receptors were calculated to have 2040 traffic noise levels above the respective noise abatement criteria (NAC) during the afternoon peak hour. Of these, eight were Category B properties, three were Category C and one was Category E. All of the impacted receptors were predicted to equal or exceed the relevant NAC; none were predicted to increase by 10 dBA or more over existing conditions.

Potential abatement barriers were assessed for effectiveness and feasibility. From the results, barriers were found to be not feasible and reasonable because the cost index was too high. Therefore, no noise abatement is recommended for the Revised ROD1 Proposed Alternative.

The Poudre River Trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp improvements will not result in noise impacts.

FEIS Preferred Alternative Impacts

For the FEIS Preferred Alternative, an analysis was performed as part of the FEIS using 2035 traffic following the 2002 CDOT noise guidance. The analysis was not updated to 2040 traffic or the updated CDOT Noise Analysis and Abatement

Guidelines. Ten Category B properties and 18 Category C properties were predicted to equal or exceed the relevant NAC. Noise impacts were identified but no noise abatement measures were recommended from SH 392 to SH 14 for the FEIS Preferred Alternative. A portion of the FEIS Preferred Alternative would be implemented through the Accel/Decel Alternative, and that noise analysis was updated to 2040 traffic volumes but had the same roadway design basis. Therefore, Accel/Decel Alternative represents the FEIS Preferred Alternative.

As noted previously, the FEIS Preferred Alternative included three general purpose in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Alternative Impacts

For the Accel/Decel Alternative, an analysis was performed using 2040 traffic and the updated CDOT Noise Analysis and Abatement Guidelines (**Attachment D**). Eighteen receptors were calculated to have 2040 traffic noise levels above the respective NAC during the afternoon peak hour. Of these, 11 were Category B properties, four were Category C and three were Category E. All of the impacted receptors were predicted to equal or exceed the relevant NAC; none were predicted to increase by 10 dBA or more over existing conditions.

Potential abatement barriers were assessed for effectiveness and feasibility. Barriers were found to be not feasible and reasonable because the cost index was too high. Therefore, no noise abatement is recommended for the Accel/Decel Alternative.

Summary

Of the properties identified as impacted, there are no new properties impacted due to Express Lane Alternative in comparison with the FEIS Preferred Alternative and the Accel/Decel Alternative. Each of the properties identified as impacted by the Express Lane Alternative were also impacted by the FEIS Preferred Alternative and the Accel/Decel Alternative. The Category E receptors impacted by the Express Lane Alternative and the Accel/Decel Alternative were not identified as impacted by the FEIS Preferred Alternative because the updated CDOT Noise Analysis and Abatement Guidelines redefined the Category E receptors.

No noise abatement was recommended for the Express Lane Alternative, FEIS Preferred Alternative, and Accel/Decel Alternative.

Mitigation

The mitigation for construction noise identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Hazardous Materials

Impacts to sites with hazardous material concerns have changed since completion of the FEIS and ROD1.

Two properties, 4225 S. Kechter Road and 3808 E. Mulberry Street, were not previously evaluated for potential hazardous material concerns as part of the FEIS because these properties were not included in the FEIS study area for hazardous materials. The residential/agricultural property at 4225 Kechter Road does not have any hazardous material concerns, but the property at 3808 E. Mulberry Street is a site with hazardous material concerns. Initial Site Assessments were performed for these properties (**Attachment E**). The commercial property located at 3808 E. Mulberry Street consists of motel (Red Lion Inn) landscaping, groundwater monitoring wells, and a pad-mounted electrical transformer. The Red Lion Inn property at 3808 E. Mulberry Street is a closed leaking underground storage tank (LUST) site with known petroleum soil and groundwater contamination.

The Poudre River Trail and the Harmony Road/Southbound I-25 On-Ramp/Northbound I-25 Off-Ramp improvements will not impact identified hazardous material sites.

Express Lane Alternative Impacts

The Express Lane Alternative would impact 14 sites with potential and recognized hazardous materials concerns. The Express Lane Alternative will require a partial acquisition of a property with known hazardous concerns, 3808 E. Mulberry Street that had not been previously identified. The portion of the property at 3808 E. Mulberry Street (Red Lion Inn) to be partially acquired consists of landscaping, groundwater monitoring wells, and a pad-mounted electrical transformer.

FEIS Preferred Alternative Impacts

The FEIS Preferred Alternative would impact 17 sites with potential or known hazardous materials concerns.

As noted previously, the FEIS Preferred Alternative included three general purpose in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Accel/Decel Impacts

The Accel/Decel Alternative would impact 14 sites with potential or known hazardous materials concerns.

Summary

Overall, the Express Lane Alternative will impact three fewer sites with potential or known hazardous materials concerns than the FEIS Preferred Alternative and the same number of sites with potential or known hazardous materials concerns as the Accel/Decel Alternative. Except for the property at 3808 E. Mulberry Street, which will be partially acquired, the remaining 13 sites with potential or known hazardous materials concerns that will be impacted by the Express Lane Alternative were also impacted by the FEIS Preferred Alternative and the Accel/Decel Alternative.

Mitigation

The mitigation identified in the FEIS and ROD1 has not changed and is still relevant (**Attachment G**).

Traffic/Operations/Travel Patterns

The North I-25 ROD1 selected acceleration/deceleration lanes in both directions on I-25 between SH 392 and SH 14. This was considered an interim improvement and ultimately the acceleration/deceleration lanes would be incorporated into the FEIS Preferred Alternative cross section when additional funds were identified. The Express Lane Alternative replaces the acceleration/deceleration lanes in both directions with the express lanes, consistent with the Preferred Alternative. These express lanes are part of a longer system of express lanes that extend south to SH 66.

A 2040 traffic analysis for the Accel/Decel Alternative, the Express Lane Alternative, and the No Action Alternative was completed (**Attachment F**). A comparison to the FEIS Preferred Alternative is not included here because the Accel/Decel Alternative and the Express Lane Alternative represent potential phases of the FEIS Preferred Alternative. The FEIS Preferred Alternative includes an additional lane in each direction when compared to ROD1. Therefore, a direct comparison to the FEIS Preferred Alternative is not appropriate.

The results of the 2040 traffic conditions at the four interchanges and along mainline I-25, including the Express Lanes are summarized below.

- Ramp terminal intersection operations are expected to be similar for both the Express Lane Alternative and the Accel/Decel Alternative. This is due to similar geometry which and similar peak hour traffic volumes for both alternatives.
- The Accel/Decel Alternative would operate with somewhat fewer hours of delay and better level of service than the Express Lane Alternative because the accel/decel lanes provide more capacity than express lanes.
- The Express Lane Alternative would bring the corridor's facilities incrementally closer to the FEIS Preferred Alternative. Accel/decel lanes included in the Accel/Decel Alternative were identified as an interim improvement and are not included in the FEIS Preferred Alternative. The express lanes are included in the FEIS Preferred Alternative.
- The Express Lane Alternative and the Accel/Decel Alternative reduce the number of vehicles unserved by approximately 5,000 and 7,000 vehicles daily (at entry into the modeling area), respectively compared to the No Action scenario.
- The Express Lane Alternative reduces the number of vehicles denied entry at key bottlenecks more than both No Action and the Accel/Decel Alternative.

- The Express Lane Alternative and Accel/Decel Alternative are projected to serve approximately 10,000 vehicles more daily compared to the No Action scenario. Since freeway travel is generally safer than surface street travel, an improvement in safety in the region is created.
- The Express Lane Alternative would provide a non-congested alternative transportation option along the corridor with the potential to improve travel reliability for drivers.
- The Express Lane Alternative would provide travel time reliability for transit travel when compared to the No Action Alternative and the Accel/Decel Alternative.

As noted previously, the FEIS Preferred Alternative included three general purpose in the southbound and northbound directions, while both the Express Lane Alternative and the Accel/Decel Alternative include two general purpose lanes in the southbound and northbound directions. The FEIS Preferred Alternative third general purpose lanes in both the southbound and northbound directions are not being considered for implementation at this time due to funding limitations.

Mitigation

No mitigation required.

MITIGATION:

- All mitigation commitment(s) from NEPA document remain the same (discuss status and compliance):
- Mitigation commitment(s) have changed from NEPA document.

(Attachment G – CDOT Mitigation Tracking Table)

Under the FEIS Preferred Alternative and the Accel/Decel Alternative, water quality detention basins were designed to provide a sufficient volume to treat 101% of the impervious surfaces within the project area. The new CDOT 2015 MS4 permit requires treating 90% of the new impervious surface. This Reevaluation will conform to the new CDOT 2015 MS4 permit.

V. Public/Agency Involvement (optional)

If any, document public meetings, notices, and websites, and/or document agency coordination. For each provide dates, and coordination, where applicable:

The North I-25 Final Environmental Impact Statement and Final Section 4(f) Evaluation was released on August 19, 2011. Details on comments received on the FEIS are included in ROD1. An RCC meeting was held September 8, 2014, and a public meeting was held October 8, 2014; both meetings included information regarding the reevaluation of ROD1. No additional public comments were received regarding the reevaluation.

A meeting was held with the RCC on September 8, 2014. Twenty-one representatives from cities, counties, and agencies along the northern I-25 corridor attended this meeting. The meeting presented information on ROD1 as well as the decision to reevaluate ROD1 to provide express lanes between SH 392 and SH 14 on I-25 instead of continuous accel/ decel lanes. The RCC concurred to include express lanes instead of continuous accel/decels between SH 392 and SH 14.

Several meetings have been held to coordinate with the other projects being planned and designed along the north I-25 corridor. No negative impact was identified with the proposal to change the decision in the ROD1. Participants generally agreed that express lanes would:

- Contribute to additional managed-lane capacity on I-25,
- Improve ease of constructability and phasing,
- Provide travel time savings to CDOT's new regional express bus, and
- Potentially attracting a Public Private Partnership (PPP) to complete the Express Lanes between Fort Collins and Denver.

A public meeting, held October 8, 2014, was attended by approximately 40 people. The meeting included discussion on ROD1, as well as the Express Lane Alternative. No comments were received regarding the change.

VI. Additional Studies Required for Proposed Action

VII. Additional Requirements for Proposed Action

- An SEIS is required, because the changes to the proposed action will result in significant impacts not evaluated in the EIS.
- An SEIS is required, because new information or circumstances will result in significant environmental impacts not evaluated in the EIS.
- A revised ROD is required, because an alternative is recommended that was fully evaluated in an approved FEIS but was not identified as the preferred alternative.
- Appropriate environmental study or an EA is required, because the significance of new impacts is uncertain.
- A revised FONSI is required, because an alternative is recommended that was fully evaluated in an approved EA but was not identified as the preferred alternative.
- Other _____
- None

VIII. Permits Updated (optional)

*This section is only required when the next stage of a project is going to construction.
List permits:*

IX. Attachments Listed

- List permits, studies, background data, etc.*

 - A – Summary of ROD1 Selected Alternative (SH 392 to SH 14), Revised ROD1 proposed Alternative, and No-Action Alternative
 - B – Air Quality Evaluation Technical Memorandum
 - C – Section 106 Consultation
 - D – Noise Impact Assessment Report
 - E – Initial Site Assessments
 - F – Traffic Analysis
 - G – CDOT Mitigation Tracking Table
 - H – USFWS Consultation

Attachment A: Summary of Comparison of the Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

Attachment A

Summary of Comparison of the Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

Metric/Resource	Alternative	Express Lane Alternative		Accel/Decel Alternative (SH 392 to SH 14)	FEIS Preferred Alternative	No-Action Alternative
		General Purpose Lanes	Express Lanes			
<i>Hours of LOS F Daily</i>						
SH 392 to Crossroads		7.9	2.5	6.2	--	6.4
SH 392 to Harmony Road		9.6	3.3	3.5	--	3.4
Harmony Road to Prospect Road		4.6	1.6	5.7	--	5.5
Prospect Road to SH 14		5.1	0.6	0.5	--	1.3
<i>Vehicles Denied Entry Daily</i>						
At Beginning of Model		7,000		5,200	-	12,000
At Key Bottlenecks		4,300		5,200	-	7,800

Source: FREEVAL Analysis, FHU and AECOM, 2017. Denied entry represents the number of vehicles in excess of capacity. Key bottlenecks were identified at SH 392 northbound and at US 34 southbound.

Attachment A
Summary of Comparison of Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

<i>Community Plans</i>					
Transportation Plans that are related to N I-25 (SH 392 to SH 14)		Would not impact community plans at or within the vicinity of the project area.	Would not impact community plans at or within the vicinity of the project area.	Would not impact community plans at or within the vicinity of the project area.	No impacts.
<i>Environmental Resources</i>					
Air Quality (Regional Conformity)		Would not impact regional air quality.	Would not impact regional air quality.	Would not impact regional air quality.	No impacts.
Air Quality (Local Conformity) Harmony Road/West Frontage Road	1-Hour CO Result National Ambient Air Quality Standards (NAAQS) 35 parts per million (ppm)	9.0 ppm No exceedance of NAAQS.	9.0 ppm No exceedance of NAAQS.	12.8 ppm No exceedance of NAAQS	9.0 ppm No exceedance of NAAQS.
	8-Hour CO Result NAAQS 9 ppm	6.2 ppm No exceedance of NAAQS.	6.2 ppm No exceedance of NAAQS.	7.2 ppm No exceedance of NAAQS.	6.2 ppm No exceedance of NAAQS.

Attachment A

Summary of Comparison of Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

Metric/Resource	Alternative	Express Lane Alternative	Accel/Decel Alternative	FEIS Preferred Alternative	No-Action
Air Quality (Construction)		May be a source of temporary air quality impacts from fugitive dust or equipment emissions.	May be a source of temporary air quality impacts from fugitive dust or equipment emissions.	May be a source of temporary air quality impacts from fugitive dust or equipment emissions.	No impacts.
Geologic Resources and Soils		May encounter expansive soils.	May encounter expansive soils.	May encounter expansive soils.	No impacts.
Water Quality		86.4 acres of additional impervious surface, 90 percent of which would be treated.	79 acres of additional impervious surface, 90 percent of which would be treated.	112 acres of additional impervious surface, 90 percent of which would be treated.	No change.
Floodplains		Would impact the existing FEMA regulated floodplains for the Cache la Poudre River and Boxelder Creek.	Would impact the existing FEMA regulated floodplains for the Cache la Poudre River and Boxelder Creek.	Would impact the existing FEMA regulated floodplains for the Cache la Poudre River and Boxelder Creek.	No impacts.
Wetlands/Other Waters of the U.S.		Would impact 5.29 acres of wetlands and other waters of the U.S.	Would impact 3.2 acres of wetlands and other waters of the U.S.	Would impact 3.28 acres of wetlands and other waters of the U.S.	No impacts.
Vegetation and Noxious Weeds		Would impact approximately 206 acres of riparian, woodland, agricultural, and various wetland vegetation communities.	Would impact approximately 198.5 acres of riparian, woodland, agricultural, and various wetland vegetation communities.	Would impact approximately 231.5 acres of riparian, woodland, agricultural, and various wetland vegetation communities.	No impacts.

Attachment A

Summary of Comparison of Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

Metric/Resource	Alternative	Express Lane Alternative	Accel/Decel Alternative	FEIS Preferred Alternative	No-Action
Fish and Wildlife	<p>May impact migratory birds, including raptors, and aquatic species at the Cache la Poudre River and Boxelder Creek.</p> <p>Would impact several black-tailed prairie dog colonies within the project area. While not observed, Western Burrowing Owls may be present in association with the black-tailed prairie dog colonies; therefore, impacts are possible.</p>	<p>May impact migratory birds, including raptors, and aquatic species at the Cache la Poudre River and Boxelder Creek.</p> <p>Would impact several black-tailed prairie dog colonies within the project area. While not observed, Western Burrowing Owls may be present in association with the black-tailed prairie dog colonies; therefore, impacts are possible.</p>	<p>May impact migratory birds, including raptors, and aquatic species at the Cache la Poudre River and Boxelder Creek.</p> <p>Would impact several black-tailed prairie dog colonies within the project area. While not observed, Western Burrowing Owls may be present in association with the black-tailed prairie dog colonies; therefore, impacts are possible.</p>	No impacts.	
Threatened/Endangered Species	<p>Would impact approximately 1.58 acres of PMJM habitat identified along the Cache la Poudre River, which includes the Poudre River Trail which would impact approximately 0.1 acre of PMJM habitat.</p>	<p>Would impact approximately 1.16 acres of PMJM habitat identified along the Cache la Poudre River.</p>	<p>Would impact approximately 1.16 acres of PMJM habitat identified along the Cache la Poudre River.</p>	No impacts.	
Historic Resources (Includes bridges)	<p>No adverse effects to four historic properties.</p>	<p>No adverse effects to four historic properties.</p>	<p>No adverse effects to four historic properties.</p>	No impacts.	
Archaeological Resources	<p>No impacts to known archaeological resources.</p>	<p>No impacts to known archaeological resources.</p>	<p>No impacts to known archaeological resources.</p>	No impacts.	

Attachment A

Summary of Comparison of Revised Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

Metric/Resource	Alternative	Express Lane Alternative	Accel/Decel Alternative	FEIS Preferred Alternative	No-Action
Paleontological Resources		No impacts to known paleontological resources.	No impacts to known paleontological resources.	No impacts to known paleontological resources.	No impacts.
Land Use		No changes from impacts and mitigation identified in in FEIS and ROD1.	No changes from impacts and mitigation identified in in FEIS and ROD1.	No changes from impacts and mitigation identified in in FEIS and ROD1.	No impacts.
Social Resources		No changes from impacts and mitigation identified in in FEIS and ROD1.	No changes from impacts and mitigation identified in in FEIS and ROD1.	No changes from impacts and mitigation identified in in FEIS and ROD1.	No impacts.
Economic Resources		No changes from impacts and mitigation identified in in FEIS and ROD1.	No changes from impacts and mitigation identified in in FEIS and ROD1.	No changes from impacts and mitigation identified in in FEIS and ROD1.	No impacts.
Environmental Justice		Would not affect minority/low-income populations disproportionately.	Would not affect minority/low-income populations disproportionately.	Would not affect minority/low-income populations disproportionately.	No effect to minority/low-income populations disproportionately.
Residential/Business Right-of-Way Impacts		Would acquire 125 acres of property for right-of-way.	Would acquire 125 acres of property for right-of-way.	Would acquire 132 acres of property for right-of-way.	No impacts.
Transportation Resources (roadway, rail, bus, bike, pedestrian, etc.)		Would not impact existing transportation resources.	Would not impact existing transportation resources.	Would not impact existing transportation resources.	No impacts.
Utilities and Railroads		Would require relocation of some utilities. Would not impact railroads.	Would require relocation of some utilities. Would not impact railroads.	Would require relocation of some utilities. Would not impact railroads.	No impacts.

Attachment A

Summary of Comparison of Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

Metric/Resource	Alternative	Express Lane Alternative	Accel/Decel Alternative	FEIS Preferred Alternative	No-Action
Section 4(f)		Would have a <i>de minimis</i> use of three properties (two historic properties and one recreational property).	Would have a <i>de minimis</i> use of three properties (two historic properties and one recreational property).	Would have a <i>de minimis</i> use of three properties (two historic properties and one recreational property).	No Section 4(f) use.
Section 6(f)		Would have no impacts to Section 6(f) properties	Would have no impacts to Section 6(f) properties	Would have no impacts to Section 6(f) properties	Would have no impacts to Section 6(f) properties
Farmlands		Would result in the direct conversion of 0.8 acre of farmland of local importance, 2.8 acres of farmland of statewide importance, and 78.9 acres of prime farmland (82.5 acres total).	Would result in the direct conversion of 0.2 acre of farmland of local importance, 1.8 acres of farmland of statewide importance, and 87.2 acres of prime farmland (89.2 acres total).	Would result in the direct conversion of 0.6 acre of farmland of local importance, 1.0 acre of farmland of statewide importance, and 92.6 acres of prime farmland (94.2 acres total).	Would not impact Prime Farmland, Farmland of statewide importance, or Farmland of local importance.

Attachment A

Summary of Comparison of Express Lane Alternative, Accel/Decel Alternative, FEIS Preferred Alternative, and No-Action Alternative

Metric/Resource	Alternative	Express Lane Alternative	Accel/Decel Alternative	FEIS Preferred Alternative	No-Action
Noise		<p>Twelve receptors were calculated to have 2040 traffic noise levels above the respective NAC during the PM. Of these, eight were Category B properties, three were Category C and one was Category E.</p> <p>No noise abatement recommended.</p> <p>Would have temporary noise impacts during construction.</p>	<p>Eighteen receptors were calculated to have 2040 traffic noise levels above the respective NAC during the PM. Of these, 11 were Category B properties, four were Category C and three were Category E.</p> <p>No noise abatement recommended.</p> <p>Would have temporary noise impacts during construction.</p>	<p>Analysis was not updated to 2040 traffic or 2011 Guidelines. Ten Category B properties and 18 Category C properties were predicted to equal or exceed the relevant NAC. No noise abatement recommended.</p> <p>Would have temporary noise impacts during construction.</p>	<p>Thirteen receptors were calculated to have 2040 traffic noise levels at or above the respective NAC during the PM. Of these, nine were Category B properties, two were Category C and two were Category E.</p>
Visual Resources/Aesthetics		<p>Would not change the visual context within or near the project area.</p>	<p>Would not change the visual context within or near the project area.</p>	<p>Would not change the visual context within or near the project area.</p>	<p>No impacts.</p>
Energy		<p>Would not substantially increase energy demand.</p>	<p>Would not substantially increase energy demand.</p>	<p>Would not substantially increase energy demand.</p>	<p>Energy demand would be directly proportionate to the increase in population as land development occurs.</p>
Hazardous Materials		<p>Would impact 14 sites with potential or recognized hazardous material concerns.</p>	<p>Would impact 14 sites with potential or recognized hazardous material concerns.</p>	<p>Would impact 17 sites with potential or recognized hazardous material concerns.</p>	<p>No impacts.</p>

Attachment B: Air Quality Evaluation Technical Memorandum



March 6, 2017

MEMORANDUM

To: Carol Parr, Colorado Department of Transportation Region 4
Monica Pavlik, Federal Highway Administration

From: Dale Tischmak

Re: North I-25 Revised Record of Decision 1 (SH 392 to SH 14) Air Quality Evaluation
FHU Reference No. 113319-11

The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA) are preparing a North I-25 Revised Record of Decision (ROD) 1 for Interstate 25 (I-25) from State Highway (SH) 392 to SH 14. The purpose of the North I-25 project is to implement a transportation solution for an important component of the regional transportation network to enhance east-west and north-south mobility. This memorandum summarizes the air quality evaluations associated with proposed changes to roadway designs. Technical information for air quality was previously provided with the North I-25 Final Environmental Impact Statement (EIS) and the ROD1.

For background, FHWA and CDOT documented the selection of Phase I of the ROD1 Preferred Alternative (SH 392 to SH 14) for the North I-25 project in ROD1 in 2011. Phase I involved numerous infrastructure improvements across the project area, including installation of a continuous acceleration/deceleration (accel/decel) lane in each travel direction on I-25 between SH 392 and SH 14 in Larimer County. The added lanes would result in three driving lanes for each I-25 travel direction.

Through ROD1 Reevaluation, FHWA is modifying the prior selection of the accel/decel lanes for Phase I by replacement with Express Lanes (Figure 1). Express Lanes were included in the ultimate Preferred Alternative between SH 392 and SH 14, but were planned for a later phase of construction. The initial Phase I plan consisted of one outside accel/decel lane and two inside general purpose lanes for each direction on I-25, and it will be replaced by two outside general purpose lanes and one inside buffer-separated Express Lane between SH 392 and the Port of Entry (Figure 2). This new configuration is referred to as the Express Lane Alternative. From the Port of Entry to SH 14, the design revision will consist of one inside Express Lane, two general purpose lanes and one outside accel/decel lane (Figure 2). Only mainline I-25 will be affected by these changes; no interchanges or intersections will be affected by the change beyond updating connections to the ramps.

I-25 between SH 392 and SH 14 is primarily a rural, but developing, corridor. This area along I-25 is subject to conformity requirements of the *Revised Carbon Monoxide Maintenance Plan, Fort*

Collins Attainment/Maintenance Area and the Denver Metropolitan Area and North Front Range 8-Hour Ozone State Implementation Plan. Evaluations were completed in regard to these plans and to determine any potential exceedances of the relevant National Ambient Air Quality Standards (NAAQS) associated with this project.

REGIONAL CONFORMITY

Reconstruction of and addition of capacity to I-25 between SH 392 and SH 14 is included in the North Front Range Metropolitan Planning Organization's fiscally-constrained 2040 Regional Transportation Plan and in the 2016-2019 Transportation Improvement Program (under the North I-25 design-build project). Therefore, regional conformity for the proposed improvements has been demonstrated.

LOCAL CONFORMITY

For this project, local conformity applies to carbon monoxide. Again, Fort Collins has a Limited Maintenance Plan, which allows for a less rigorous approach in general. Associated technical guidance provides that emissions budgets may be treated as essentially non-constraining for transportation conformity because it is unreasonable to expect the area will experience so much growth that a violation of the NAAQS may result.

The proposed changes to I-25 through the Express Lanes will not affect typical carbon monoxide hot spots like congested intersections; only mainline I-25 traffic will be affected. However, nearby intersections at Harmony Road were predicted to operate at a poor level of service (LOS) for the Final EIS (LOS E in the afternoon in 2035) and were evaluated as a hot spot with CAL3QHC modeling. The evaluation was updated for ROD1 Reevaluation. The intersections examined were Harmony Road at West Frontage Road and the I-25 southbound ramps. A "worst case" situation was modeled where the highest emissions factors (2016) were combined with the highest traffic volumes (2040 afternoon peak). These artificial conditions were purposely devised to ensure that the maximum potential carbon monoxide concentrations were considered.

The model results were compared to the carbon monoxide NAAQS, which are 35 parts per million (ppm) for one hour and 9 ppm for eight hours. Background carbon monoxide concentrations obtained from the Colorado Department of Public Health and Environment were 3 ppm and 2 ppm, respectively. The highest carbon monoxide concentrations calculated for the two Harmony Road intersections were 9.0 ppm for one hour and 6.2 ppm for eight hours—both of these values are below their respective NAAQS. The modeling output, which contains model input data, is attached.

For the reasons above, this project was determined not to cause or contribute to an exceedance of the federal carbon monoxide NAAQS and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals.

GREENHOUSE GASES AND CLIMATE CHANGE

Climate change is an important national and global concern. While the earth has gone through many natural changes in climate in its history, there is general agreement that the earth's climate is currently changing at an accelerated rate and will continue to do so for the foreseeable future. Anthropogenic (human-caused) greenhouse gas (GHG) emissions contribute to this rapid change.

Carbon dioxide (CO₂) makes up the largest component of these GHG emissions. Other prominent transportation GHGs include methane and nitrous oxide.

Many GHGs occur naturally. Water vapor is the most abundant GHG and makes up approximately two thirds of the natural greenhouse effect. However, the burning of fossil fuels and other human activities are adding to the concentration of GHGs in the atmosphere. Many GHGs remain in the atmosphere for time periods ranging from decades to centuries. GHGs trap heat in the earth's atmosphere. Because atmospheric concentration of GHGs continues to climb, our planet will continue to experience climate-related phenomena. For example, warmer global temperatures can cause changes in precipitation and sea levels.

To date, no national standards have been established regarding GHGs, nor has the Environmental Protection Agency (EPA) established criteria or thresholds for ambient GHG emissions pursuant to its authority to establish motor vehicle emission standards for CO₂ under the Clean Air Act. However, there is a considerable body of scientific literature addressing the sources of GHG emissions and their adverse effects on climate, including reports from the Intergovernmental Panel on Climate Change, the US National Academy of Sciences, and EPA and other Federal agencies. GHGs are different from other air pollutants evaluated in Federal environmental reviews because their impacts are not localized or regional due to their rapid dispersion into the global atmosphere, which is characteristic of these gases. The affected environment for CO₂ and other GHG emissions is the entire planet. In addition, from a quantitative perspective, global climate change is the cumulative result of numerous and varied emissions sources (in terms of both absolute numbers and types), each of which makes a relatively small addition to global atmospheric GHG concentrations. In contrast to broad scale actions such as actions involving an entire industry sector or very large geographic areas, it is difficult to isolate and understand the GHG emissions impacts for a particular transportation project. Furthermore, presently there is no scientific methodology for attributing specific climatological changes to a particular transportation project's emissions.

Under the National Environmental Policy Act (NEPA), detailed environmental analysis should be focused on issues that are significant and meaningful to decision-making. FHWA has concluded, based on the nature of GHG emissions and the exceedingly small potential GHG impacts of the alternatives, as discussed below, that the GHG emissions from the alternatives will not result in "reasonably foreseeable significant adverse impacts on the human environment" (40 CFR 1502.22(b)). The GHG emissions from the project build alternatives will be insignificant, and will not play a meaningful role in a determination of the environmentally preferable alternative or the selection of the proposed action. More detailed information on GHG emissions "is not essential to a reasoned choice among reasonable alternatives" (40 CFR 1502.22(a)) or to making a decision in the best overall public interest based on a balanced consideration of transportation, economic, social, and environmental needs and impacts (23 CFR 771.105(b)). For these reasons, no alternatives-level GHG analysis has been performed for this project.

The context in which emissions from the Express Lane Alternative or No Action Alternative will occur, together with the expected GHG emissions contribution from the project, illustrate why the project's GHG emissions will not be significant and will not be a substantial factor in the decision-

making. The transportation sector is the second largest source of total GHG emissions in the U.S., behind electricity generation. The transportation sector was responsible for approximately 27 percent of all anthropogenic (human caused) GHG emissions in the U.S. in 2010. The majority of transportation GHG emissions are the result of fossil fuel combustion. CO₂ makes up the largest component of these GHG emissions. U.S. CO₂ emissions from the consumption of energy accounted for about 18 percent of worldwide energy consumption CO₂ emissions in 2010. U.S. transportation CO₂ emissions accounted for about 6 percent of worldwide CO₂ emissions.

While the contribution of GHGs from transportation in the U.S. as a whole is a large component of U.S. GHG emissions, as the scale of analysis is reduced the GHG contributions become quite small. Based on emissions estimates from EPA's MOVES model, and global CO₂ estimates and projections from the Energy Information Administration, CO₂ emissions from motor vehicles in the entire state of Colorado contributed less than one tenth of one percent of global emissions in 2010 (0.0348 percent). These emissions are projected to contribute an even smaller fraction (0.0261%) in 2040. For the Express Lane Alternative, daily miles driven on I-25 between SH 392 and SH 14 represent approximately 0.484 percent of estimated 2040 total Colorado travel activity. The Express Lanes project is not expected to change overall vehicle miles traveled (VMT) compared to the original Phase I improvements, but is expected to improve I-25 traffic operations and efficiency compared to No Action and thereby reduce vehicle emissions. As a result, FHWA estimates that the proposed project could result in a potential small decrease in global carbon dioxide emissions in 2040 of less than one hundred-thousandth of one percent, and an equivalent percentage decrease in Colorado's share of global emissions in 2040. This very small change in global emissions is well within the range of uncertainty associated with future emissions estimates.

To help address the global issue of climate change, the U.S. Department of Transportation is committed to reducing GHG emissions from vehicles traveling on our nation's highways. The U.S. Department of Transportation and EPA are working together to reduce these emissions by substantially improving vehicle efficiency and shifting toward less carbon-intensive fuels. The agencies have jointly established new, more stringent fuel economy and first ever GHG emissions standards for model year 2012–2025 cars and light trucks, with an ultimate fuel economy standard of 54.5 miles per gallon for cars and light trucks by model year 2025. Further, on September 15, 2011, the agencies jointly published the first ever fuel economy and GHG emissions standards for heavy-duty trucks and buses. Increasing use of technological innovations that can improve fuel economy, such as gasoline- and diesel-electric hybrid vehicles, will improve air quality and reduce CO₂ emissions in future years.

Consistent with its view that broad-scale efforts hold the greatest promise for meaningfully addressing the global climate change problem, FHWA is engaged in developing strategies to reduce transportation's contribution to GHGs—particularly CO₂ emissions—and to assess the risks to transportation systems and services from climate change. In an effort to assist States and MPOs in performing GHG analyses, FHWA has developed a Handbook for Estimating Transportation GHG Emissions for Integration into the Planning Process. The Handbook presents methodologies reflecting good practices for the evaluation of GHG emissions at the transportation program level, and will demonstrate how such evaluation may be integrated into the transportation planning process. FHWA has also developed a tool for use at the statewide level to model a large number of

GHG reduction scenarios and alternatives for use in transportation planning, climate action plans, scenario planning exercises, and in meeting state GHG reduction targets and goals. To assist states and MPOs in assessing climate change vulnerabilities to their transportation networks, FHWA has developed a draft vulnerability and risk assessment conceptual model and has piloted it in several locations.

At the state level, there are also several programs underway in Colorado to address transportation GHGs. The Governor's Climate Action Plan, adopted in November 2007, includes measures to adopt vehicle CO₂ emissions standards and to reduce vehicle travel through transit, flex time, telecommuting, ridesharing, and broadband communications. CDOT issued a Policy Directive on Air Quality in May 2009. This Policy Directive was developed with input from a number of agencies, including the Colorado Department of Public Health and Environment, EPA, FHWA, the Federal Transit Administration, the Denver Regional Transportation District and the Denver Regional Air Quality Council. This Policy Directive and implementation document, the CDOT Air Quality Action Plan address unregulated mobile source air toxics (MSATs) and GHGs produced from Colorado's state highways, interstates, and construction activities.

As a part of CDOT's commitment to addressing MSATs and GHGs, some of CDOT's program wide activities include:

- Researching pavement durability opportunities with the goal of reducing the frequency of resurfacing and/or reconstruction projects.
- Developing air quality educational materials, specific to transportation issues, for citizens, elected officials, and schools, including development of vehicle idling reduction programs for schools and communities.
- Offering outreach to communities to integrate land use and transportation decisions to reduce growth in VMT, such as smart growth techniques, buffer zones, transit-oriented development, walkable communities, access management plans, etc.
- Committing to research additional concrete additives that would reduce the demand for cement.
- Expanding Transportation Demand Management efforts statewide to better utilize the existing transportation mobility network.
- Continuing to diversify the CDOT fleet by retrofitting diesel vehicles, specifying the types of vehicles and equipment contractors may use, purchasing low-emission vehicles, such as hybrids, and purchasing cleaner burning fuels through bidding incentives where feasible.
- Exploring congestion and/or right-lane only restrictions for motor carriers.
- Funding truck parking electrification.
- Researching additional ways to improve freight movement and efficiency statewide.
- Committing to use ultra-low sulfur diesel for non-road equipment statewide.
- Developing a low-volatile-carbon-emitting tree landscaping specification.

Even though project-level mitigation measures will not have a substantial impact on global GHG emissions because of the exceedingly small amount of GHG emissions involved, the above-

identified activities are part of a program-wide effort by FHWA and CDOT to adopt practical means to avoid and minimize environmental impacts in accordance with 40 CFR 1505.2(c).

This document does not incorporate an analysis of the GHG emissions or climate change effects of each of the alternatives because the potential change in GHG emissions is very small in the context of the affected environment. Because of the insignificance of the GHG impacts, those impacts will not be meaningful to a decision on the environmentally preferable alternative or to a choice among alternatives. As outlined above, FHWA is working to develop strategies to reduce transportation's contribution to GHGs—particularly CO₂ emissions—and to assess the risks to transportation systems and services from climate change. FHWA will continue to pursue these efforts as productive steps to address this important issue. Finally, the construction best practices described above represent practicable project-level measures that, while not substantially reducing global GHG emissions, may help reduce basis and could contribute in the long term to meaningful cumulative reduction when considered across the Federal-aid highway program.

MOBILE SOURCE AIR TOXICS

A quantitative MSAT analysis was previously prepared for Phase I in support of the Final EIS and those documents can be referenced for more information. It was concluded (and concurred with) that “The North I-25 ROD1 Preferred Alternative (SH 392 to SH 14) Phase I will provide air quality benefits from improved interchange operations, from less congestion and idling emissions and from increased transit routing and ridership.” Based on the earlier findings and predicted 2040 average daily traffic volumes on I-25 of less than 140,000 in the corridor, a qualitative evaluation of MSATs was prepared for the I-25 Express Lanes as an update.

The amount of MSATs emitted among the alternatives largely would be proportional to VMT, assuming that other variables, such as fleet mix, are the same. The proposed change from accel/decel lanes to I-25 Express Lanes is expected to result in no change in predicted daily VMT on I-25 (i.e., the same numbers of vehicles will be traveling the same I-25 segments), so the previous MSAT findings are still informative relative to No Action. I-25 is already the major inter-regional travel corridor, so the proposed improvements are unlikely to draw substantially more traffic. Because the estimated VMT for I-25 Express Lanes is expected to be the same, it is expected there would be no appreciable difference in overall MSAT emissions due to VMT from the change to I-25 Express Lanes.

Still, the No Action MSAT emissions may be somewhat higher than emissions under the proposed improvements due to more congestion on I-25. According to the U.S. Environmental Protection Agency's (EPA's) MOVES model, emissions of all the priority MSATs decrease as speed increases.

Regardless of the alternative chosen, MSAT emissions will likely be lower in 2040 than present levels as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after

accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The I-25 Express Lanes will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, there may be localized areas where ambient concentrations of MSATs could be higher than the No Action Alternative. The localized increases in MSAT concentrations would likely be greatest near Kechter Road or Sable Lane. However, the magnitude and the duration of these potential increases compared to No Action cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts.

In summary, when a highway is widened, the localized level of MSAT emissions for a build alternative could be higher relative to the No Action Alternative, but this could be offset due to increases in vehicle speeds and reductions in congestion that are associated with lower MSAT emissions. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will cause substantial reductions over time that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

FHWA has stated their view that information is incomplete or unavailable to credibly predict project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway improvements. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. EPA maintains the Integrated Risk Information System, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (www.epa.gov/iris). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSATs, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling, dispersion modeling, exposure modeling, and final determination of health impacts. Each step in the process builds on the model predictions obtained in the previous step—all are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame because such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel particulate matter. EPA states that with respect to diesel engine exhaust, “[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (<https://www.epa.gov/iris>).”

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by EPA as provided by the Clean Air Act to determine whether more stringent controls are required to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries.

The decision framework is a two-step process. The first step requires EPA to determine an “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million.

In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA’s approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable ([www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/\\$file/07-1053-1120274.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf)).

Because of the limitations in the methodologies for forecasting health impacts, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits that are better suited for quantitative analysis, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response. Therefore, project-specific health impacts due to potential changes in MSAT emissions have not been calculated.

OTHER AIR QUALITY CONSIDERATIONS

Several other technical discussions and analyses for air quality have been completed during earlier stages of the project. It was concluded this information would not be substantively affected by the proposed change to I-25 Express Lanes and is not repeated here. The prior documents include the Draft EIS (2008), the Final EIS (2011) and ROD1 (2011), which can be reviewed for further information. Some of the technical topics included:

- Criteria pollutants
- Meteorology
- Class I areas
- Nitrogen compound dispersion and deposition (includes Rocky Mountain National Park)
- Commuter rail

UPDATE OF METHODOLOGY AND QUANTITATIVE RESULTS

The quantitative results presented in this document are based on predicted 2040 traffic volumes that were current for the project in January 2017. Subsequently, the traffic analysis was revisited and the predicted 2040 volumes were updated. The updated 2040 peak-hour traffic volumes for Harmony Road were approximately 37 percent lower than the earlier 2040 volumes. These (lower) updated volumes result in improved traffic operations predicted in the project corridor, which would lead to lower pollutant emissions through reduced traffic congestion. Therefore, use of the earlier (higher) traffic volumes is more conservative in the evaluation of potential air quality impacts in that it is a “worse case” traffic situation. Note that the “worse case” condition was found not to cause exceedance of a NAAQS or other air quality impact; therefore, the updated (lower) traffic volumes would not, either. For these reasons, the air quality analysis was not updated and the overall findings have not changed, as summarized below.

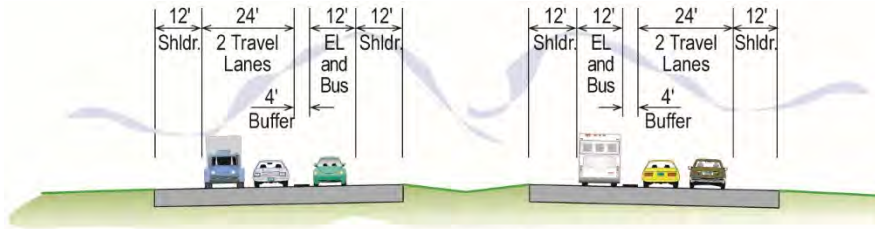
SUMMARY

This project has been determined to not cause an exceedance of any NAAQS. The proposed project will not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the NAAQS or any required interim emissions reductions or other milestones. This project complies with the transportation conformity regulations in 40 CFR 93 and with the conformity provisions of Section 176(c) of the Clean Air Act.

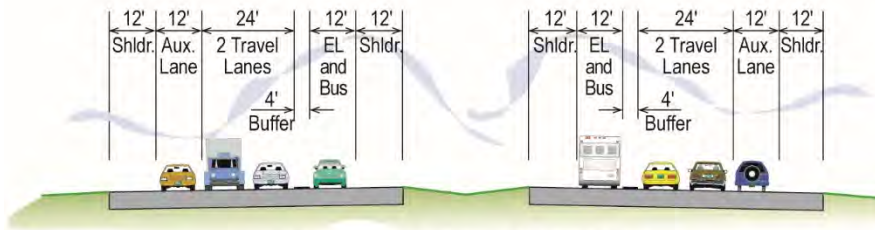
Figure 1. Summary of Revised Phase I Transportation Improvements



Figure 2. Example Road Sections for I-25 Express Lanes: SH 392 to SH 14



**Express Lanes Alternative
I-25 (SH 392 to Port of Entry)**



**Express Lanes Alternative
I-25 (Port of Entry to SH 14)**

CAL3QHC MODEL OUTPUT FILE

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 13045

PAGE 1

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

The MODE flag has been set for calculating concentrations for POLLUTANT: CO

SITE & METEOROLOGICAL VARIABLES

 VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 127. CM
 U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

LINK VARIABLES

LINK DESCRIPTION	* X1	* Y1	* X2	* Y2	* LENGTH (FT)	* BRG TYPE (DEG)	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. harmebapp1	* 240.0	* 76.0	* 1140.0	* 76.0	* 900.	* 90. AG	2715.	10.7	0.0	44.0		
2. harmebapp1 q	* 1109.0	* 76.0	* -3200.5	* 76.0	* 4310.	* 270. AG	57.	100.0	0.0	24.0	1.28	218.9
3. harmeb1tturn	* 1109.0	* 94.0	* 1099.4	* 94.0	* 10.	* 270. AG	29.	100.0	0.0	12.0	0.04	0.5
4. harmebapp2	* 240.0	* 58.0	* 1140.0	* 58.0	* 900.	* 90. AG	2715.	10.7	0.0	32.0		
5. harmebapp2 q	* 1109.0	* 58.0	* -4064.1	* 58.0	* 5173.	* 270. AG	29.	100.0	0.0	12.0	1.34	262.8
6. harmebdep/app	* 1140.0	* 58.0	* 2240.0	* 58.0	* 1100.	* 90. AG	1860.	9.6	0.0	32.0		
7. harmebdep/app2	* 1140.0	* 76.0	* 2240.0	* 76.0	* 1100.	* 90. AG	3720.	9.6	0.0	44.0		
8. harmebdep/app2 q	* 2212.0	* 76.0	* -3652.6	* 76.0	* 5865.	* 270. AG	76.	100.0	0.0	24.0	1.43	297.9
9. harmebdep	* 2240.0	* 76.0	* 2840.0	* 76.0	* 600.	* 90. AG	4430.	7.5	0.0	44.0		
10. harmebdep2_q	* 2809.0	* 94.0	* -7688.5	* 94.0	* *****	* 270. AG	76.	100.0	0.0	24.0	1.79	533.3
11. harmwbapp1	* 2240.0	* 112.0	* 2840.0	* 112.0	* 600.	* 90. AG	3790.	8.2	0.0	44.0		
12. harmwbquel	* 2271.0	* 112.0	* 2442.3	* 112.0	* 171.	* 90. AG	59.	100.0	0.0	24.0	0.65	8.7
13. harmwb1tturn	* 2271.0	* 96.0	* 3375.6	* 96.0	* 1105.	* 90. AG	107.	100.0	0.0	12.0	1.72	56.1
14. harmwbdep/app	* 2240.0	* 112.0	* 1140.0	* 112.0	* 1100.	* 270. AG	1567.	5.5	0.0	44.0		
15. harmwbdep/app q	* 1171.0	* 112.0	* 2813.7	* 112.0	* 1643.	* 90. AG	56.	100.0	0.0	24.0	1.09	83.4
16. harmwbdep/app2	* 2220.0	* 128.0	* 1140.0	* 128.0	* 1080.	* 270. AG	3133.	5.5	0.0	32.0		
17. harmwbdep/app2 q	* 1171.0	* 128.0	* 2823.8	* 128.0	* 1653.	* 90. AG	28.	100.0	0.0	12.0	1.09	84.0
18. harmwb1tturn2	* 1171.0	* 96.0	* 1272.3	* 96.0	* 101.	* 90. AG	108.	100.0	0.0	12.0	0.93	5.1
19. harmwbdep	* 1140.0	* 112.0	* 240.0	* 112.0	* 900.	* 270. AG	1576.	5.5	0.0	44.0		
20. harmwbdep2	* 1140.0	* 128.0	* 240.0	* 128.0	* 900.	* 270. AG	3153.	5.5	0.0	32.0		

21. pkgsbapp	*	1125.0	400.0	1125.0	100.0 *	300.	180. AG	220.	21.9	0.0	32.0		
22. pkgsbapp q	*	1125.0	159.0	1125.0	313.0 *	154.	360. AG	98.	100.0	0.0	12.0	0.81	7.8
23. pkgsbdep	*	1137.0	100.0	1137.0	-376.0 *	476.	180. AG	215.	21.9	0.0	32.0		
24. pkgsbleftturn	*	1137.0	159.0	1137.0	197.1 *	38.	360. AG	98.	100.0	0.0	12.0	0.22	1.9
25. i25sbrampdep	*	2240.0	100.0	2240.0	-876.0 *	976.	180. AG	1680.	21.9	0.0	44.0		
26. pkgnbapp	*	1155.0	-376.0	1155.0	124.0 *	500.	360. AG	300.	43.8	0.0	44.0		
27. pkgnbapp q	*	1155.0	34.0	1155.0	-61.1 *	95.	180. AG	195.	100.0	0.0	24.0	0.55	4.8
28. pkgnbdep	*	1157.0	124.0	1157.0	400.0 *	276.	360. AG	75.	21.9	0.0	32.0		
29. i25sbrampapp	*	2222.0	1124.0	2222.0	124.0 *	1000.	180. AG	1440.	8.8	0.0	32.0		
30. i25sbramp_q	*	2240.0	159.0	2240.0	938.7 *	780.	360. AG	98.	100.0	0.0	12.0	1.18	39.6
31. i25sbramp	*	2240.0	1124.0	2240.0	124.0 *	1000.	180. AG	320.	21.9	0.0	44.0		

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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	*	CYCLE	RED	CLEARANCE	APPROACH	SATURATION	IDLE	SIGNAL	ARRIVAL
	*	LENGTH	TIME	LOST TIME	VOL	FLOW RATE	EM FAC	TYPE	RATE
	*	(SEC)	(SEC)	(SEC)	(VPH)	(VPH)	(gm/hr)		
2. harmebapp1 q	*	140	34	2.0	3530	1900	43.90	1	3
3. harmebltturn	*	140	35	2.0	50	1900	43.90	1	3
5. harmebapp2 q	*	140	34	2.0	1850	1900	43.90	1	3
8. harmebdep/app2 q	*	140	45	2.0	3525	1900	43.90	1	3
10. harmebdep2_q	*	140	45	2.0	4430	1900	43.90	1	3
12. harmwbquel	*	140	35	2.0	1790	1900	43.90	1	3
13. harmwbltturn	*	140	127	2.0	210	1900	43.90	1	3
15. harmwbdep/app q	*	140	33	2.0	3033	1900	43.90	1	3
17. harmwbdep/app2 q	*	140	33	2.0	1517	1900	43.90	1	3
18. harmwbltturn2	*	140	128	2.0	100	1900	43.90	1	3
22. pkgsbapp q	*	140	116	2.0	220	1900	43.90	1	3
24. pkgsbleftturn	*	140	116	2.0	60	1900	43.90	1	3
27. pkgnbapp q	*	140	116	2.0	300	1900	43.90	1	3
30. i25sbramp_q	*	140	116	2.0	320	1900	43.90	1	3

RECEPTOR LOCATIONS

* COORDINATES (FT) *

RECEPTOR	*	X	Y	Z	*
1. Receptor 1	*	900.0	42.0	5.0	*
2. Receptor 2	*	1000.0	42.0	5.0	*
3. Receptor 3	*	1050.0	42.0	5.0	*
4. Receptor 4	*	1100.0	42.0	5.0	*
5. Receptor 5	*	1121.0	32.0	5.0	*
6. Receptor 6	*	1121.0	-43.0	5.0	*
7. Receptor 7	*	1121.0	-110.0	5.0	*
8. Receptor 8	*	1177.0	-110.0	5.0	*
9. Receptor 9	*	1177.0	-43.0	5.0	*
10. Receptor 10	*	1177.0	32.0	5.0	*
11. Receptor 11	*	1187.0	42.0	5.0	*
12. Receptor 12	*	1252.0	42.0	5.0	*
13. Receptor 13	*	1327.0	42.0	5.0	*
14. Receptor 14	*	1400.0	42.0	5.0	*
15. Receptor 15	*	2002.0	42.0	5.0	*
16. Receptor 16	*	2102.0	42.0	5.0	*
17. Receptor 17	*	2152.0	42.0	5.0	*
18. Receptor 18	*	2202.0	42.0	5.0	*
19. Receptor 19	*	2218.0	32.0	5.0	*
20. Receptor 20	*	2218.0	-43.0	5.0	*
21. Receptor 21	*	2218.0	-118.0	5.0	*
22. Receptor 22	*	2262.0	-118.0	5.0	*
23. Receptor 23	*	2262.0	-43.0	5.0	*
24. Receptor 24	*	2262.0	32.0	5.0	*
25. Receptor 25	*	2262.0	54.0	5.0	*
26. Receptor 26	*	2337.0	54.0	5.0	*
27. Receptor 27	*	2412.0	54.0	5.0	*
28. Receptor 28	*	2487.0	54.0	5.0	*
29. Receptor 29	*	2482.0	134.0	5.0	*
30. Receptor 30	*	2382.0	134.0	5.0	*
31. Receptor 31	*	2332.0	134.0	5.0	*

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16
 TIME : 22:58:39

RECEPTOR LOCATIONS

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      *                COORDINATES (FT)                *
      *                X                Y                Z                *
-----*-----*-----*-----*-----*-----*-----*
32. Receptor 32      *      2282.0      134.0      5.0      *
33. Receptor 33      *      2262.0      144.0      5.0      *
34. Receptor 34      *      2262.0      219.0      5.0      *
35. Receptor 35      *      2262.0      294.0      5.0      *
36. Receptor 36      *      2206.0      294.0      5.0      *
37. Receptor 37      *      2206.0      219.0      5.0      *
38. Receptor 38      *      2206.0      154.0      5.0      *
39. Receptor 39      *      2196.0      144.0      5.0      *
40. Receptor 40      *      2121.0      144.0      5.0      *
41. Receptor 41      *      2046.0      144.0      5.0      *
42. Receptor 42      *      1971.0      144.0      5.0      *
43. Receptor 43      *      1381.0      144.0      5.0      *
44. Receptor 44      *      1281.0      144.0      5.0      *
45. Receptor 45      *      1231.0      144.0      5.0      *
46. Receptor 46      *      1181.0      144.0      5.0      *
47. Receptor 47      *      1173.0      169.0      5.0      *
48. Receptor 48      *      1173.0      194.0      5.0      *
49. Receptor 49      *      1173.0      244.0      5.0      *
50. Receptor 50      *      1109.0      244.0      5.0      *
51. Receptor 51      *      1109.0      194.0      5.0      *
52. Receptor 52      *      1109.0      169.0      5.0      *
53. Receptor 53      *      1099.0      144.0      5.0      *
54. Receptor 54      *      1024.0      144.0      5.0      *
55. Receptor 55      *       949.0      144.0      5.0      *
56. Receptor 56      *       874.0      144.0      5.0      *
  
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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

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REMARKS : In search of the angle corresponding to
          the maximum concentration, only the first
          angle, of the angles with same maximum
          concentrations, is indicated as maximum.
  
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WIND ANGLE RANGE: 0.-355.

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WIND ANGLE (DEGR)	* CONCENTRATION (PPM)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0.	*	2.8467	2.8529	2.8887	3.0442	2.7254	1.7184	1.5486	1.7779	1.9402	2.6712	2.7998	2.6460	2.5070	2.5065	2.5433
5.	*	2.7979	2.8117	2.8692	3.0392	2.8131	1.8549	1.7250	1.5456	1.7307	2.5527	2.7030	2.5956	2.4710	2.4709	2.5460
10.	*	2.7429	2.7683	2.8475	3.0086	2.8783	1.9755	1.8673	1.3264	1.5478	2.4461	2.6155	2.5343	2.4256	2.4257	2.5507
15.	*	2.7151	2.7554	2.8484	2.9826	2.9227	2.0722	1.9611	1.1558	1.4069	2.3763	2.5639	2.4918	2.4005	2.4009	2.5759
20.	*	2.7291	2.7908	2.8855	2.9760	2.9469	2.1440	1.9777	1.0530	1.3172	2.3497	2.5594	2.4825	2.4093	2.4106	2.6219
25.	*	2.7841	2.8735	2.9627	3.0133	2.9737	2.2547	1.9799	1.0120	1.3122	2.3698	2.6052	2.5121	2.4575	2.4611	2.6874
30.	*	2.8896	2.9878	3.0667	3.1058	3.0068	2.3155	1.9301	0.9857	1.3004	2.4104	2.6848	2.5800	2.5446	2.5516	2.7712
35.	*	3.0130	3.1120	3.1871	3.2308	3.0526	2.3662	1.8662	0.9840	1.3091	2.4587	2.7778	2.6646	2.6464	2.6566	2.8542
40.	*	3.1464	3.2417	3.3246	3.3818	3.1052	2.4073	1.8050	1.0020	1.3322	2.5175	2.8788	2.7616	2.7565	2.7683	2.9367
45.	*	3.3246	3.4031	3.4783	3.5832	3.2110	2.4443	1.7685	1.0499	1.3767	2.6267	3.0148	2.8959	2.8985	2.9097	3.0553
50.	*	3.5115	3.5846	3.6707	3.7861	3.2902	2.4441	1.7310	1.0829	1.4154	2.7143	3.1480	3.0401	3.0456	3.0545	3.1714
55.	*	3.7159	3.7933	3.8862	3.9892	3.3821	2.4726	1.7106	1.1155	1.4589	2.8072	3.2899	3.1977	3.2035	3.2099	3.3073
60.	*	3.9555	4.0388	4.1231	4.1996	3.4960	2.4994	1.6999	1.1478	1.5064	2.9181	3.4575	3.3847	3.3898	3.3943	3.4739
65.	*	4.2333	4.3169	4.3765	4.4165	3.6279	2.5283	1.6962	1.1737	1.5552	3.0399	3.6545	3.6016	3.6054	3.6082	3.6628
70.	*	4.5281	4.5983	4.6269	4.6281	3.7684	2.5532	1.6919	1.1698	1.5858	3.1540	3.8619	3.8254	3.8248	3.8245	3.8348
75.	*	4.8426	4.8751	4.8827	4.8472	3.9188	2.5370	1.6274	1.1036	1.5678	3.2589	4.0885	4.0628	4.0564	4.0497	3.9630
80.	*	4.8733	4.8768	4.8605	4.8164	3.8700	2.4043	1.4803	0.9418	1.4221	3.1479	4.0544	4.0328	4.0187	4.0038	3.8113
85.	*	4.5832	4.5658	4.5388	4.5105	3.5980	2.1512	1.2663	0.7119	1.1567	2.8129	3.7412	3.7204	3.6999	3.6784	3.4114
90.	*	3.9283	3.9104	3.8900	3.8981	3.0928	1.8141	1.0320	0.4704	0.8200	2.2532	3.1266	3.1090	3.0876	3.0658	2.7965
95.	*	2.9999	3.0025	3.0082	3.0603	2.4439	1.4640	0.8241	0.2789	0.5022	1.5797	2.3158	2.3024	2.2864	2.2698	2.0801
100.	*	2.0603	2.0981	2.1361	2.2390	1.8385	1.1932	0.6919	0.1670	0.2782	0.9559	1.5157	1.5094	1.5018	1.4941	1.4223
105.	*	1.3090	1.3825	1.4515	1.6048	1.4124	1.0282	0.6330	0.1234	0.1647	0.5105	0.8912	0.8907	0.8902	0.8900	0.9297
110.	*	0.8512	0.9474	1.0392	1.2392	1.2126	0.9462	0.6215	0.1152	0.1289	0.2871	0.5276	0.5303	0.5339	0.5369	0.6515
115.	*	0.5809	0.7109	0.8332	1.0555	1.1249	0.8903	0.6184	0.1151	0.1225	0.1834	0.3300	0.3356	0.3423	0.3483	0.4972
120.	*	0.4303	0.5693	0.7142	0.9713	1.1080	0.8513	0.6258	0.1089	0.1172	0.1409	0.2299	0.2378	0.2470	0.2555	0.4218
125.	*	0.3453	0.4783	0.6399	0.9345	1.1100	0.8109	0.6290	0.0961	0.1062	0.1202	0.1767	0.1865	0.1989	0.2111	0.3917
130.	*	0.2951	0.4128	0.5798	0.9142	1.1133	0.7692	0.6292	0.0805	0.0905	0.1027	0.1416	0.1514	0.1663	0.1822	0.3839
135.	*	0.2635	0.3751	0.5311	0.9105	1.1450	0.7425	0.6427	0.0683	0.0760	0.0867	0.1171	0.1238	0.1383	0.1546	0.3909
140.	*	0.2250	0.3314	0.4744	0.8751	1.1572	0.7311	0.6649	0.0595	0.0640	0.0706	0.0865	0.0909	0.1029	0.1180	0.3866
145.	*	0.1861	0.2951	0.4259	0.8324	1.1653	0.7343	0.6928	0.0607	0.0628	0.0664	0.0648	0.0647	0.0724	0.0835	0.3812
150.	*	0.1446	0.2585	0.3814	0.7835	1.1702	0.7517	0.7250	0.0720	0.0735	0.0772	0.0532	0.0462	0.0498	0.0559	0.3691
155.	*	0.1011	0.2144	0.3340	0.7222	1.1624	0.7761	0.7543	0.0965	0.0995	0.1088	0.0518	0.0322	0.0333	0.0357	0.3416
160.	*	0.0603	0.1610	0.2786	0.6454	1.1294	0.7927	0.7674	0.1409	0.1477	0.1715	0.0652	0.0203	0.0200	0.0206	0.2921
165.	*	0.0271	0.1021	0.2124	0.5550	1.0726	0.8000	0.7634	0.2120	0.2253	0.2752	0.0994	0.0110	0.0087	0.0088	0.2192
170.	*	0.0072	0.0557	0.1468	0.4484	0.9562	0.7447	0.7000	0.3228	0.3463	0.4454	0.1819	0.0098	0.0016	0.0014	0.1419
175.	*	0.0014	0.0275	0.0930	0.3399	0.7996	0.6465	0.5992	0.4628	0.4978	0.6670	0.3134	0.0229	0.0013	0.0000	0.0785
180.	*	0.0003	0.0116	0.0514	0.2337	0.6194	0.5167	0.4742	0.6126	0.6566	0.9127	0.4838	0.0502	0.0050	0.0003	0.0354

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185.	*	0.0000	0.0038	0.0236	0.1413	0.4372	0.3758	0.3422	0.7258	0.7790	1.1294	0.6725	0.0913	0.0138	0.0015	0.0123
190.	*	0.0022	0.0031	0.0109	0.0757	0.2812	0.2485	0.2263	0.8004	0.8640	1.3042	0.8496	0.1443	0.0320	0.0065	0.0045
195.	*	0.0140	0.0141	0.0164	0.0458	0.1651	0.1501	0.1379	0.8358	0.9145	1.4253	0.9951	0.2064	0.0650	0.0221	0.0091
200.	*	0.0319	0.0320	0.0326	0.0453	0.0972	0.0910	0.0848	0.8176	0.9152	1.4641	1.0826	0.2685	0.1107	0.0485	0.0197
205.	*	0.0508	0.0508	0.0509	0.0550	0.0563	0.0541	0.0516	0.7921	0.9168	1.4728	1.1326	0.3209	0.1558	0.0824	0.0312

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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
210.	*	0.0685	0.0685	0.0685	0.0695	0.0352	0.0345	0.0337	0.7572	0.9145	1.4497	1.1476	0.3661	0.1947	0.1190	0.0421
215.	*	0.0849	0.0849	0.0849	0.0850	0.0253	0.0251	0.0249	0.7208	0.9161	1.4100	1.1412	0.4068	0.2255	0.1535	0.0523
220.	*	0.1013	0.1013	0.1013	0.1013	0.0214	0.0211	0.0211	0.6841	0.9229	1.3610	1.1240	0.4467	0.2515	0.1835	0.0632
225.	*	0.1182	0.1182	0.1182	0.1182	0.0212	0.0200	0.0200	0.6467	0.9337	1.3025	1.0970	0.4866	0.2775	0.2091	0.0761
230.	*	0.1260	0.1260	0.1260	0.1260	0.0184	0.0167	0.0167	0.6144	0.9475	1.2371	1.0331	0.5140	0.2942	0.2246	0.0841
235.	*	0.1499	0.1500	0.1500	0.1501	0.0197	0.0138	0.0138	0.5886	0.9656	1.1993	1.0068	0.5469	0.3312	0.2511	0.1067
240.	*	0.2052	0.2057	0.2060	0.2063	0.0340	0.0115	0.0112	0.5631	0.9837	1.1691	1.0068	0.5964	0.3947	0.3064	0.1574
245.	*	0.3251	0.3277	0.3289	0.3300	0.0837	0.0112	0.0088	0.5425	1.0054	1.1719	1.0677	0.6961	0.5116	0.4208	0.2667
250.	*	0.5611	0.5697	0.5734	0.5768	0.2107	0.0200	0.0088	0.5397	1.0469	1.2670	1.2543	0.8856	0.7236	0.6417	0.4886
255.	*	0.9710	0.9923	1.0015	1.0098	0.4637	0.0558	0.0189	0.5508	1.1146	1.4855	1.6169	1.2676	1.1124	1.0331	0.8906
260.	*	1.6428	1.6852	1.7035	1.7203	0.9486	0.1631	0.0611	0.6076	1.2629	1.9455	2.2428	1.8996	1.7511	1.6803	1.5718
265.	*	2.4875	2.5541	2.5830	2.6095	1.6136	0.3703	0.1591	0.7310	1.5144	2.5888	3.0368	2.6863	2.5484	2.4906	2.4320
270.	*	3.3452	3.4297	3.4660	3.4983	2.3274	0.6638	0.3187	0.9184	1.8428	3.2654	3.8174	3.4556	3.3322	3.2888	3.2714
275.	*	3.9920	4.0791	4.1163	4.1503	2.9371	0.9848	0.5196	1.1093	2.1489	3.7685	4.3761	4.0051	3.9004	3.8661	3.8614
280.	*	4.3489	4.4223	4.4531	4.4807	3.3238	1.2601	0.7243	1.2997	2.4000	4.0216	4.6181	4.2513	4.1696	4.1369	4.1099
285.	*	4.4288	4.4792	4.4996	4.5177	3.4767	1.4460	0.9001	1.4627	2.5675	4.0394	4.5817	4.2318	4.1776	4.1381	4.0737
290.	*	4.2108	4.2384	4.2490	4.2579	3.3757	1.5186	1.0198	1.5737	2.6363	3.8250	4.2929	3.9684	3.9540	3.8950	3.7903
295.	*	3.9958	4.0080	4.0126	4.0165	3.2489	1.5270	1.0772	1.6261	2.6567	3.6218	4.0388	3.7388	3.7462	3.6641	3.5436
300.	*	3.7664	3.7707	3.7723	3.7736	3.0935	1.4956	1.0869	1.6527	2.6530	3.4237	3.8009	3.5289	3.5362	3.4348	3.3163
305.	*	3.5600	3.5611	3.5616	3.5614	2.9446	1.4513	1.0705	1.6679	2.6390	3.2578	3.6005	3.3646	3.3490	3.2344	3.1277
310.	*	3.3828	3.3830	3.3831	3.3820	2.8195	1.4071	1.0455	1.6858	2.6176	3.1338	3.4405	3.2405	3.1827	3.0646	2.9747
315.	*	3.2219	3.2220	3.2220	3.2202	2.7082	1.3700	1.0213	1.7206	2.6243	3.0409	3.3068	3.1366	3.0233	2.9109	2.8404
320.	*	3.0670	3.0670	3.0670	3.0702	2.5838	1.3240	0.9818	1.7606	2.6144	2.9473	3.1964	3.0405	2.8587	2.7571	2.7104
325.	*	2.9592	2.9593	2.9593	2.9636	2.5286	1.3016	0.9695	1.8339	2.6146	2.9189	3.1224	2.9385	2.7354	2.6521	2.6215
330.	*	2.8539	2.8540	2.8540	2.8613	2.4797	1.2877	0.9675	1.9183	2.6059	2.8981	3.0535	2.8291	2.6125	2.5512	2.5327
335.	*	2.7632	2.7632	2.7633	2.7773	2.4348	1.2893	0.9802	2.0042	2.5836	2.8768	2.9907	2.7219	2.5032	2.4629	2.4532
340.	*	2.7203	2.7204	2.7211	2.7481	2.4169	1.2719	0.9998	2.0585	2.4986	2.8591	2.9470	2.6359	2.4347	2.4159	2.4127

March 6, 2017

Memorandum to Carol Parr, Monica Pavlik

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345.	*	2.7109	2.7111	2.7136	2.7626	2.4490	1.3434	1.0659	2.1081	2.4319	2.8405	2.9102	2.5907	2.4096	2.4014	2.4010
350.	*	2.7414	2.7422	2.7500	2.8331	2.5179	1.4488	1.1898	2.0673	2.3037	2.8046	2.8760	2.5969	2.4290	2.4259	2.4296
355.	*	2.7975	2.7998	2.8184	2.9408	2.6171	1.5771	1.3581	1.9561	2.1349	2.7521	2.8428	2.6256	2.4722	2.4709	2.4850
-----*																
MAX	*	4.8733	4.8768	4.8827	4.8472	3.9188	2.5532	1.9799	2.1081	2.6567	4.0394	4.6181	4.2513	4.1776	4.1381	4.1099
DEGR.	*	80	80	75	75	75	70	25	345	295	285	280	280	285	285	280

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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-355.

WIND * CONCENTRATION

ANGLE * (DEGR)*	*	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
0.	*	2.6437	2.7906	3.1256	3.5443	2.7789	2.5989	2.5431	2.6482	3.0209	3.4721	2.5593	2.4344	2.2969	0.0219	0.0927
5.	*	2.6873	2.8648	3.2007	3.6946	2.9696	2.8137	2.1280	2.2622	2.7085	3.1536	2.4262	2.3440	2.2321	0.0074	0.0439
10.	*	2.7151	2.8967	3.2095	3.7263	3.0239	2.8803	1.7049	1.8762	2.4035	2.8408	2.3192	2.2704	2.1774	0.0050	0.0194
15.	*	2.7391	2.8978	3.1863	3.6878	2.9811	2.8420	1.3580	1.5595	2.1704	2.6134	2.2632	2.2313	2.1514	0.0184	0.0226
20.	*	2.7653	2.8795	3.1461	3.6116	2.8574	2.7014	1.1389	1.3476	2.0298	2.4995	2.2567	2.2262	2.1573	0.0393	0.0403
25.	*	2.8190	2.8843	3.1699	3.5715	2.8117	2.6195	1.0360	1.2810	1.9802	2.4740	2.2869	2.2463	2.1893	0.0605	0.0607
30.	*	2.8797	2.9096	3.2502	3.5516	2.7384	2.5167	0.9650	1.2329	1.9685	2.5097	2.3487	2.2962	2.2511	0.0800	0.0800
35.	*	2.9405	2.9595	3.3644	3.5383	2.6785	2.4267	0.9297	1.2168	1.9807	2.5729	2.4251	2.3597	2.3263	0.0975	0.0975
40.	*	3.0026	3.0359	3.4968	3.5201	2.6176	2.3423	0.9176	1.2151	2.0087	2.6462	2.5068	2.4304	2.4070	0.1142	0.1142
45.	*	3.0880	3.1394	3.6855	3.5357	2.5670	2.2712	0.9328	1.2405	2.0972	2.7655	2.6301	2.5487	2.5338	0.1299	0.1298
50.	*	3.1925	3.3008	3.8355	3.5270	2.5247	2.2010	0.9150	1.2418	2.1433	2.8788	2.7486	2.6664	2.6560	0.1376	0.1376
55.	*	3.3406	3.4913	3.9632	3.5169	2.4762	2.1227	0.8787	1.2361	2.1914	2.9964	2.8709	2.7914	2.7792	0.1586	0.1590
60.	*	3.5282	3.6969	4.0700	3.5125	2.4075	2.0151	0.8103	1.2095	2.2393	3.1241	3.0036	2.9269	2.9031	0.2026	0.2047
65.	*	3.7336	3.8877	4.1410	3.5017	2.3168	1.8796	0.6991	1.1436	2.2614	3.2546	3.1389	3.0604	3.0124	0.2902	0.2981
70.	*	3.8974	4.0107	4.1514	3.4639	2.1976	1.7394	0.5472	1.0192	2.2251	3.3583	3.2462	3.1576	3.0740	0.4523	0.4755
75.	*	3.9891	4.0549	4.1001	3.3849	2.0366	1.5742	0.3669	0.8270	2.1185	3.4406	3.3225	3.2128	3.0887	0.7173	0.7705
80.	*	3.7968	3.8104	3.8349	3.1597	1.8576	1.4589	0.2140	0.5983	1.8495	3.2940	3.1738	3.0472	2.8939	1.1471	1.2498

85.	*	3.3643	3.3462	3.4027	2.8328	1.6930	1.4006	0.1080	0.3822	1.4814	2.9575	2.8379	2.7072	2.5462	1.7037	1.8678
90.	*	2.7469	2.7281	2.8426	2.4414	1.5609	1.3824	0.0456	0.2087	1.0604	2.4341	2.3308	2.2143	2.0699	2.3136	2.5333
95.	*	2.0556	2.0692	2.2398	1.9659	1.3792	1.2913	0.0152	0.0935	0.6590	1.7809	1.7031	1.6151	1.5068	2.8184	3.0794
100.	*	1.4415	1.5023	1.7247	1.5814	1.2545	1.2207	0.0074	0.0367	0.3502	1.1783	1.1269	1.0715	1.0033	3.1770	3.4498
105.	*	0.9877	1.0929	1.3735	1.3433	1.1955	1.1859	0.0208	0.0289	0.1701	0.7312	0.6873	0.6588	0.6235	3.3656	3.6263
110.	*	0.7247	0.8545	1.2051	1.2539	1.1921	1.1898	0.0433	0.0453	0.1045	0.4754	0.4213	0.4087	0.3938	3.3333	3.5700
115.	*	0.6117	0.7416	1.1194	1.2256	1.2056	1.2053	0.0663	0.0666	0.0859	0.3381	0.2675	0.2631	0.2581	3.2398	3.4523
120.	*	0.5530	0.6875	1.1095	1.2653	1.2604	1.2604	0.0871	0.0871	0.0919	0.2764	0.1878	0.1866	0.1853	3.1097	3.3068
125.	*	0.5311	0.6720	1.1226	1.3299	1.3290	1.3290	0.1057	0.1057	0.1065	0.2556	0.1495	0.1493	0.1491	2.9685	3.1593
130.	*	0.5251	0.6776	1.1415	1.3977	1.3976	1.3976	0.1230	0.1230	0.1231	0.2550	0.1319	0.1319	0.1318	2.8324	3.0224
135.	*	0.5363	0.7037	1.1896	1.4678	1.4678	1.4678	0.1392	0.1392	0.1392	0.2648	0.1257	0.1257	0.1257	2.6994	2.8890
140.	*	0.5379	0.7106	1.2271	1.5656	1.5656	1.5656	0.1461	0.1461	0.1461	0.2572	0.1111	0.1111	0.1111	2.5660	2.7544
145.	*	0.5424	0.7231	1.2701	1.6675	1.6673	1.6670	0.1657	0.1658	0.1659	0.2613	0.0954	0.0954	0.0954	2.4749	2.6600
150.	*	0.5453	0.7380	1.3255	1.7812	1.7805	1.7796	0.2073	0.2076	0.2080	0.2867	0.0789	0.0787	0.0786	2.3944	2.5747
155.	*	0.5396	0.7467	1.3838	1.9188	1.9168	1.9145	0.2904	0.2916	0.2927	0.3528	0.0617	0.0599	0.0598	2.3268	2.5023
160.	*	0.5135	0.7399	1.4250	2.0717	2.0673	2.0618	0.4429	0.4462	0.4491	0.4888	0.0474	0.0399	0.0391	2.3011	2.4743
165.	*	0.4586	0.7093	1.4547	2.2626	2.2531	2.2416	0.6915	0.6989	0.7053	0.7252	0.0440	0.0217	0.0186	2.2858	2.4632
170.	*	0.3660	0.6190	1.3679	2.3194	2.3034	2.2848	1.0672	1.0813	1.0936	1.1000	0.0768	0.0175	0.0059	2.3114	2.5085
175.	*	0.2578	0.4867	1.1913	2.2397	2.2188	2.1947	1.5123	1.5333	1.5517	1.5567	0.1625	0.0422	0.0108	2.3717	2.6089
180.	*	0.1544	0.3331	0.9379	1.9832	1.9634	1.9382	1.9383	1.9613	1.9853	1.9912	0.2904	0.0960	0.0319	2.4482	2.7414
185.	*	0.0755	0.1915	0.6518	1.5516	1.5333	1.5123	2.1947	2.2188	2.2398	2.2454	0.4338	0.1751	0.0722	2.4464	2.7945
190.	*	0.0305	0.0911	0.3883	1.0935	1.0813	1.0672	2.2848	2.3035	2.3194	2.3237	0.5632	0.2697	0.1347	2.4632	2.8458
195.	*	0.0170	0.0415	0.1992	0.7053	0.6989	0.6915	2.2416	2.2531	2.2627	2.2680	0.6614	0.3669	0.2178	2.5115	2.8991
200.	*	0.0219	0.0308	0.1077	0.4490	0.4462	0.4429	2.0618	2.0673	2.0717	2.0866	0.7063	0.4404	0.3005	2.5823	2.9471
205.	*	0.0316	0.0338	0.0635	0.2927	0.2915	0.2904	1.9145	1.9168	1.9188	1.9497	0.7256	0.4847	0.3597	2.6461	3.0055

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
210.	*	0.0422	0.0425	0.0516	0.2080	0.2076	0.2073	1.7796	1.7805	1.7813	1.8090	0.7281	0.5058	0.3960	2.7276	3.0703
215.	*	0.0522	0.0523	0.0543	0.1658	0.1658	0.1657	1.6670	1.6673	1.6676	1.6922	0.7231	0.5146	0.4155	2.8117	3.1446
220.	*	0.0629	0.0629	0.0632	0.1463	0.1461	0.1461	1.5656	1.5656	1.5658	1.6001	0.7179	0.5189	0.4265	2.9012	3.2281
225.	*	0.0751	0.0749	0.0749	0.1402	0.1393	0.1392	1.4678	1.4678	1.4680	1.5212	0.7155	0.5227	0.4343	3.0529	3.3811
230.	*	0.0818	0.0811	0.0806	0.1253	0.1234	0.1231	1.3977	1.3979	1.3990	1.4976	0.7003	0.5119	0.4306	3.2041	3.5325
235.	*	0.1024	0.1009	0.0997	0.1137	0.1074	0.1063	1.3296	1.3304	1.3357	1.5097	0.7093	0.5298	0.4447	3.3842	3.7058
240.	*	0.1511	0.1486	0.1466	0.1141	0.0926	0.0895	1.2624	1.2651	1.2853	1.5728	0.7622	0.5800	0.4901	3.6074	3.8981

245.	*	0.2591	0.2560	0.2532	0.1480	0.0820	0.0734	1.2117	1.2197	1.2840	1.7439	0.9013	0.6993	0.6032	3.8767	4.1101
250.	*	0.4812	0.4780	0.4750	0.2598	0.0873	0.0631	1.2084	1.2320	1.4027	2.1138	1.1754	0.9340	0.8430	4.1723	4.3113
255.	*	0.8852	0.8829	0.8810	0.5086	0.1368	0.0734	1.2371	1.3003	1.6707	2.7429	1.6944	1.4034	1.2834	4.5101	4.5648
260.	*	1.5716	1.5718	1.5722	1.0091	0.2958	0.1459	1.3579	1.5080	2.2215	3.6713	2.4704	2.1414	2.0018	4.6148	4.6108
265.	*	2.4385	2.4419	2.4453	1.7047	0.5938	0.3178	1.5917	1.8682	2.9820	4.7334	3.3646	3.0145	2.8717	4.4151	4.3737
270.	*	3.2850	3.2881	3.2941	2.4186	0.9729	0.5709	1.9015	2.3038	3.7529	5.6415	4.1327	3.7870	3.6605	3.8225	3.7726
275.	*	3.8723	3.8777	3.8830	2.9587	1.3188	0.8372	2.1141	2.5957	4.2258	6.0057	4.5068	4.1908	4.0939	2.8981	2.8730
280.	*	4.1163	4.1195	4.1228	3.2262	1.5382	1.0402	2.2561	2.7530	4.3986	5.9261	4.4777	4.2233	4.1647	1.9464	1.9552
285.	*	4.0748	4.0755	4.0764	3.2697	1.6241	1.1515	2.3177	2.7852	4.3359	5.5677	4.1879	4.0184	3.9967	1.1977	1.2353
290.	*	3.7875	3.7866	3.7859	3.1180	1.5979	1.1714	2.3176	2.7324	4.0890	5.0196	3.7630	3.6931	3.6848	0.7531	0.8033
295.	*	3.5410	3.5399	3.5389	2.9806	1.5489	1.1513	2.2890	2.6869	3.8861	4.6135	3.4515	3.4456	3.4380	0.5205	0.5877
300.	*	3.3147	3.3140	3.3130	2.8455	1.4979	1.1189	2.2905	2.6702	3.7178	4.2979	3.2226	3.2522	3.2369	0.4088	0.4829
305.	*	3.1269	3.1266	3.1253	2.7281	1.4565	1.0912	2.3123	2.6781	3.5889	4.0651	3.0631	3.1062	3.0748	0.3609	0.4397
310.	*	2.9744	2.9742	2.9720	2.6358	1.4245	1.0718	2.3427	2.6933	3.4949	3.8863	2.9512	2.9873	2.9373	0.3422	0.4248
315.	*	2.8403	2.8403	2.8370	2.5559	1.4016	1.0594	2.3866	2.7157	3.4156	3.7387	2.8751	2.8835	2.8122	0.3424	0.4288
320.	*	2.7105	2.7105	2.7159	2.4537	1.3655	1.0286	2.4437	2.7534	3.3421	3.6287	2.8224	2.7712	2.6789	0.3319	0.4224
325.	*	2.6215	2.6216	2.6299	2.4193	1.3569	1.0312	2.5203	2.8013	3.3169	3.5497	2.7741	2.6989	2.5876	0.3191	0.4160
330.	*	2.5328	2.5332	2.5498	2.3995	1.3705	1.0599	2.6053	2.8501	3.2913	3.4957	2.7307	2.6345	2.5026	0.3002	0.4076
335.	*	2.4537	2.4559	2.4919	2.4106	1.4253	1.1293	2.7039	2.9111	3.2755	3.4823	2.6956	2.5752	2.4217	0.2689	0.3916
340.	*	2.4151	2.4238	2.4968	2.4835	1.5094	1.2487	2.7911	2.9429	3.2898	3.5323	2.6712	2.5321	2.3678	0.2206	0.3597
345.	*	2.4093	2.4331	2.5672	2.6559	1.7377	1.4715	2.9148	3.0333	3.3210	3.6017	2.6510	2.4824	2.3041	0.1561	0.3063
350.	*	2.4551	2.5107	2.7298	2.9241	2.0627	1.8140	2.9174	3.0216	3.3038	3.6325	2.6326	2.4565	2.2769	0.0939	0.2331
355.	*	2.5424	2.6432	2.9392	3.2458	2.4349	2.2187	2.8044	2.9017	3.2155	3.6046	2.6039	2.4433	2.2799	0.0497	0.1592
-----*																
MAX	*	4.1163	4.1195	4.1514	3.7263	3.0239	2.8803	2.9174	3.0333	4.3986	6.0057	4.5068	4.2233	4.1647	4.6148	4.6108
DEGR.	*	280	280	70	10	10	10	350	345	280	275	275	280	280	260	260

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

REMARKS : In search of the angle corresponding to
 the maximum concentration, only the first
 angle, of the angles with same maximum
 concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-355.

WIND * CONCENTRATION

ANGLE * (DEGR) *	(PPM)	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
0. *	0.1934	0.4773	0.9004	0.8842	0.8677	1.1160	1.1322	1.1466	0.7068	0.1637	0.0555	0.0186	0.0000	0.0005	0.0072	
5. *	0.1074	0.3152	0.6632	0.6505	0.6363	1.3021	1.3191	1.3321	0.8866	0.2530	0.1047	0.0433	0.0000	0.0001	0.0028	
10. *	0.0512	0.1779	0.4294	0.4212	0.4119	1.3938	1.4071	1.4171	1.0031	0.3369	0.1651	0.0822	0.0013	0.0013	0.0022	
15. *	0.0347	0.0968	0.2447	0.2406	0.2358	1.3979	1.4063	1.4122	1.0516	0.4017	0.2278	0.1341	0.0085	0.0083	0.0085	
20. *	0.0444	0.0712	0.1345	0.1328	0.1308	1.3097	1.3137	1.3163	1.0237	0.4342	0.2775	0.1879	0.0198	0.0192	0.0191	
25. *	0.0616	0.0704	0.0728	0.0722	0.0716	1.2295	1.2312	1.2319	0.9906	0.4469	0.3069	0.2275	0.0337	0.0315	0.0309	
30. *	0.0801	0.0823	0.0444	0.0441	0.0439	1.1500	1.1505	1.1503	0.9491	0.4470	0.3205	0.2520	0.0510	0.0455	0.0439	
35. *	0.0975	0.0979	0.0338	0.0325	0.0325	1.0810	1.0812	1.0802	0.9105	0.4431	0.3255	0.2649	0.0730	0.0633	0.0600	
40. *	0.1142	0.1142	0.0321	0.0280	0.0280	1.0212	1.0212	1.0191	0.8723	0.4395	0.3280	0.2722	0.0994	0.0861	0.0809	
45. *	0.1298	0.1299	0.0354	0.0265	0.0265	0.9665	0.9665	0.9622	0.8343	0.4379	0.3306	0.2775	0.1268	0.1120	0.1057	
50. *	0.1377	0.1378	0.0317	0.0234	0.0234	0.9208	0.9209	0.9174	0.7944	0.4283	0.3247	0.2746	0.1463	0.1329	0.1266	
55. *	0.1594	0.1598	0.0320	0.0201	0.0201	0.8839	0.8839	0.8784	0.7769	0.4318	0.3325	0.2845	0.1690	0.1581	0.1529	
60. *	0.2063	0.2078	0.0424	0.0167	0.0166	0.8470	0.8471	0.8397	0.7674	0.4506	0.3584	0.3124	0.2067	0.1983	0.1941	
65. *	0.3034	0.3080	0.0775	0.0133	0.0126	0.8153	0.8161	0.8172	0.7826	0.5043	0.4221	0.3791	0.2852	0.2788	0.2755	
70. *	0.4892	0.5007	0.1654	0.0122	0.0084	0.7976	0.8021	0.8412	0.8661	0.6149	0.5521	0.5210	0.4466	0.4436	0.4421	
75. *	0.7993	0.8234	0.3316	0.0186	0.0049	0.7946	0.8109	0.9355	1.0440	0.8505	0.7979	0.7772	0.7485	0.7498	0.7506	
80. *	1.3046	1.3502	0.6603	0.0515	0.0064	0.8142	0.8667	1.1767	1.4107	1.2606	1.2264	1.2189	1.2721	1.2822	1.2871	
85. *	1.9541	2.0248	1.1340	0.1338	0.0216	0.8594	0.9866	1.5600	1.9367	1.8096	1.7965	1.8058	1.9604	1.9818	1.9919	
90. *	2.6489	2.7427	1.6988	0.2819	0.0616	0.9306	1.1735	2.0320	2.5358	2.4130	2.4136	2.4406	2.6819	2.7114	2.7241	
95. *	3.2109	3.3110	2.2569	0.4908	0.1391	1.0007	1.3782	2.4624	3.0537	2.9174	2.9271	2.9661	3.2387	3.2683	3.2820	
100. *	3.5810	3.6741	2.6917	0.7332	0.2603	1.1118	1.6053	2.7989	3.4039	3.2415	3.2564	3.3039	3.5405	3.5618	3.5719	
105. *	3.7422	3.8164	2.9399	0.9643	0.4157	1.2610	1.8165	2.9953	3.5513	3.3624	3.3909	3.4432	3.5934	3.6034	3.6093	
110. *	3.6606	3.7086	2.9525	1.1373	0.5854	1.4315	1.9735	3.0112	3.4635	3.2724	3.3320	3.3910	3.4158	3.4161	3.4204	
115. *	3.5176	3.5465	2.8820	1.2351	0.7183	1.5740	2.0791	2.9333	3.2933	3.1916	3.2611	3.2841	3.2424	3.2367	3.2426	
120. *	3.3531	3.3690	2.7611	1.2758	0.8072	1.6781	2.1314	2.8307	3.1225	3.1027	3.1624	3.1594	3.0676	3.0581	3.0708	
125. *	3.1903	3.1977	2.6330	1.2793	0.8547	1.7457	2.1533	2.7228	2.9769	3.0376	3.0659	3.0383	2.9121	2.8983	2.9220	
130. *	3.0419	3.0441	2.5218	1.2636	0.8729	1.7864	2.1554	2.6419	2.8836	2.9932	2.9777	2.9315	2.7758	2.7572	2.7957	
135. *	2.9003	2.8995	2.4203	1.2425	0.8751	1.8268	2.1420	2.6100	2.8680	2.9570	2.9010	2.8368	2.6457	2.6244	2.6814	
140. *	2.7604	2.7630	2.3137	1.2071	0.8530	1.8528	2.1334	2.5833	2.8375	2.9176	2.7897	2.7209	2.4987	2.4775	2.5554	
145. *	2.6606	2.6658	2.2585	1.1874	0.8509	1.8994	2.1408	2.6420	2.8962	2.8776	2.7275	2.6511	2.3948	2.3781	2.4787	
150. *	2.5757	2.5866	2.2330	1.1844	0.8614	1.9610	2.1757	2.7518	3.0007	2.8395	2.6754	2.5877	2.3094	2.2995	2.4181	
155. *	2.5052	2.5326	2.2378	1.2098	0.8931	2.0421	2.2466	2.9017	3.1171	2.8053	2.6253	2.5224	2.2452	2.2417	2.3739	
160. *	2.4835	2.5481	2.3101	1.2483	0.9380	2.1106	2.3160	3.0762	3.2377	2.7652	2.5651	2.4475	2.2018	2.2035	2.3453	
165. *	2.4891	2.6199	2.4698	1.4083	1.0790	2.2395	2.4837	3.2833	3.3457	2.7385	2.5187	2.3944	2.2054	2.2123	2.3609	
170. *	2.5678	2.8138	2.7502	1.6496	1.3108	2.2900	2.5538	3.3592	3.3450	2.6778	2.4580	2.3458	2.2215	2.2399	2.4021	
175. *	2.7200	3.1024	3.0864	1.9172	1.5842	2.2373	2.5092	3.3051	3.2503	2.5925	2.3995	2.3143	2.2472	2.2872	2.4715	
180. *	2.9113	3.4142	3.3885	2.1448	1.8311	2.0541	2.3304	3.1123	3.0665	2.4962	2.3532	2.3008	2.2738	2.3478	2.5620	
185. *	3.0094	3.5854	3.5575	2.2648	1.9779	1.7605	2.0453	2.8114	2.7951	2.3671	2.2813	2.2564	2.2547	2.3725	2.6186	
190. *	3.0782	3.6633	3.5603	2.2654	2.0184	1.4507	1.7405	2.5035	2.5410	2.2727	2.2325	2.2237	2.2412	2.4100	2.6806	

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195.	*	3.1244	3.6589	3.4204	2.1835	1.9862	1.1993	1.4849	2.2596	2.3591	2.2215	2.2075	2.2053	2.2446	2.4667	2.7471
200.	*	3.1501	3.5654	3.1393	2.0616	1.9133	1.0508	1.3243	2.1238	2.2767	2.2104	2.2062	2.2057	2.2731	2.5498	2.8192
205.	*	3.2037	3.4847	2.9227	2.0439	1.8695	0.9798	1.2895	2.0846	2.2662	2.2386	2.2377	2.2377	2.3370	2.6553	2.8951

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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
210.	*	3.2775	3.4212	2.7396	2.0248	1.8269	0.9433	1.2640	2.0824	2.3016	2.2894	2.2893	2.2894	2.4186	2.7549	2.9573
215.	*	3.3691	3.3690	2.6078	2.0303	1.7974	0.9344	1.2666	2.1076	2.3612	2.3538	2.3539	2.3543	2.5107	2.8509	3.0085
220.	*	3.4671	3.3329	2.5316	2.0494	1.7810	0.9439	1.2837	2.1508	2.4319	2.4295	2.4300	2.4311	2.6126	2.9431	3.0504
225.	*	3.5707	3.3580	2.5500	2.0886	1.7860	0.9803	1.3277	2.2492	2.5515	2.5570	2.5585	2.5611	2.7689	3.0731	3.0958
230.	*	3.6768	3.3598	2.5877	2.1089	1.7736	1.0081	1.3646	2.3301	2.6667	2.6733	2.6764	2.6811	2.9059	3.1760	3.1446
235.	*	3.7858	3.4102	2.6881	2.1504	1.7942	1.0458	1.4143	2.4270	2.8011	2.8091	2.8140	2.8203	3.0625	3.2827	3.2154
240.	*	3.9046	3.5026	2.8495	2.2042	1.8278	1.0931	1.4763	2.5503	2.9676	2.9766	2.9830	2.9904	3.2430	3.4009	3.3080
245.	*	4.0479	3.6508	3.0613	2.2717	1.8702	1.1434	1.5489	2.6928	3.1674	3.1765	3.1834	3.1915	3.4366	3.5268	3.4215
250.	*	4.2117	3.8767	3.3260	2.3387	1.9048	1.1776	1.6177	2.8404	3.3905	3.3978	3.4037	3.4115	3.6138	3.6304	3.5309
255.	*	4.4415	4.1633	3.6039	2.3889	1.9016	1.1627	1.6565	2.9890	3.6429	3.6459	3.6482	3.6513	3.7689	3.7301	3.6425
260.	*	4.4839	4.2966	3.6900	2.3164	1.7967	1.0444	1.5692	2.9454	3.6814	3.6785	3.6753	3.6725	3.6869	3.6111	3.5250
265.	*	4.2663	4.1848	3.5207	2.0918	1.5862	0.8233	1.3311	2.6701	3.4496	3.4415	3.4330	3.4246	3.3484	3.2573	3.1823
270.	*	3.7063	3.7219	3.0461	1.7351	1.3135	0.5425	0.9641	2.1402	2.8939	2.8857	2.8731	2.8647	2.7486	2.6685	2.6163
275.	*	2.8539	2.9359	2.3496	1.3294	1.0434	0.2845	0.5697	1.4671	2.1060	2.0979	2.0895	2.0809	1.9886	1.9405	1.9193
280.	*	1.9797	2.1012	1.6466	1.0137	0.8625	0.1148	0.2653	0.8354	1.3224	1.3183	1.3141	1.3100	1.2764	1.2669	1.2761
285.	*	1.2879	1.4299	1.1176	0.8368	0.7771	0.0394	0.0989	0.3914	0.7248	0.7239	0.7232	0.7228	0.7476	0.7699	0.8030
290.	*	0.8646	1.0179	0.8347	0.7716	0.7523	0.0221	0.0415	0.1736	0.3850	0.3856	0.3863	0.3869	0.4474	0.4883	0.5363
295.	*	0.6542	0.8026	0.7075	0.7590	0.7545	0.0236	0.0282	0.0765	0.2068	0.2074	0.2082	0.2090	0.2822	0.3386	0.3985
300.	*	0.5537	0.7066	0.6799	0.7715	0.7708	0.0301	0.0309	0.0454	0.1249	0.1253	0.1257	0.1263	0.1984	0.2618	0.3289
305.	*	0.5164	0.6769	0.6966	0.7925	0.7924	0.0370	0.0371	0.0408	0.0900	0.0901	0.0903	0.0906	0.1539	0.2214	0.2926
310.	*	0.5082	0.6809	0.7319	0.8176	0.8176	0.0440	0.0440	0.0451	0.0756	0.0756	0.0756	0.0757	0.1264	0.1968	0.2698
315.	*	0.5198	0.7176	0.7904	0.8631	0.8631	0.0510	0.0510	0.0517	0.0714	0.0709	0.0709	0.0709	0.1068	0.1790	0.2565
320.	*	0.5178	0.7393	0.8488	0.9028	0.9027	0.0544	0.0544	0.0545	0.0615	0.0608	0.0607	0.0608	0.0843	0.1515	0.2309
325.	*	0.5167	0.7578	0.9096	0.9468	0.9466	0.0642	0.0642	0.0643	0.0530	0.0506	0.0506	0.0506	0.0643	0.1223	0.2019
330.	*	0.5152	0.7779	0.9755	0.9993	0.9987	0.0860	0.0861	0.0863	0.0493	0.0408	0.0407	0.0407	0.0476	0.0931	0.1690
335.	*	0.5089	0.7941	1.0453	1.0585	1.0568	0.1313	0.1320	0.1325	0.0573	0.0309	0.0302	0.0301	0.0330	0.0651	0.1324
340.	*	0.4898	0.7990	1.1123	1.1167	1.1126	0.2177	0.2197	0.2213	0.0903	0.0226	0.0193	0.0190	0.0199	0.0397	0.0943
345.	*	0.4516	0.7913	1.1797	1.1753	1.1668	0.3611	0.3660	0.3696	0.1612	0.0208	0.0101	0.0085	0.0086	0.0189	0.0577
350.	*	0.3800	0.7300	1.1682	1.1572	1.1437	0.5836	0.5930	0.6002	0.3029	0.0392	0.0089	0.0028	0.0014	0.0061	0.0309

355.	*	0.2908	0.6247	1.0767	1.0616	1.0445	0.8519	0.8662	0.8772	0.4980	0.0880	0.0235	0.0061	0.0000	0.0018	0.0157
-----*																
MAX	*	4.4839	4.2966	3.6900	2.3889	2.0184	2.2900	2.5538	3.3592	3.6814	3.6785	3.6753	3.6725	3.7689	3.7301	3.6425
DEGR.	*	260	260	260	255	190	170	170	170	260	260	260	260	255	255	255

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

REMARKS : In search of the angle corresponding to
 the maximum concentration, only the first
 angle, of the angles with same maximum
 concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-355.

WIND * CONCENTRATION
 ANGLE * (PPM)

(DEGR)*		46	47	48	49	50	51	52	53	54	55	56
0.	*	0.0839	0.1305	0.1159	0.0892	0.3120	0.3957	0.4255	0.2154	0.0043	0.0000	0.0000
5.	*	0.0497	0.0886	0.0797	0.0641	0.3916	0.4888	0.5221	0.3000	0.0109	0.0003	0.0000
10.	*	0.0279	0.0566	0.0519	0.0437	0.4620	0.5629	0.5975	0.3835	0.0243	0.0024	0.0013
15.	*	0.0211	0.0347	0.0326	0.0287	0.5192	0.6133	0.6480	0.4593	0.0498	0.0115	0.0085
20.	*	0.0253	0.0220	0.0211	0.0194	0.5537	0.6287	0.6635	0.5120	0.0864	0.0270	0.0197
25.	*	0.0334	0.0147	0.0143	0.0136	0.5740	0.6295	0.6706	0.5499	0.1254	0.0467	0.0325
30.	*	0.0440	0.0119	0.0114	0.0108	0.5799	0.6171	0.6695	0.5719	0.1633	0.0701	0.0466
35.	*	0.0580	0.0136	0.0127	0.0113	0.5758	0.5986	0.6676	0.5836	0.1982	0.0973	0.0636
40.	*	0.0770	0.0206	0.0190	0.0161	0.5669	0.5811	0.6701	0.5896	0.2308	0.1287	0.0857
45.	*	0.1005	0.0326	0.0304	0.0259	0.5564	0.5670	0.6772	0.5906	0.2629	0.1638	0.1140
50.	*	0.1208	0.0476	0.0449	0.0395	0.5401	0.5523	0.6826	0.5781	0.2866	0.1961	0.1440
55.	*	0.1478	0.0607	0.0580	0.0531	0.5382	0.5534	0.6981	0.5687	0.3208	0.2344	0.1845
60.	*	0.1901	0.0730	0.0685	0.0641	0.5367	0.5580	0.7124	0.5682	0.3685	0.2875	0.2416
65.	*	0.2725	0.0935	0.0801	0.0722	0.5361	0.5711	0.7347	0.6056	0.4521	0.3775	0.3356
70.	*	0.4406	0.1479	0.1077	0.0829	0.5465	0.6127	0.7950	0.7270	0.6137	0.5476	0.5110
75.	*	0.7514	0.2760	0.1816	0.1132	0.5791	0.7070	0.9283	1.0120	0.9221	0.8596	0.8253
80.	*	1.2922	0.5584	0.3648	0.2032	0.6749	0.9172	1.2154	1.5328	1.4546	1.3967	1.3649
85.	*	2.0031	0.9950	0.6785	0.3851	0.8661	1.2627	1.6554	2.2320	2.1545	2.0991	2.0712
90.	*	2.7411	1.5104	1.0824	0.6564	1.1481	1.6989	2.1698	2.9647	2.8742	2.8177	2.7953

95.	*	3.3059	1.9755	1.4782	0.9614	1.4513	2.1104	2.6113	3.5241	3.4044	3.3435	3.3283
100.	*	3.6028	2.2782	1.7625	1.2177	1.7022	2.4056	2.8848	3.8188	3.6542	3.5950	3.5890
105.	*	3.6507	2.3973	1.8967	1.3711	1.8488	2.5495	2.9708	3.8642	3.6511	3.6063	3.6103
110.	*	3.4763	2.3512	1.8865	1.4088	1.8829	2.5519	2.8888	3.6908	3.4404	3.4291	3.4425
115.	*	3.3156	2.2841	1.8402	1.3935	1.8715	2.5180	2.7779	3.5087	3.2649	3.2799	3.2752
120.	*	3.1563	2.2062	1.7778	1.3500	1.8462	2.4683	2.6579	3.3278	3.1054	3.1303	3.1036
125.	*	3.0127	2.1314	1.7170	1.3021	1.8258	2.4138	2.5398	3.1601	2.9811	2.9929	2.9417
130.	*	2.8836	2.0641	1.6607	1.2549	1.8124	2.3548	2.4332	3.0148	2.8834	2.8617	2.7934
135.	*	2.7598	2.0008	1.6097	1.2098	1.8178	2.3040	2.3529	2.9061	2.7999	2.7359	2.6577
140.	*	2.6229	1.9081	1.5443	1.1548	1.8122	2.2312	2.2622	2.7986	2.7245	2.5926	2.5109
145.	*	2.5304	1.8686	1.5088	1.1319	1.8379	2.1868	2.2454	2.7600	2.6427	2.4896	2.4132
150.	*	2.4670	1.8513	1.4921	1.1240	1.8769	2.1680	2.2671	2.7479	2.5538	2.3950	2.3226
155.	*	2.4337	1.8603	1.5020	1.1341	1.9211	2.1690	2.3122	2.7498	2.4652	2.3111	2.2437
160.	*	2.4398	1.8735	1.5063	1.1350	1.9250	2.1391	2.3326	2.7424	2.3743	2.2272	2.1692
165.	*	2.5154	1.9709	1.6020	1.2075	1.9616	2.1643	2.3857	2.7410	2.3178	2.2012	2.1612
170.	*	2.6629	2.1039	1.7282	1.3150	1.9266	2.1247	2.3599	2.6878	2.2833	2.1965	2.1722
175.	*	2.8483	2.2431	1.8562	1.4323	1.8276	2.0257	2.2698	2.6050	2.2669	2.2089	2.1965
180.	*	3.0295	2.3599	1.9591	1.5290	1.6708	1.8822	2.1352	2.5079	2.2603	2.2264	2.2212
185.	*	3.1195	2.4222	2.0079	1.5769	1.4797	1.7196	1.9844	2.3711	2.2124	2.1957	2.1941
190.	*	3.1399	2.4126	1.9894	1.5734	1.3035	1.5750	1.8536	2.2585	2.1713	2.1648	2.1644
195.	*	3.0933	2.3349	1.9115	1.5356	1.1725	1.4634	1.7558	2.1849	2.1447	2.1429	2.1427
200.	*	2.9776	2.1939	1.7940	1.4802	1.1016	1.3944	1.6989	2.1577	2.1391	2.1387	2.1384
205.	*	2.9007	2.1221	1.7572	1.4846	1.1027	1.4117	1.7164	2.1898	2.1825	2.1825	2.1825

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	46	47	48	49	50	51	52	53	54	55	56
210.	*	2.8410	2.0479	1.7161	1.4754	1.0978	1.4123	1.7223	2.2390	2.2359	2.2360	2.2359
215.	*	2.8151	2.0066	1.7142	1.4771	1.1058	1.4297	1.7406	2.3041	2.3025	2.3026	2.3025
220.	*	2.8235	1.9984	1.7471	1.4840	1.1212	1.4607	1.7727	2.3786	2.3776	2.3775	2.3774
225.	*	2.8952	2.0571	1.8226	1.5127	1.1629	1.5198	1.8557	2.4923	2.4925	2.4925	2.4923
230.	*	2.9667	2.1068	1.8941	1.5208	1.1936	1.5628	1.9105	2.6015	2.6015	2.6014	2.6008
235.	*	3.0604	2.1751	1.9736	1.5437	1.2273	1.6144	1.9757	2.7255	2.7247	2.7237	2.7218
240.	*	3.1743	2.2634	2.0550	1.5662	1.2562	1.6690	2.0510	2.8701	2.8671	2.8635	2.8581
245.	*	3.3005	2.3584	2.1232	1.5745	1.2646	1.7126	2.1219	3.0292	3.0215	3.0115	2.9979
250.	*	3.4244	2.4408	2.1527	1.5367	1.2280	1.7208	2.1642	3.1784	3.1617	3.1400	3.1123

255.	*	3.5262	2.4753	2.1160	1.4461	1.1225	1.6647	2.1523	3.3078	3.2760	3.2374	3.1895
260.	*	3.4232	2.3500	1.9382	1.2685	0.9364	1.4793	1.9793	3.2116	3.1658	3.1119	3.0473
265.	*	3.1083	2.0667	1.6368	1.0291	0.6968	1.1843	1.6553	2.8914	2.8384	2.7773	2.7059
270.	*	2.5770	1.6536	1.2556	0.7699	0.4452	0.8241	1.2163	2.3522	2.3022	2.2461	2.1814
275.	*	1.9158	1.2057	0.8778	0.5438	0.2321	0.4775	0.7569	1.6781	1.6409	1.5989	1.5510
280.	*	1.3039	0.8353	0.5893	0.3940	0.0943	0.2220	0.3870	1.0541	1.0318	1.0067	0.9782
285.	*	0.8588	0.6006	0.4199	0.3209	0.0301	0.0812	0.1593	0.5921	0.5818	0.5700	0.5565
290.	*	0.6199	0.4945	0.3476	0.2977	0.0123	0.0301	0.0629	0.3314	0.3273	0.3228	0.3176
295.	*	0.5118	0.4502	0.3243	0.3000	0.0096	0.0139	0.0243	0.1888	0.1875	0.1862	0.1846
300.	*	0.4702	0.4277	0.3157	0.3009	0.0115	0.0122	0.0148	0.1205	0.1201	0.1199	0.1195
305.	*	0.4607	0.4134	0.3155	0.3013	0.0141	0.0142	0.0146	0.0895	0.0894	0.0894	0.0893
310.	*	0.4600	0.4014	0.3195	0.2992	0.0166	0.0167	0.0167	0.0759	0.0758	0.0758	0.0758
315.	*	0.4626	0.3970	0.3314	0.2979	0.0191	0.0191	0.0191	0.0715	0.0713	0.0713	0.0713
320.	*	0.4470	0.3866	0.3351	0.2873	0.0203	0.0204	0.0205	0.0614	0.0611	0.0611	0.0611
325.	*	0.4225	0.3746	0.3335	0.2712	0.0234	0.0239	0.0242	0.0517	0.0509	0.0510	0.0509
330.	*	0.3903	0.3593	0.3246	0.2505	0.0297	0.0316	0.0325	0.0434	0.0409	0.0409	0.0409
335.	*	0.3491	0.3380	0.3062	0.2262	0.0418	0.0474	0.0497	0.0378	0.0303	0.0303	0.0303
340.	*	0.2985	0.3086	0.2780	0.1995	0.0633	0.0766	0.0817	0.0382	0.0191	0.0191	0.0191
345.	*	0.2404	0.2706	0.2407	0.1720	0.0977	0.1229	0.1324	0.0482	0.0084	0.0083	0.0083
350.	*	0.1811	0.2249	0.1986	0.1432	0.1532	0.1966	0.2126	0.0819	0.0016	0.0013	0.0013
355.	*	0.1286	0.1766	0.1559	0.1154	0.2268	0.2911	0.3143	0.1401	0.0014	0.0000	0.0000
-----*												
MAX	*	3.6507	2.4753	2.1527	1.5769	1.9616	2.5519	2.9708	3.8642	3.6542	3.6063	3.6103
DEGR.	*	105	255	250	185	165	110	105	105	100	105	105

THE HIGHEST CONCENTRATION OF 6.0057 PPM OCCURRED AT RECEPTOR 25.

PAGE 12

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
 THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	* CO/LINK (PPM)														
	* ANGLE (DEGREES)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINK #	* 80	80	75	75	75	70	25	345	295	285	280	280	285	285	280
-----*															

1	*	0.8788	0.6454	0.5717	0.2129	0.0014	0.0000	0.0180	0.1566	0.4512	0.9575	1.0316	0.6945	0.3666	0.2519	0.0853
2	*	0.1151	0.0643	0.0336	0.0000	0.0000	0.0000	0.0004	0.0163	0.0784	0.1514	0.1676	0.1199	0.0621	0.0463	0.0256
3	*	0.0013	0.0017	0.0009	0.0000	0.0000	0.0000	0.0001	0.0012	0.0000	0.0010	0.0014	0.0017	0.0012	0.0007	0.0001
4	*	1.7284	1.5198	1.3834	0.9019	0.0672	0.0000	0.0200	0.1485	0.4674	1.0816	1.1037	0.6150	0.2798	0.1937	0.0744
5	*	0.0948	0.0738	0.0594	0.0003	0.0000	0.0000	0.0002	0.0055	0.0355	0.0645	0.0707	0.0472	0.0220	0.0168	0.0111
6	*	0.2018	0.3260	0.3637	0.6594	0.7804	0.2945	0.1517	0.0678	0.0000	0.1719	0.5662	0.8682	1.0352	1.0904	1.2330
7	*	0.4787	0.7544	0.8910	1.3145	1.2416	0.5652	0.3150	0.1277	0.0000	0.0398	0.2340	0.6633	1.1373	1.2824	1.4864
8	*	0.2523	0.2501	0.2554	0.2547	0.2120	0.1027	0.0599	0.0591	0.1038	0.2259	0.2738	0.2740	0.2677	0.2678	0.2752
9	*	0.0404	0.0454	0.0264	0.0284	0.0312	0.0232	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	*	0.1925	0.1913	0.1951	0.1948	0.1722	0.0961	0.0565	0.0557	0.0948	0.1819	0.2108	0.2108	0.2040	0.2040	0.2113
11	*	0.0424	0.0478	0.0302	0.0326	0.0355	0.0271	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	*	0.0025	0.0028	0.0018	0.0020	0.0022	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
13	*	0.0159	0.0176	0.0102	0.0109	0.0118	0.0082	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	*	0.1230	0.1676	0.1944	0.2073	0.1852	0.1096	0.0681	0.0232	0.0000	0.0000	0.0001	0.0142	0.0769	0.1136	0.1786
15	*	0.0688	0.0920	0.1015	0.1145	0.1055	0.0645	0.0328	0.0053	0.0000	0.0000	0.0000	0.0012	0.0276	0.0510	0.0946
16	*	0.2231	0.2786	0.3155	0.3184	0.2896	0.1845	0.1199	0.0380	0.0000	0.0000	0.0000	0.0060	0.0766	0.1366	0.2643
17	*	0.0291	0.0363	0.0394	0.0413	0.0383	0.0252	0.0131	0.0020	0.0000	0.0000	0.0000	0.0001	0.0053	0.0130	0.0318
18	*	0.0283	0.0457	0.0659	0.0788	0.0496	0.0032	0.0411	0.0091	0.0000	0.0000	0.0000	0.0083	0.0750	0.0632	0.0067
19	*	0.0757	0.0276	0.0138	0.0000	0.0000	0.0000	0.0037	0.0459	0.1094	0.1805	0.1845	0.1728	0.1296	0.0946	0.0288
20	*	0.0791	0.0171	0.0052	0.0000	0.0000	0.0000	0.0058	0.0868	0.1863	0.2807	0.2755	0.2755	0.2414	0.1849	0.0569
21	*	0.0129	0.0073	0.0048	0.0000	0.0000	0.0000	0.0065	0.0406	0.0000	0.0005	0.0010	0.0075	0.0180	0.0189	0.0088
22	*	0.0043	0.0004	0.0001	0.0000	0.0000	0.0000	0.0045	0.0314	0.0000	0.0000	0.0000	0.0004	0.0068	0.0120	0.0082
23	*	0.0208	0.0405	0.0605	0.1122	0.1607	0.1623	0.2557	0.1050	0.1113	0.1078	0.0941	0.0487	0.0219	0.0131	0.0039
24	*	0.0035	0.0005	0.0001	0.0000	0.0000	0.0000	0.0023	0.0096	0.0000	0.0000	0.0000	0.0001	0.0043	0.0067	0.0022
25	*	0.0186	0.0205	0.0097	0.0104	0.0117	0.0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
26	*	0.0720	0.1263	0.1740	0.2732	0.3527	0.3598	0.4861	0.7017	0.4304	0.4208	0.3711	0.1883	0.1021	0.0615	0.0142
27	*	0.0204	0.0275	0.0166	0.0199	0.1119	0.4550	0.3125	0.3622	0.5881	0.1734	0.0321	0.0333	0.0131	0.0104	0.0059
28	*	0.0030	0.0014	0.0010	0.0000	0.0000	0.0000	0.0040	0.0087	0.0000	0.0000	0.0000	0.0002	0.0031	0.0045	0.0028
29	*	0.0211	0.0218	0.0267	0.0273	0.0271	0.0286	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	*	0.0123	0.0126	0.0156	0.0159	0.0157	0.0161	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31	*	0.0122	0.0126	0.0152	0.0155	0.0154	0.0160	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

		* CO/LINK (PPM)															
		* ANGLE (DEGREES)															
		* 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30															
LINK #	*	280	280	70	10	10	10	350	345	280	275	275	280	280	260	260	
1	*	0.0737	0.0688	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0618	0.0814	0.0752	0.0480	0.0443	0.0501	0.0560
2	*	0.0230	0.0219	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0204	0.0291	0.0275	0.0168	0.0159	0.0176	0.0190
3	*	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
4	*	0.0646	0.0605	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0548	0.0745	0.0689	0.0425	0.0393	0.0500	0.0559
5	*	0.0100	0.0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0090	0.0134	0.0127	0.0075	0.0071	0.0086	0.0093
6	*	1.2417	1.2454	0.5766	0.5101	0.1268	0.0640	0.0900	0.1240	0.7760	1.0472	0.4761	0.2469	0.1791	0.2349	0.3090	
7	*	1.5065	1.5153	0.3213	0.7401	0.2302	0.1248	0.1905	0.2722	1.1927	1.7810	1.0305	0.6107	0.4385	0.5049	0.7286	
8	*	0.2754	0.2755	0.0000	0.0192	0.0132	0.0101	0.0214	0.0232	0.2284	0.3001	0.1997	0.1209	0.0943	0.1088	0.1465	
9	*	0.0000	0.0000	1.0586	0.1312	0.2032	0.1771	0.1161	0.1567	0.0004	0.4390	1.1193	1.5770	1.7428	0.4280	0.2079	
10	*	0.2113	0.2114	0.1751	0.1188	0.0706	0.0540	0.0540	0.0709	0.1887	0.2426	0.2426	0.2509	0.2510	0.2510	0.2509	
11	*	0.0000	0.0000	0.6979	0.1911	0.1783	0.1554	0.0884	0.0984	0.0000	0.0000	0.0424	0.2655	0.4083	1.6223	1.3789	
12	*	0.0000	0.0000	0.0698	0.0039	0.0129	0.0161	0.0064	0.0038	0.0000	0.0000	0.0005	0.0256	0.0518	0.1523	0.1457	
13	*	0.0000	0.0000	0.1829	0.0031	0.0172	0.0227	0.0096	0.0061	0.0000	0.0000	0.0060	0.0797	0.1264	0.1431	0.0699	
14	*	0.1842	0.1866	0.0003	0.0916	0.0398	0.0245	0.0432	0.0602	0.1691	0.1936	0.1848	0.1571	0.1197	0.1079	0.1729	
15	*	0.0979	0.0994	0.1025	0.0732	0.0480	0.0376	0.0376	0.0484	0.0909	0.1021	0.1040	0.1224	0.1237	0.2559	0.2544	
16	*	0.2752	0.2799	0.0000	0.0602	0.0361	0.0264	0.0619	0.0815	0.2604	0.2750	0.2733	0.2625	0.2099	0.1657	0.2547	
17	*	0.0333	0.0339	0.0353	0.0261	0.0182	0.0144	0.0144	0.0180	0.0319	0.0334	0.0342	0.0414	0.0420	0.2353	0.2347	
18	*	0.0054	0.0049	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0042	0.0049	0.0044	0.0031	0.0028	0.0027	0.0031	
19	*	0.0248	0.0232	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0206	0.0255	0.0235	0.0162	0.0149	0.0133	0.0148	
20	*	0.0491	0.0458	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0407	0.0490	0.0453	0.0321	0.0295	0.0238	0.0264	
21	*	0.0078	0.0074	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0065	0.0059	0.0055	0.0054	0.0050	0.0018	0.0020	
22	*	0.0072	0.0068	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0059	0.0055	0.0051	0.0049	0.0045	0.0016	0.0018	
23	*	0.0034	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0030	0.0046	0.0043	0.0022	0.0021	0.0071	0.0078	
24	*	0.0019	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015	0.0014	0.0012	0.0010	0.0006	0.0006	
25	*	0.0000	0.0000	0.9308	1.1368	1.6366	1.8704	1.8704	1.7321	1.2148	1.2722	0.4926	0.2318	0.1442	0.1565	0.1607	
26	*	0.0122	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0105	0.0156	0.0146	0.0078	0.0072	0.0224	0.0244	
27	*	0.0050	0.0047	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0043	0.0064	0.0059	0.0032	0.0029	0.0064	0.0073	
28	*	0.0025	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0019	0.0018	0.0018	0.0016	0.0005	0.0006	
29	*	0.0000	0.0000	0.0000	0.2851	0.1761	0.1264	0.1569	0.1779	0.0000	0.0000	0.0034	0.0230	0.0303	0.0224	0.0367	
30	*	0.0000	0.0000	0.0000	0.1441	0.0960	0.0707	0.0707	0.0696	0.0000	0.0000	0.0000	0.0031	0.0075	0.0048	0.0044	
31	*	0.0000	0.0000	0.0003	0.1917	0.1207	0.0857	0.0857	0.0902	0.0000	0.0000	0.0011	0.0121	0.0170	0.0144	0.0255	

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
 THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		* CO/LINK (PPM)										
		* ANGLE (DEGREES)										
		46	47	48	49	50	51	52	53	54	55	56
LINK #	*	105	255	250	185	165	110	105	105	100	105	105
1	*	0.0000	0.5284	0.4488	0.0927	0.1053	0.0000	0.0000	0.0003	0.0618	0.2855	0.4102
2	*	0.0000	0.1039	0.0835	0.0053	0.0057	0.0000	0.0000	0.0000	0.0020	0.0325	0.0571
3	*	0.0000	0.0002	0.0001	0.0007	0.0011	0.0000	0.0000	0.0000	0.0015	0.0019	0.0011
4	*	0.0000	0.4109	0.3662	0.0847	0.0814	0.0000	0.0000	0.0000	0.0122	0.1352	0.2376
5	*	0.0000	0.0389	0.0318	0.0025	0.0021	0.0000	0.0000	0.0000	0.0001	0.0059	0.0140
6	*	0.3264	0.0000	0.0000	0.0979	0.0991	0.2339	0.2667	0.3311	0.2985	0.2543	0.1943
7	*	0.8701	0.0000	0.0000	0.2395	0.2134	0.5698	0.6771	0.8791	0.7486	0.5407	0.3926
8	*	0.1526	0.1380	0.1121	0.0624	0.0629	0.1023	0.1206	0.1543	0.1457	0.1568	0.1579
9	*	0.0393	0.0000	0.0000	0.0000	0.0000	0.0225	0.0397	0.0345	0.0523	0.0276	0.0249
10	*	0.1996	0.1607	0.1238	0.0671	0.0673	0.1199	0.1507	0.2002	0.1966	0.2011	0.2015
11	*	0.0298	0.0000	0.0000	0.0000	0.0000	0.0163	0.0308	0.0262	0.0434	0.0212	0.0192
12	*	0.0018	0.0000	0.0000	0.0000	0.0000	0.0011	0.0019	0.0016	0.0026	0.0013	0.0012
13	*	0.0118	0.0000	0.0000	0.0000	0.0000	0.0063	0.0122	0.0106	0.0178	0.0088	0.0080
14	*	0.4049	0.0002	0.0000	0.0750	0.0530	0.1824	0.2444	0.3197	0.2079	0.1079	0.0744
15	*	0.1987	0.0000	0.0000	0.0204	0.0131	0.1016	0.1305	0.1433	0.1039	0.0540	0.0393
16	*	1.1629	0.0063	0.0002	0.1555	0.0938	0.3876	0.5566	0.6270	0.3656	0.1675	0.1166
17	*	0.1200	0.0000	0.0000	0.0089	0.0041	0.0462	0.0610	0.0535	0.0402	0.0191	0.0142
18	*	0.0386	0.0000	0.0000	0.0292	0.0214	0.0252	0.0396	0.0907	0.0542	0.0336	0.0215
19	*	0.0000	0.2401	0.1801	0.0261	0.0458	0.0000	0.0001	0.0850	0.1918	0.3034	0.3376
20	*	0.0000	0.5489	0.3851	0.0434	0.1002	0.0001	0.0043	0.5476	0.8539	1.0092	1.0622
21	*	0.0000	0.0993	0.1004	0.0271	0.2643	0.1645	0.1644	0.1364	0.0508	0.0198	0.0113
22	*	0.0000	0.0572	0.1188	0.0076	0.2586	0.2657	0.2165	0.0000	0.0080	0.0036	0.0032
23	*	0.0000	0.0000	0.0000	0.0745	0.0606	0.0000	0.0000	0.0025	0.0115	0.0217	0.0214
24	*	0.0000	0.0847	0.1458	0.0235	0.0746	0.1766	0.1165	0.0005	0.0081	0.0033	0.0026
25	*	0.0890	0.0000	0.0000	0.0000	0.0000	0.0891	0.0832	0.0851	0.0722	0.0791	0.0763
26	*	0.0000	0.0014	0.0002	0.2753	0.2420	0.0040	0.0148	0.1121	0.0826	0.0838	0.0734
27	*	0.0000	0.0000	0.0000	0.0828	0.0760	0.0000	0.0000	0.0000	0.0016	0.0206	0.0310

March 6, 2017

Memorandum to Carol Parr, Monica Pavlik

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28	*	0.0000	0.0560	0.0558	0.0747	0.0159	0.0341	0.0329	0.0182	0.0079	0.0029	0.0019
29	*	0.0026	0.0000	0.0000	0.0000	0.0000	0.0014	0.0031	0.0024	0.0053	0.0020	0.0019
30	*	0.0011	0.0000	0.0000	0.0000	0.0000	0.0006	0.0013	0.0010	0.0025	0.0009	0.0009
31	*	0.0015	0.0000	0.0000	0.0000	0.0000	0.0008	0.0018	0.0014	0.0031	0.0012	0.0011

Attachment C: Section 106 Consultation



COLORADO

Department of Transportation

Region 4

10601 West 10th Street
Greeley, CO 80634
(970) 350.2153 (Fax) 350.2203

February 14, 2017

Mr. Steve Turner
State Historic Preservation Officer
Colorado Historical Society
1200 Broadway
Denver, CO 80202

Dear Mr. Turner,

Re: Determinations of National Register of Historic Places Eligibility and Effect for CDOT Project IM 0253-179 (SA# 18357), North I-25 Revised Record of Decision 1, I-25 from State Highway 392 to State Highway 14, Larimer County, Colorado

Dear Mr. Turner,

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) are currently preparing the North I-25 Revised Record of Decision (ROD) 1 for Interstate 25 (I-25) from State Highway (SH) 392 to SH 14. This letter and the following attachments constitute our request for concurrence on determinations of National Register of Historic Places (NRHP)-eligibility and effects for roadway improvements identified in the revised ROD 1. Starting in 2006, historic resources survey and impact assessment work has been conducted for proposed transportation improvements to the North I-25 corridor. As design for the proposed transportation improvements has progressed, specific construction projects have moved forward, including the project referenced above which is a revision to ROD 1.

Project Description

FHWA and CDOT documented the selection of Phase I of the Preferred Alternative for the North I-25 project in ROD 1 in 2011. Phase I involved numerous infrastructure improvements across the project area, including installation of a continuous acceleration/deceleration (accel/decel) lane in each travel direction on I-25 between SH 392 and SH 14 in Larimer County. The added lanes would result in three lanes for each I-25 travel direction (northbound and southbound). Through Revised ROD 1, FHWA is modifying the prior selection of the accel/decel lanes for Phase I by replacement with Express Lanes in each direction plus one continuous accel/decel lane will be added in each direction from the I-25 weigh station facility (south of Prospect Road) to SH 14. The proposed transportation improvements are subject of the North I-25 Section 106 Programmatic Agreement (PA), signed with your agency in December 2011. Pursuant to stipulations in that PA, a re-evaluation will occur at the initiation of each construction project. The information provided here constitutes the re-evaluation of NRHP-eligibility and effects for properties in the Area of Potential Effects (APE) for the North I-25 SH 392 to SH 14 Revised ROD 1 project.

Area of Potential Effects

The North I-25 corridor between SH 392 and SH 14 is primarily surrounded by rural lands. However, commercial and residential development are expanding at the Mulberry Street interchange at the north end of the project area and at the SH 392 interchange to the south. The Area of Potential Effects (APE) identified in the North I-25 Environmental Impact Statement (EIS) was utilized for this project and includes the parcels of land immediately adjacent to the right-of-way (ROW) for I-25 between SH 392

and SH 14. The APE also includes parcels directly adjacent to proposed project design footprint at East County Road 36 (Kechter Road), East Prospect Road, and SH 14 (East Mulberry Street) interchanges. Previously un-surveyed properties containing buildings and structures 45 years of age or older have been evaluated for NRHP-eligibility. Please refer to the attached APE map (Attachment A) for additional detail.

Survey Methods and Results

The survey methods employed for this investigation include archival research utilizing the following resources to determine whether historic properties could be affected by the proposed project:

- A file search through the Office of Archaeology and Historic Preservation (OAHP) online COMPASS cultural resources database to determine whether previously recorded NRHP-eligible or -listed resources were located within or near the proposed project area;
- Review of Larimer County Assessor's Office property records to determine if any buildings within the project study area met the minimum age requirement for historic eligibility. Due to the extended time that may be required to construct the project, properties at least 45 years old were evaluated for the proposed project.
- Analysis of U.S. Geological Survey (USGS) historic topographical maps and historic aerial photography to determine changes in the built landscape over time.
- Review of previous cultural resource reports and site forms including:
 - Hermsen Consultants and Centennial Archaeology, Inc. 2007. *Historic Resources Survey Report for North I-25 EIS*. Prepared for CDOT.
- Site visits to survey and document existing and potentially historic resources.
- The information collected through the archival and field investigations was used to create inventory forms (Architectural Inventory Forms - OAHP Form #1403), with attachments including photographs and maps.

CDOT and Felsburg Holt & Ullevig (FHU) documented eight (8) properties as part of the North I-25 SH 392 to SH 14 Revised ROD 1 project. Additional structures were found to be within the APE, however only properties directly adjacent to North I-25 ROW were surveyed and evaluated for NRHP eligibility, which is consistent with the 2007 North I-25 EIS.

Sites originally evaluated as part of the 2007 North I-25 EIS were not re-evaluated for eligibility, since the ten-year threshold has not been met as outlined in the North I-25 Section 106 PA [Stipulation 1(c)(2)(a)], which states "Re-evaluations of eligibility for previously recorded historic properties shall be done ten years after the initial recording." Other buildings either within or adjacent to the proposed project that failed to meet the 45-year age threshold were identified and were not documented as part of this analysis.

Determinations of Eligibility and Effects

Previously Recorded Resources

Fifteen (15) previously recorded resources were found to be located within the North I-25 SH 392 to SH 14 Revised ROD 1 Project APE. A summary of eligibility and effects determinations for these fifteen resources is outlined in Table 1 below.

Table 1. Previously Recorded Resources located within the APE

(Resource No.) Site Name	Address/Location	Site Type	NRHP-Eligibility	Effects Determinations
(5LR.1731.2) Colorado Central Railroad	SE ¼ of NE ¼ T7N, R68W, Sect. 9	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR.12555) Sunstate Equipment Company	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.12556) Moore Residence	3716 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.12557) Culbertson Residence	3604 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.11395) Kaplan Residence	1012 SE Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.11394) Northern Auto Brokers	1101 Smithfield Dr. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.11393) Rudolph Farm	1028-1100 SE Frontage Road Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.995.4) Lake Canal	SE ¼ of NE ¼ T7N, R68W, Sect. 16	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.995.6) Lake Canal	NE ¼ of NW ¼ T7N, R68W, Sect. 22	Structure	<i>Not Eligible (Officially) 12/20/2010</i>	<i>No Historic Properties Affected</i>
(5LR.1327.6) Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway	SE ¼ of SW ¼ T7N, R68W, Sect. 27	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR.9504) Cache La Poudre River Bridge B- 17-DI	SE ¼ of NW ¼ T7N, R68W, Sect. 34	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.2160.1) Boxelder Ditch	NE ¼ of SW ¼ T7N, R68W, Sect. 34	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>

Table 1. Previously Recorded Resources located within the APE

(Resource No.) Site Name	Address/Location	Site Type	NRHP-Eligibility	Effects Determinations
(5LR.12561) Hoffner Veterinary Clinic/RV World	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.11411.1) Arthur Lateral Ditch	NE ¼ of SW ¼ T6N, R68W, Sect. 10	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.8931.1) Fossil Creek Reservoir Outlet (canal)	NE ¼ of NW ¼ T6N, R68W, Sect. 15	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>

Newly Evaluated Resources

Nine (9) new properties were inventoried on the standard OAHP Form 1403 and evaluated for NRHP-eligibility and effects. Attachment B includes the site forms for these 9 newly recorded properties.

Centennial Livestock Auction (5LR.14088): This resource consists of a simple, rectangular plan office building built in 1968 which is part of a larger complex of agricultural buildings. The simple metal utility building does not meet any of the eligibility requirements outlined by the NRHP. The building was not found to be associated with any historically significant events or trends and/or people. Additionally, the building does not embody the distinctive significant characteristics of a type, period, method of construction, or engineering technique. The site is also not likely to yield important historical information. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14088, the Centennial Livestock Auction facility.

Econolodge Motel (5LR.14089): This resource consists of a large commercial motel complex with stucco siding, metal roofing and a porte-cochere over the entrance. The original portion of the motel was constructed in 1966, while several additions and renovations have occurred over time bringing the complex to its present condition. The structure does not meet any of the NRHP-eligibility requirements and was not found to be associated with historically significant events or trends and/or people. Additionally, the building does not embody the distinctive characteristics of a significant type, period, method of construction, or engineering technique. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14089, the Econolodge Motel.

Shell Gas and Schrader's Country Store (5LR.14090): This resource consists of a small rectangular gas station building built in 1966, and two newer gas station canopies and pumps, the result of being remodeled in 1988. The building is clad in light red brick, with buff accent bricks. The building was not found to be associated with historically significant events or trends and/or people. The gas station embodies some of the characteristics of the Oblong Box style gas station (rectangular plan, lack of ornamentation, corner office), but it does not have the flat roof or service bays typical of this style. Therefore, the building does not represent a definitive style, nor is it the work of a master and does not qualify under Criterion C. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts

as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14090, the Shell Gas and Schrader's Country Store.

Shell Gas Station (5LR.14091): This resource consists of a small rectangular gas station building constructed in 1966, and a newer gas station canopy with gas pumps. The building is clad in painted vertical siding, and has a flat roof of horizontal siding, projecting about one foot over the north (front), east and west elevations. The building was not found to be associated with historically significant events or trends and/or people. The gas station embodies some of the characteristics of the Oblong Box style gas station (rectangular plan, lack of ornamentation, corner office), but it does not have the service bays typical of this style and has undergone modifications to the exterior which have altered the form of the building. Therefore, the building does not represent a definitive style, nor is it the work of a master and does not qualify under Criterion C. The site is also not likely to yield important historical information through further investigation. Therefore, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14091, the Shell Gas Station.

Colorado State University Research Farm (5LR.14092): This resource consists of two individual houses that are now owned and maintained by the Colorado State University Research Foundation. One house, built in 1915, is located southeast of a small loop in the access road into the parcel; this house is the smaller of the two. It is one story in height, with a side-gabled roof (saltbox), a central chimney, and two one-over-one double-hung windows on the north and south facades. The other house was constructed in 1927 and is located about 180 feet to the northwest directly adjacent to the access road. The rectangular-plan building is 1½ stories, with a front gabled roof. The buildings were not found to be associated with historically significant events or trends and/or people. The 1927 house does have some distinctive characteristics of the bungalow type, but does not embody enough distinctive characteristics including the large front porch, large overhanging eaves, clipped gable or pent-roofed bay windows, nor do the buildings represent the work of a master. Therefore, the property is not eligible under NRHP Criterion C. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14092, the Colorado State University Research Farm.

North Poudre Irrigation Company Property (5LR.14093): This resource consists of a small, 1-story hipped roof rural cottage. The main portion of the house with a hipped roof has a square floor plan. The main entrance is located on the east elevation, at the end of a small shed roof wing that protrudes from the main portion of the house toward East County Road 34E. One large double-hung window is also located on the east elevation and is located on the main portion of the house. A shed roof porch extends along the entire west elevation of the house. No association was made between the resource and historically significant events or trends and/or people and is not eligible under NRHP Criteria A or B. While the building does have some characteristics of the Classic Cottage building type, including a square floor plan and hipped-roof, the building does not embody the distinctive characteristics to be considered a good representation of the Classic Cottage type including a central dormer, porch with Doric columns, flared eaves, or ornate window surrounds. Therefore, the building does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not meet NRHP Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14093, the North Poudre Irrigation Company Property.

Fort Collins Archery Association (5LR.14094): This resource consists of a small, 1-story side-gabled house with a small gabled wing on the north end of the building. An entrance door is located along the south or main façade of the building as well as triple and twin sets of short double-hung windows. Larger double-hung windows are found throughout. The building has horizontal aluminum clapboard siding and simple lines. The resource was not found to be associated with historically important events, trends and/or people and is not eligible under NRHP Criteria A or B. The building is a simple rural house

with no ornamentation, details or unique features and is therefore not eligible under Criterion C. Since the site has been redeveloped as an archery range in recent years, the site is not likely to yield important historical information through further investigation and is not eligible under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14094, the Fort Collins Archery Association property.

Stephen Weber Farm (5LR.14095): This resource consists of a sprawling farmhouse comprised of a one-and-one-half story portion (west end) and two-story portion (east end). The original house, built in 1917, comprises the west end of the dwelling which originally consisted of a vernacular version of the Bungalow-type house. This original portion has a large covered porch over the main façade (west elevation) with a large gable with second floor windows facing East County Road 34E. No association was found between the resource and historically significant events, trends and/or people and is not eligible under Criterion A or B of the NRHP. While the building does retain some characteristics of the Bungalow building type and was a vernacular version of that type when it was originally constructed in 1917, including the original one-and-one-half story portion of the house (west end), knee braces and large overhangs, the large two-story addition on the east and replacement siding and windows throughout have altered the distinctive character-defining characteristics of the building. Therefore, the house does not embody a good representation of the Bungalow type and does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not qualify under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14095, the Stephen Weber Farm.

Harmony-McMurray Property (5LR.14097): This resource consists of an early twentieth century residence located along the north side of East County Road 36, just west of I-25. The west end of the building, which comprises the original house, was constructed in 1910, while the east end was an addition built in 1966. The east addition has a low-pitched gabled roof oriented east/west, perpendicular to the 1910 portion of the house. Review of Bureau of Land Management (BLM) General Land Office (GLO) records did not link the subject parcel to the original landowner or patentee. As a result, no association was made between the resource and historically significant events, trends and/or people and is not eligible under Criterion A or B of the NRHP. While the building does have some characteristics of the Ranch building type, including an elongated floor plan and large sliding-sash windows, the building does not embody the distinctive characteristics to represent a unique example of the Ranch type including wide overhanging eaves, minimal front porch with decorative wrought iron supports, false shutters or low wide chimney. The 1966 addition is an example of typical home construction during the 1960s and 1970s and does not represent an exemplary form of the Ranch type. Therefore, the resource does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not qualify under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14097, the Harmony-McMurray Property.

John Jensen Property (5905 SW Frontage Road): This property contains several farm buildings dating from 1908 to 1940, which meet the minimum age requirement of 45 years for potential NRHP-eligibility. The site was inaccessible to field surveying and formal evaluation for eligibility. As a result, the site is being treated, in terms of Section 106, as eligible for the NRHP for purposes of this project. Impacts resulting from the proposed transportation improvements, including widening the existing roadway from two to three lanes, will result in the taking of approximately 0.03 acres of land in a strip 35 ft. wide by 450 ft. long from the east edge of the parcel. All farm buildings are located approximately 350 ft. west of I-25 in a grove of mature deciduous trees. Because no direct impacts would occur to any of the buildings or features associated with the John Jensen Property, and because the small land acquisition would not change the setting, feel design or workmanship of the site, the proposed project would result in *no adverse* effect with regard to the John Jensen Property.

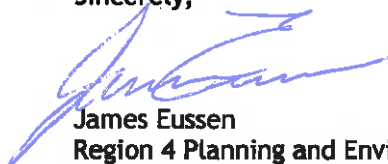
Table 1 Newly Evaluated Resources within the APE

(Resource No.) Site Name	Address/Location	Site Type	National Register Eligibility	Effects Determinations
(5LR.14088) Centennial Livestock Auction	113 NW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14089) Econolodge Motel	3836 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14090) Shell Gas and Schrader's Country Store	3733 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14091) Shell Gas Station	3809 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14092) Colorado State University Research Farm	3829 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14093) North Poudre Irrigation Company Property	4433 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14094) Fort Collins Archery Association	2825 SW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14095) Stephen Weber Property	4400 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14097) Harmony-McMurray LLC Property	4308 E. County Road 36 Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
John Jensen Property	5905 SW Frontage Rd. Fort Collins, CO	Building	<i>Eligible (Field)</i>	<i>No Adverse Effect</i>

We hereby request your concurrence with the proposed APE and with our determinations of NRHP-eligibility and effects. Your response is necessary for CDOT and FHWA's compliance with Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's regulations.

Thank you in advance for your prompt attention to this matter. If you require additional information, please contact Region 4 Historian Jason Marmor at (970) 350-2153 or jason.marmor@state.co.us.

Sincerely,



James Eussen
 Region 4 Planning and Environmental Unit Manager

Mr. Steve Turner, AIA
February 14, 2017
Page 8

cc: Carol Parr, Jason Marmor
File/Central Files

Enclosures: Attachment A: Area of Potential Effect Maps
Attachment B: Arch Inventory Form 1403 - Resources 5LR14088, 5LR14089, 5LR14090,
5LR14091, 5LR14092, 5LR14093, 5LR14094, 5LR14095, 5LR14097

Attachment A:

Area of Potential Effects Map

**North I-25 Revised ROD 1, SH 392 to SH 14
CDOT Project IM 0253-179 (SA# 18357)**

Attachment B:

Architectural Inventory Forms (OAHP Form 1403) and Attachments

5LR14088 Centennial Livestock Auction

5LR14089 Econolodge Motel

5LR14090 Shell Gas & Schrader's Country Store

5LR14091 Shell Gas Station

5LR14092 Colorado State University Research Farm

5LR14093 North Poudre Irrigation Company Property

5LR14094 Fort Collins Archery Association

5LR14095 Stephen Weber Property

5LR14097 Harmony-McMurray Property

Attachment D: Noise Impact Assessment Report



North I-25 Environmental Impact Statement Revised Record of Decision 1 for North I-25 from SH 392 to SH 14

Traffic Noise Impact Assessment ROD1 Reevaluation

**FHWA-CO-EIS-08-01-F
CDOT Project Number 18357 IM 0253-221**

March 2017

Prepared for:

Federal Highway Administration
Colorado Department of Transportation

Prepared by:

Felsburg Holt & Ullevig
6300 South Syracuse Way, Suite 600
Centennial, CO 80111

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1.0 INTRODUCTION

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) evaluated alternative sets of improvements to the transportation system in north-central Colorado through the *North I-25 Final Environmental Impact Statement (FEIS)*. The general region covered in the EIS (**Figure 1-1**) encompassed approximately 1,300 square miles. This regional study area generally was bounded by and included U.S. Highway (US) 287, US 85, State Highway (SH) 1 and US 36 with Interstate 25 (I-25) as a central element.

The overall purpose for the EIS was to study ways to improve connectivity, functionality and capacity of transportation modes within the regional study area. This is needed because the existing highways are becoming inadequate and will underserve the expected future traffic demand in the region.

CDOT Project IM0253 179 was the EIS and examined several alternatives that would upgrade transportation infrastructure in the regional study area. The Final EIS (CDOT, 2011a) examined four future alternatives in detail: the No-Action Alternative; Package A; Package B; and the FEIS Preferred Alternative. The highway and commuter rail improvements and the noise impact results for each alternative were discussed in the Final EIS.

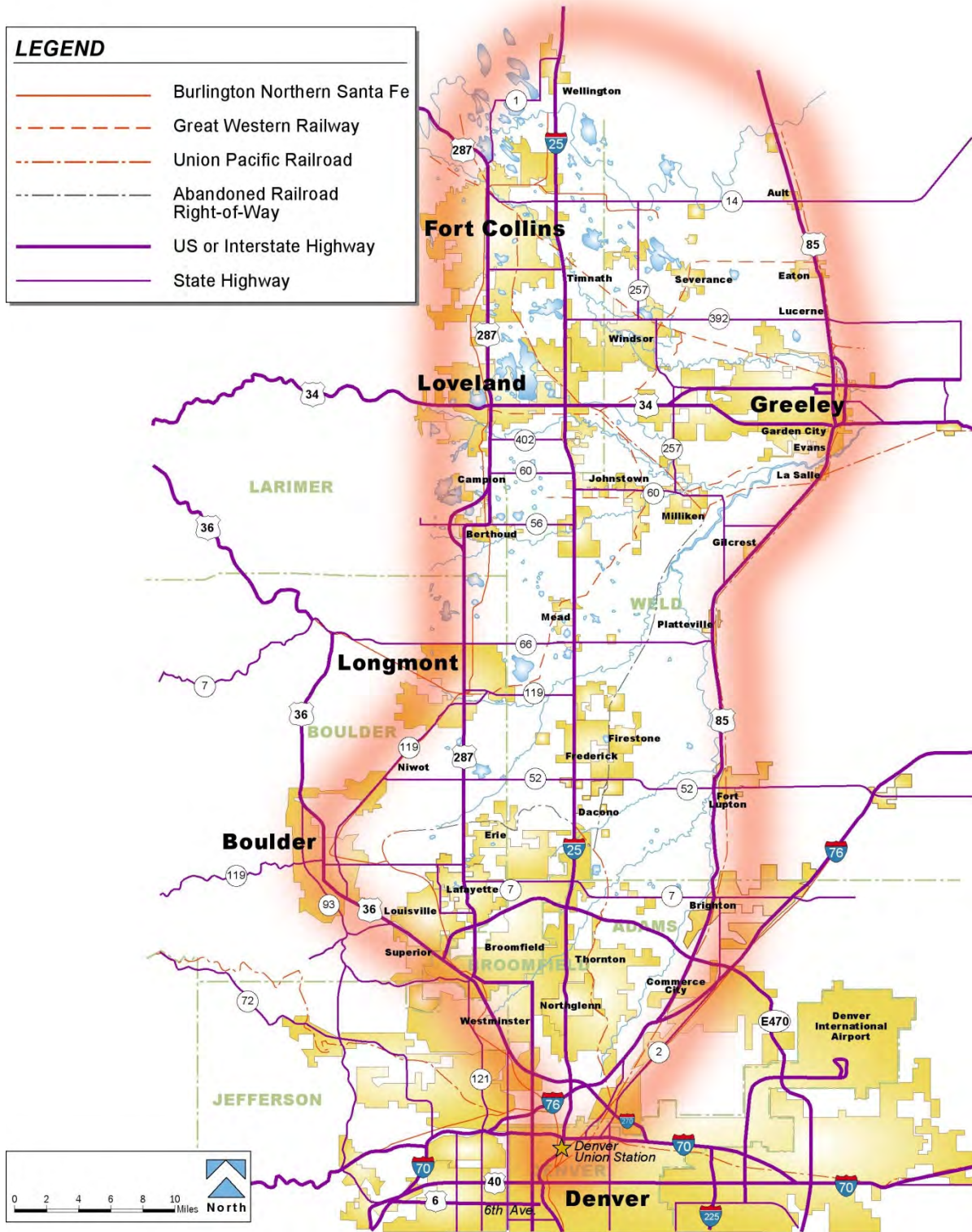
The proposed improvements included in the FEIS Preferred Alternative were so extensive that they could not reasonably be included in a single construction project, given current funding constraints. Therefore, the FEIS Preferred Alternative was divided into a planned series of phases that could be constructed in pieces as funding became available (CDOT, 2011a). Each phase was to be cleared by a Record of Decision (ROD) prior to construction. The Accel/Decel Alternative (SH 392 to SH 14) was cleared by the initial ROD1 (CDOT, 2011b), hereafter referred to as the Accel/Decel Alternative (SH 392 to SH 14) in this document.

Since ROD1, new opportunities and considerations related to the project have developed where some revisions to previous decisions were found to be appropriate. Those revisions are the subject of the following noise analyses. The Express Lane Alternative is a set of refinements to the ROD1 design for I-25 between SH 392 and SH 14 that differ primarily through proposed changes in I-25 lane configurations.

The noise analyses performed for the Express Lane Alternative supplement the analyses previously conducted for the Draft EIS (CDOT, 2008), Final EIS (CDOT, 2011a) and ROD1 (CDOT, 2011b). This addendum focuses on methods and results that are new or changed in the Express Lane Alternative revised project area since ROD1. Note that Express Lane Alternative noise topics unchanged or untouched by the proposed refinements are not discussed below but can be found in the previous technical reports. Also note that the Express Lane Alternative does not include construction of any commuter rail components (**Section 1.1**) from the FEIS Preferred Alternative; therefore, this addendum focuses on I-25 traffic noise and not rail noise/vibration.

Typically, a review of fundamentals of sound and noise are required for noise technical reports for CDOT (CDOT, 2015). This information was provided previously for the Draft EIS (CDOT, 2008) and for brevity is not repeated in this addendum.

Figure 1-1 North I-25 Project Regional Study Area



1.1 ACCEL/DECEL ALTERNATIVE (SH 392 TO SH 14)

The FEIS Preferred Alternative from the Final EIS is a multimodal solution with highway, rail transit and bus transit improvements. In summary, the FEIS Preferred Alternative includes:

- ▶ Numerous I-25 interchange reconstructions between US 36 and SH 1.
- ▶ Addition of general purpose lanes and tolled express lanes on I-25 between US 36 and SH 14.
- ▶ Commuter rail service along the Burlington Northern Santa Fe Railway tracks between Fort Collins and the FasTracks North Metro end-of-line station in Thornton (via Longmont).
- ▶ Express bus service from Fort Collins and Greeley on I-25 to downtown Denver.
- ▶ Commuter bus service on US 85 between Greeley and downtown Denver.

The Accel/Decel Alternative (SH 392 to SH 14) (**Figure 1-2**) consisted of a subset of the overall improvements and was planned to:

- ▶ Widen I-25 between SH 14 and SH 392 with continuous acceleration/deceleration lanes.
- ▶ Widen I-25 between SH 56 and SH 66 (approximately seven miles) with one tolled express lane in each direction.
- ▶ Widen I-25 between US 36 and 120th Avenue (approximately six miles) with one buffer-separated tolled express lane in each direction and complete I-25 interchange modifications, as necessary.
- ▶ Replace and reconstruct I-25 interchanges at: SH 14, Prospect Road, SH 56, County Road 34, and SH 7. A first phase of improvements to the eastern leg of the I-25/US 34 interchange would be completed, with additional improvements in later phases.
- ▶ Replace or construct 46 structures, modify two existing structures, and rehabilitate two structures (within the footprint shown on **Figure 1-2**).
- ▶ Install six carpool lots at: I-25/SH 14, I-25/Prospect Road, I-25/Harmony Road, I-25/SH 56/WCR 44, Firestone, and I-25/SH 7.
- ▶ Purchase the new right-of-way necessary for the ultimate commuter rail configuration.
- ▶ Initiate regional express bus service on I-25 connecting Fort Collins and Greeley to downtown Denver and Denver International Airport (DIA). Construct four transit stations at: I-25/Harmony Road, US 34/SH 257, Firestone, and I-25/SH 7.
- ▶ Implement the entire commuter bus service of the FEIS Preferred Alternative on US 85 connecting Greeley to downtown Denver. This will include construction of five stations (Greeley, South Greeley, Evans, Platteville and Fort Lupton) and the purchase of five buses.

This analysis pertains only to refinements of the I-25 segment from SH 14 to SH 392.

Figure 1-2 Summary of Accel/Decel Alternative (SH 392 to SH 14) Improvements (with the Express Lane Alternative)



1.2 EXPRESS LANE ALTERNATIVE

The proposed design refinements to the Express Lane Alternative that are the subject of the Reevaluation affect I-25 between SH 14 and SH 392. The Express Lane Alternative would substitute the previous continuous acceleration/deceleration lane in each direction with one Express Lane in each direction. This change is called out on **Figure 1-2**. In addition to the Express Lanes, one continuous acceleration/deceleration lane will be added in each direction from the I-25 weigh station facility (south of Prospect Road) to SH 14. Corresponding design updates for the Express Lane Alternative were developed and these have been incorporated into the updated traffic noise analyses.

1.3 ANALYSIS APPROACH

The overall purpose of this addendum was to evaluate traffic noise results for the Express Lane Alternative and to review whether noise levels at receptors near potential roadway improvements may exceed applicable impact thresholds (CDOT, 2015). If so, abatement actions are then considered for the impacts. For comparison and disclosure, the No Action Alternative and the Accel/Decel Alternative (SH 392 to SH 14) noise analyses were also updated and reviewed, but were not considered for abatement actions.

The primary impact thresholds of concern for this analysis are the CDOT Noise Abatement Criteria (NAC) (**Table 1-1**). Under CDOT's guidelines, equaling or exceeding the NAC is one type of noise impact and triggers an investigation of noise abatement measures. A "substantial" noise increase of 10 A-weighted decibels (dBA) or more over existing levels is another type of noise impact and also leads to evaluation of traffic noise abatement actions (CDOT, 2015). The CDOT guidelines direct that the one-hour equivalent sound level (L_{eq}) is used for the evaluation.

The traffic design year has been updated from 2035 to 2040 and the predicted 2040 traffic volumes as of March 2017 were used for the noise analysis (AECOM, 2017). Updated Traffic Noise Model (TNM) Version 2.5 software models were developed and evaluated to represent several conditions: existing conditions (using 2005 traffic); 2040 No Action; 2040 Accel/Decel Alternative (SH 392 to SH 14); and 2040 Express Lane Alternative. The TNM models for the corridor were updated as needed to reflect changes from 2011 to 2016. Based on previous North I-25 corridor noise analysis results, a larger noise study area that extended 600 feet (rather than the typical 500 feet) from the outside of affected travel lanes was selected to ensure that the extent of potential noise impacts would be identified. Year 2040 traffic volumes were obtained from a traffic analysis update for the project.

The model updates primarily added or modified the TNM traffic lines as required to reflect the proposed design changes from acceleration/deceleration lanes to Express Lanes, and updated traffic volumes to 2040. Traffic on I-25 is of greatest importance for noise for the Express Lane Alternative. The split for vehicle types for I-25 was 89 percent automobiles, 3 percent medium trucks and 8 percent heavy trucks, based on 2016 CDOT traffic data.

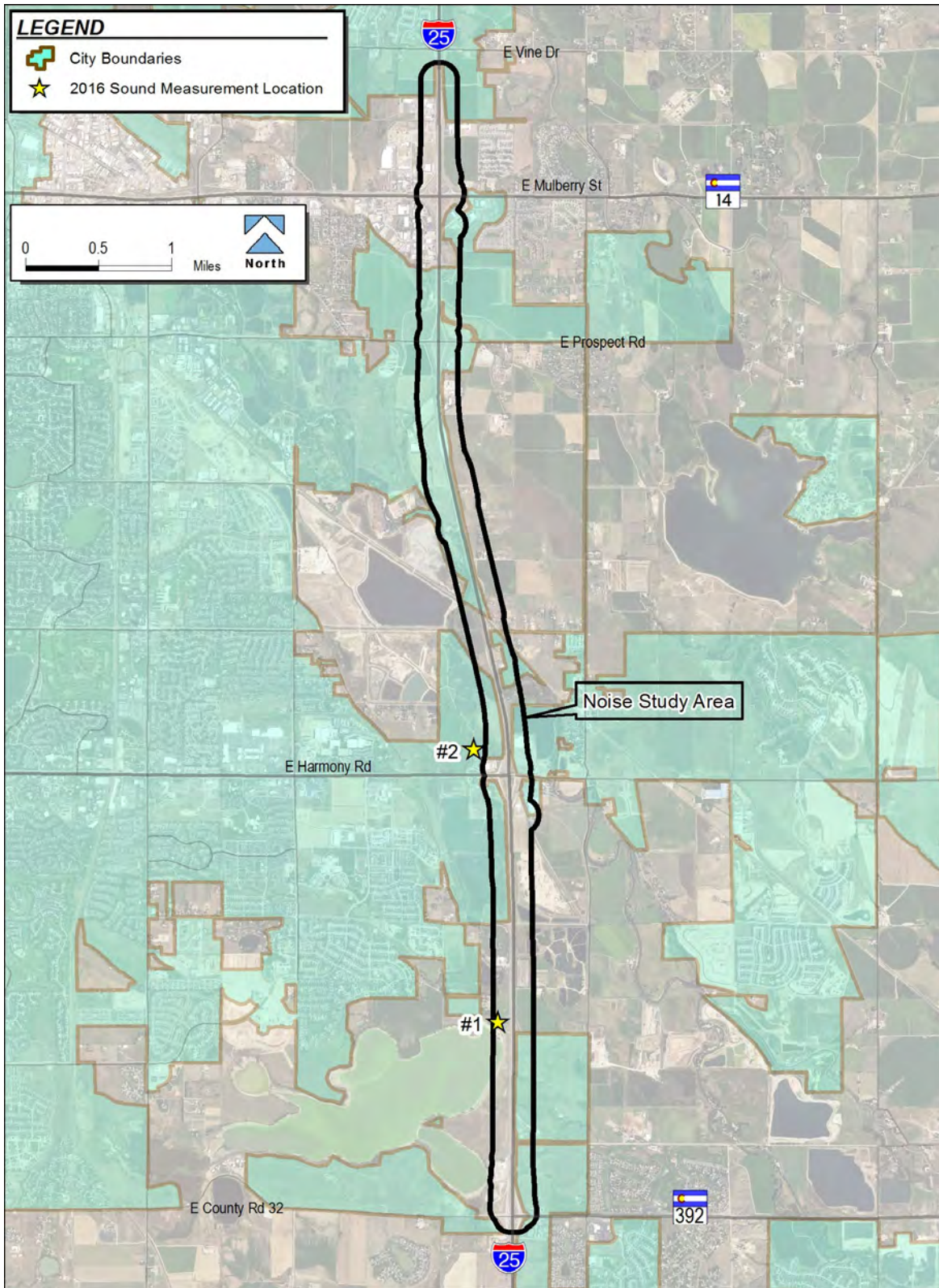
Table 1-1 CDOT Noise Abatement Criteria

Activity Category	Activity L_{eq} (dBA)	Description of Land Use Category
A	56 Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	66 Exterior	Residential
C	66 Exterior	Active sport areas, amphitheatres, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreational areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	51 Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	71 Exterior	Hotels, motels, time-share resorts, vacation rental properties, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D or F.
F	Not Applicable	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, ship yards, utilities (water resources, water treatment, electrical), and warehousing.
G	Not Applicable	Undeveloped lands that are not permitted for development.

The TNM model objects used in the analyses are illustrated in **Appendix A**. The model receptors are shown in **Appendix A** and described below. The roads modeled were: I-25, interchange ramps, adjoining frontage roads, SH 14, Prospect Road, Harmony Road, Kechter Road and SH 392. Several terrain lines were used to capture potentially important topographic features (**Appendix A**). Buildings important for the modeling were represented by barriers, plus several abatement barriers were modeled for noise impacts described below. No special ground zones were used in the models; the default lawn ground type was used.

The CDOT guidelines require field verification measurements as part of a noise analysis. The previous noise measurements that were performed for the Draft EIS (CDOT, 2008) demonstrated the validity of the TNM modeling for this project. Two new measurements were gathered on September 9, 2016 from approximately 10:50 AM to 12:30 PM to update the earlier findings and compare to verification model results (**Figure 1-3**), following similar measurement procedures. Traffic on I-25 was free-flowing at the time.

Figure 1-3 2016 Measurement Locations and Project Noise Study Area



The traffic noise measurements were taken with an NTI XL2 Type 1 sound level meter calibrated at the site with a Larson-Davis CAL200 calibrator. The equipment conformed to American National Standards Institute Standard S1.4 for Type 1 sound level meters. Calibrations traceable to the US National Institute of Standards and Technology were performed in the field before and after each set of measurements using the acoustical calibrator. The measurement microphone was protected by a windscreen and located on a tripod approximately 5 feet above the ground. The microphone was positioned at each site to characterize the exposure to the dominant noise sources in the area.

The measurements were made during calm weather conditions that were acceptable according to FHWA guidance (FHWA, 1996). Weather conditions, including wind speed, were monitored during the measurements. Short-term (15-minute) traffic noise measurements were performed at each location to document 2016 ambient conditions in the Noise Study Area. Traffic counts, including the number of large trucks, were collected during the noise measurement periods for model verification.

The measurement results were used to document ambient conditions and to evaluate the performance of the computer models. The differences between measured and modeled sound levels were less than 3 dBA (**Table 1-2**), so the models were verified. The I-25 traffic volumes during the measurements are tabulated in **Table 1-3**.

Table 1-2 2016 TNM Verification Noise Model Results

Location	Measurement Leq (dBA)	Verification Model Result (dBA)	Difference (dBA)
1—County Road 34E	60.8	63.7	2.9
2—Arapaho Bend Trail	55.1	56.8	1.7

Table 1-3 Noise Measurement I-25 Traffic Volumes

Road	Equivalent Hourly Traffic Volume			Estimated Speed (MPH)
	Cars	Med. Trucks	Heavy Trucks	
Measurement 1—County Road 34E				
NB I-25	1,728	116	220	75
SB I-25	2,340	88	196	75
Measurement 2—Arapaho Bend Trail				
NB I-25	1,772	100	212	75
SB I-25	2,168	72	164	75

2.0 AFFECTED ENVIRONMENT

The affected environment has not changed substantively between SH 392 and SH 14 since ROD1. The corridor is still primarily rural, though new development has occurred in select locations. The land uses were described in previous documents for the project. The surrounding properties with noise-sensitive uses that are the focus for Express Lane Alternative are indicated in the noise model receptor data provided in **Appendix A**.

I-25 traffic is the predominant noise source for the corridor, with contributions from frontage roads and intersecting arterial streets. Along I-25, there are mostly undeveloped lands or dispersed residential and business properties. There are clusters of developed properties in the corridor, primarily in the vicinity of the four interchanges. There are open space and recreation properties (with trails), as well. None of the undeveloped parcels were identified as permitted for development.

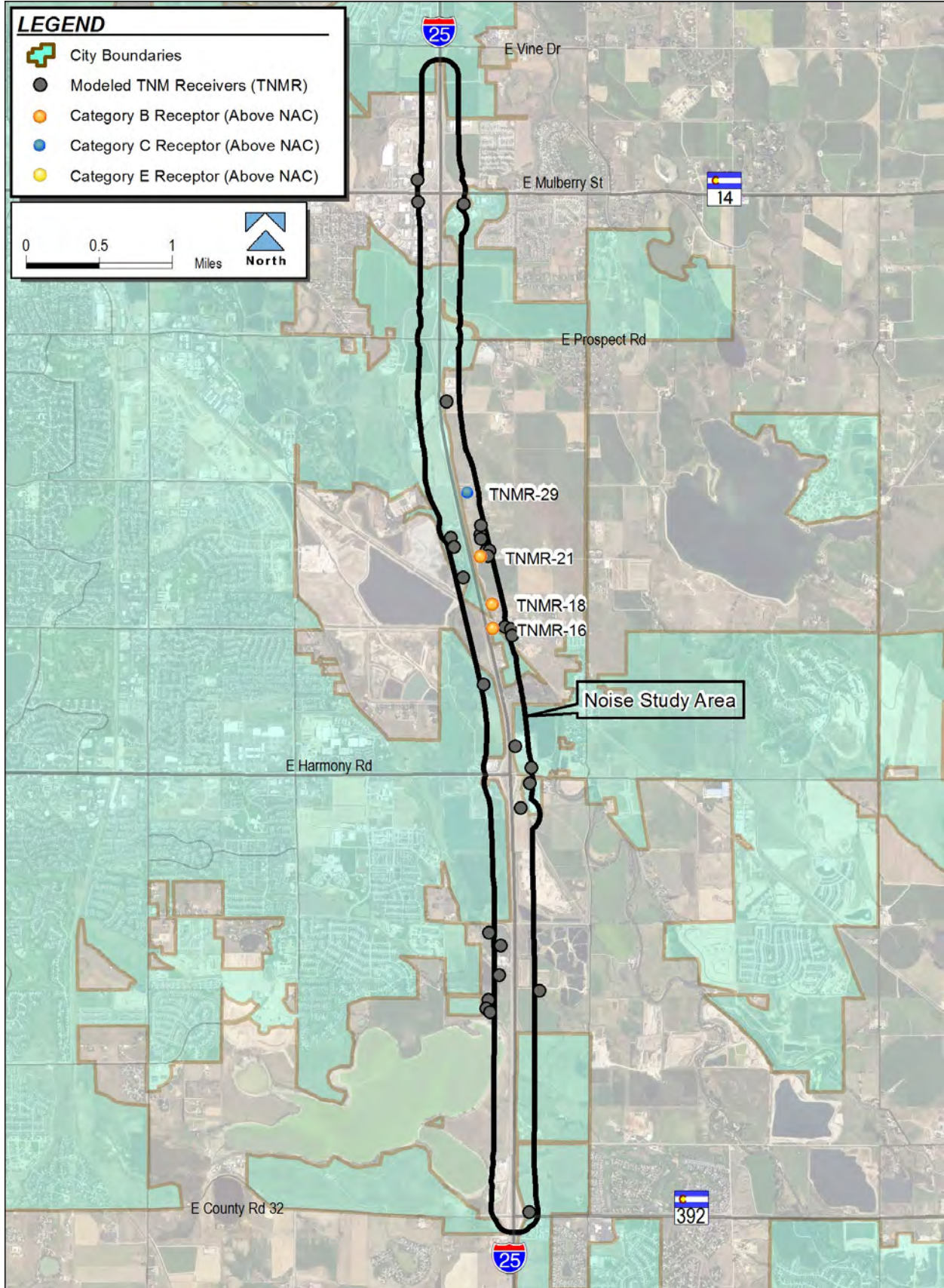
In the Noise Study Area, there are six Section 4(f) properties: Colorado Central Railroad, Colorado & Southern Railroad, Cache la Poudre Reservoir Inlet, Boxelder Ditch, John Jensen Farm, and Arapaho Bend Natural Area. The Colorado Central Railroad, Colorado & Southern Railroad, Cache la Poudre Reservoir Inlet and Boxelder Ditch do not have human use areas, so they are not included in the noise analysis. The John Jensen Farm was included as a Category B property represented by model point TNMR-06. Arapaho Bend Natural Area trails were included as a Category C property represented by model points TNMR-13 and TNMR-19.

Traffic data for 2005 were used for the TNM modeling for existing conditions to maintain consistency with the Draft EIS, Final EIS and ROD1. This choice uses lower traffic volumes, which means that the possibility for noise impacts due to a 10-dBA or larger increase was greater than if more recent traffic volumes were used. Conversely, if more recent traffic data were used (e.g., 2016), it is likely more receptors would be at or above the NAC under existing conditions.

The TNM model objects were adjusted for the follow-up analyses to reflect current (2016) conditions and regulatory requirements (CDOT, 2015). A total of 33 points in the Express Lane Alternative noise study area (**Figure 2-1**) were modeled for traffic noise (**Appendix A**).

The TNM result for existing conditions for each model point is presented in **Appendix A**. Four modeled points that represent four receptors within the study area were calculated to have existing traffic noise levels at or above the respective NAC during the afternoon peak hour (**Figure 2-1**). Overall, the calculated noise level range for the modeled points was 55.0 to 70.4 dBA. Three of the NAC exceedences are Category B (residences) and one is Category C.

Figure 2-1 TNM Receptors Exceeding NAC for Existing Conditions



3.0 ENVIRONMENTAL CONSEQUENCES

In this follow-up noise analysis, traffic noise levels were evaluated through TNM modeling in the areas associated with the Express Lane Alternative improvements. Updated traffic noise models were developed using TNM as described in **Section 1.3**. The models included representative receptor points and major project roads in the Express Lane Alternative construction area using 2040 traffic volumes and applicable road layouts. Refinements and updates to the previous EIS and ROD models were incorporated to reflect any changed conditions in the corridor since the prior analyses.

3.1 2040 NO ACTION ALTERNATIVE RESULTS

For disclosure and comparison, 2040 No Action was assessed using 33 points modeled for traffic noise impacts. Overall, the calculated noise level range for the modeled points was 58.4 to 72.5 dBA. NAC exceedence results are illustrated in **Figure 3-1**. Detailed noise level results are presented in **Appendix A**.

Eleven modeled points that represented 13 discrete receptors were calculated to have 2040 traffic noise levels at or above the respective NAC during the afternoon peak hour. Of these, nine were Category B properties, two were Category C and two were Category E. All of the receptors were predicted to equal or exceed the relevant NAC; none were predicted to increase by 10 dBA or more over existing conditions (**Appendix A**).

3.2 2040 ACCEL/DECEL ALTERNATIVE (SH 392 TO SH 14) RESULTS

For disclosure and comparison, the Accel/Decel Alternative (SH 392 to SH 14) was assessed using 32 points modeled for traffic noise impacts (one home would be acquired). This condition was examined and reported for informational purposes only. Overall, the calculated noise level range for the modeled points was 61.7 to 75.2 dBA. Noise impact results are illustrated in **Figure 3-2**. Detailed noise level results are presented in **Appendix A**.

Fifteen modeled points that represented 18 discrete receptors were calculated to have 2040 traffic noise levels above the respective NAC during the afternoon peak hour. Of these, 11 were Category B properties, four were Category C and three were Category E. All of the impacted receptors were predicted to equal or exceed the relevant NAC; none were predicted to increase by 10 dBA or more over existing conditions (**Appendix A**).

Figure 3-1 TNM Receptors Exceeding NAC for 2040 No Action Conditions

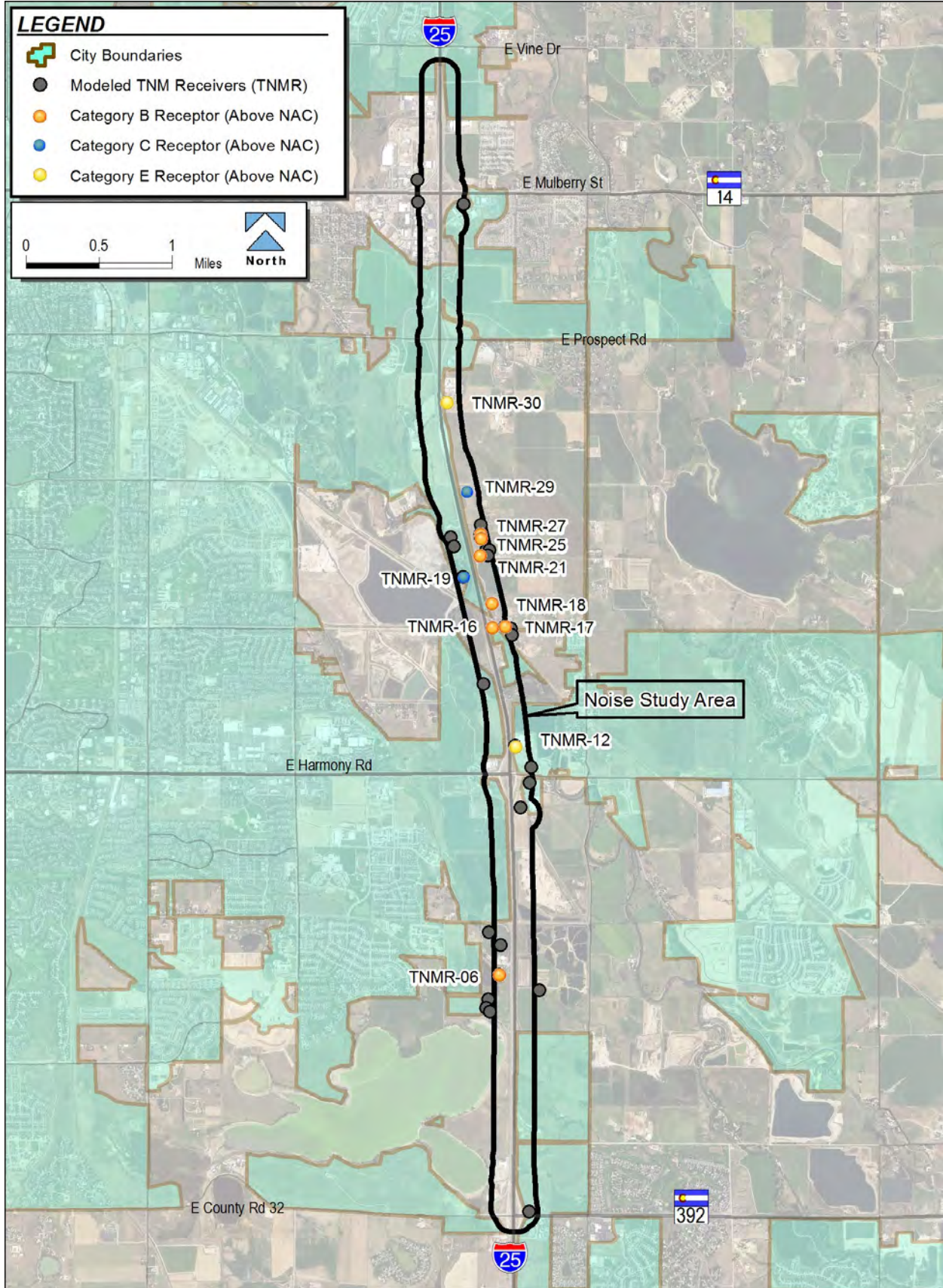
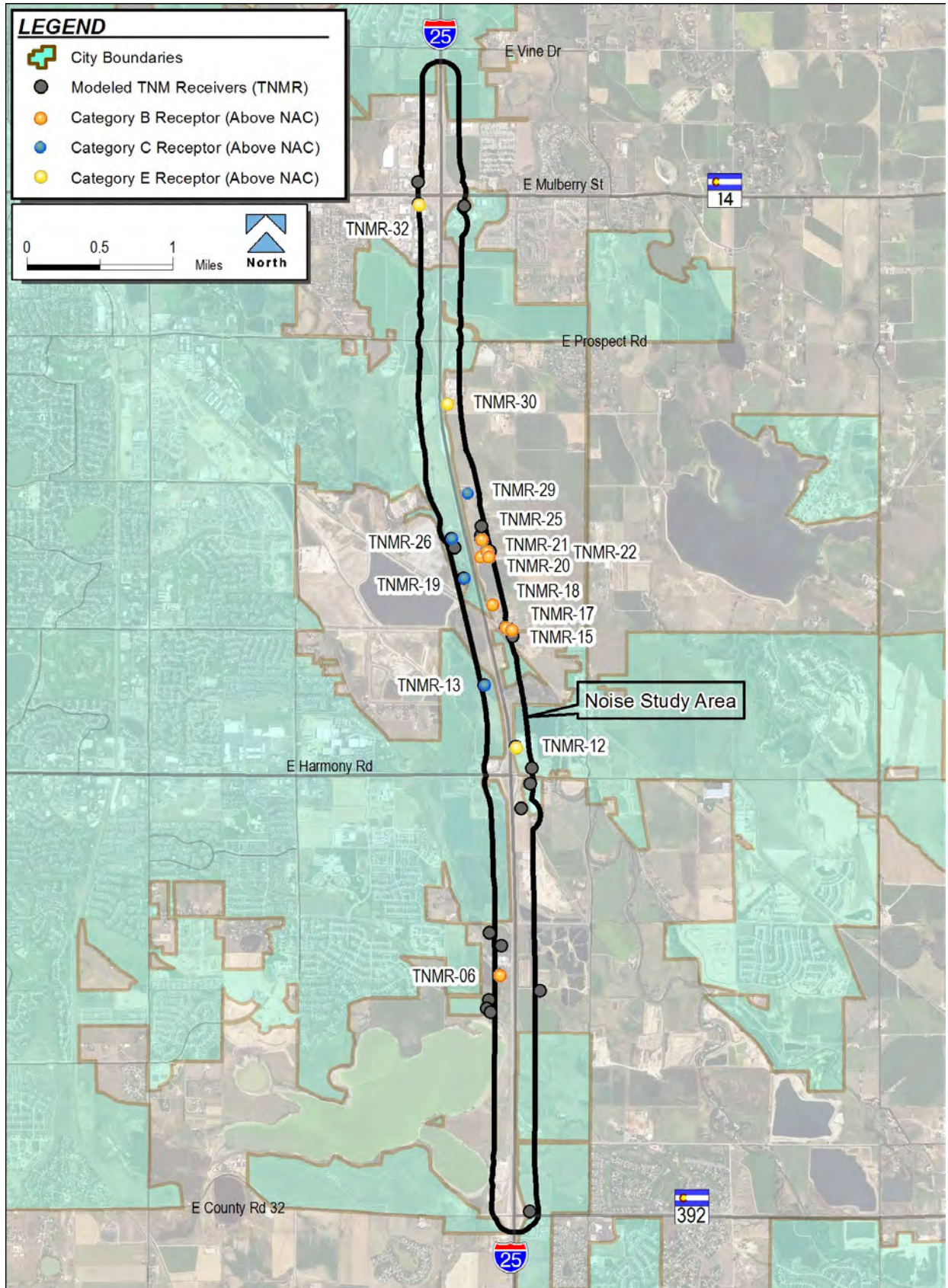


Figure 3-2 TNM Receptors Exceeding NAC for 2040 Accel/Decel Alternative (SH 392 to SH 14)



3.3 2040 EXPRESS LANE ALTERNATIVE RESULTS

To assess the Express Lane Alternative improvements for 2040, 32 points were modeled for traffic noise impacts (one home would be acquired). Overall, the calculated noise level range for the modeled points was 57.7 to 76.1 dBA. The noise impact results are illustrated in **Figure 3-3**. Detailed noise level results are presented in **Appendix A**.

Ten modeled points that represented 12 discrete receptors were calculated to have 2040 traffic noise levels above the respective NAC during the afternoon peak hour. Of these, eight were Category B properties, three were Category C and one was Category E. All of the impacted receptors were predicted to equal or exceed the relevant NAC; none were predicted to increase by 10 dBA or more over existing conditions (**Appendix A**).

3.4 SUMMARY OF TRAFFIC NOISE IMPACTS

Several receptors were calculated to be impacted by traffic noise for the 2040 Express Lane Alternative (Table 3-1). The residential areas (Category B) predicted to be impacted were isolated/dispersed homes along I-25. Impacted Category C receptors included Archery Range Natural Area, Arapaho Bend Natural Area, and St. James Church along I-25. The impacted Category E receptor consisted of a business along I-25.

Table 3-1 Summary of Calculated Traffic Noise Results

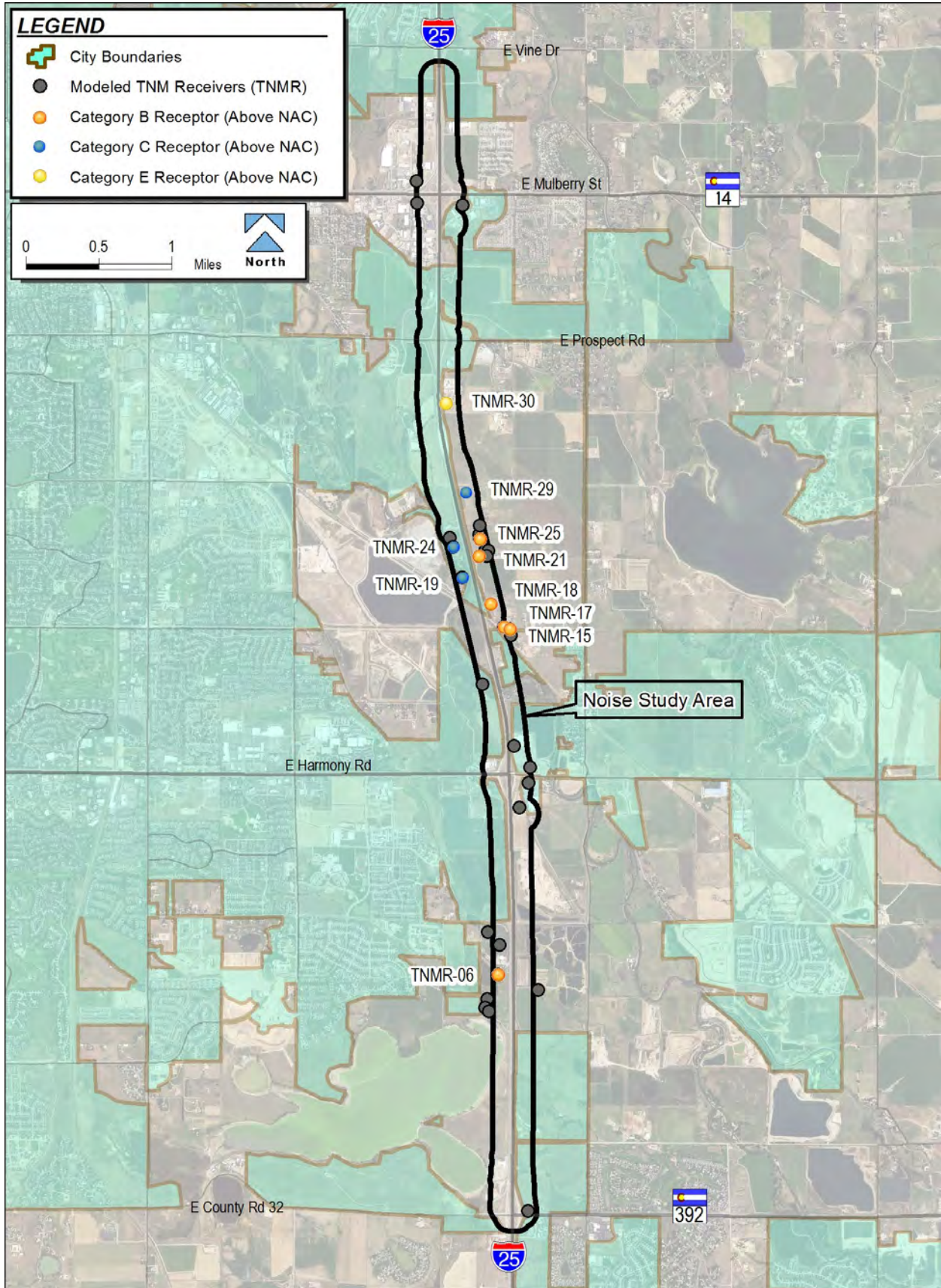
Land Use Category	Receptor Descriptions	Number of Receptors at or above the Respective NAC			Express Lane Alternative Noise Impacts (2040)
		Existing (2005)	No Action (2040)	Accel/Decel Alternative (SH 392 to SH 14) (2040)	
B	Dispersed rural residences	3	9	11	8
C	Church and parks	1	2	4	3
E	Commercial and office	0	2	3	1
Total		4	13	18	12

3.5 CONSTRUCTION NOISE

Adjoining properties near the Express Lane Alternative could be exposed to noise from construction activities. Construction noise differs from traffic noise in several ways:

- ▶ Construction noise lasts only for the duration of the construction event, with most construction activities in noise-sensitive areas being conducted during hours that are least disturbing to adjacent and nearby residents.

Figure 3-3 Noise-Impacted Receptors for 2040 Express Lane Alternative



- ▶ Construction activities generally are short term and, depending on the nature of the construction operations, could last from seconds (e.g., a truck passing a receptor) to months (e.g., constructing a bridge).
- ▶ Construction noise is intermittent and depends on the type of operation, location, and function of the equipment, and the equipment usage cycle.

Construction noise is not assessed like operational traffic noise; there are no CDOT NACs for construction noise. Therefore, no construction noise impacts have been identified for the proposed revision. However, construction noise would be subject to relevant local regulations and ordinances, and any construction activities would be expected to comply with them.

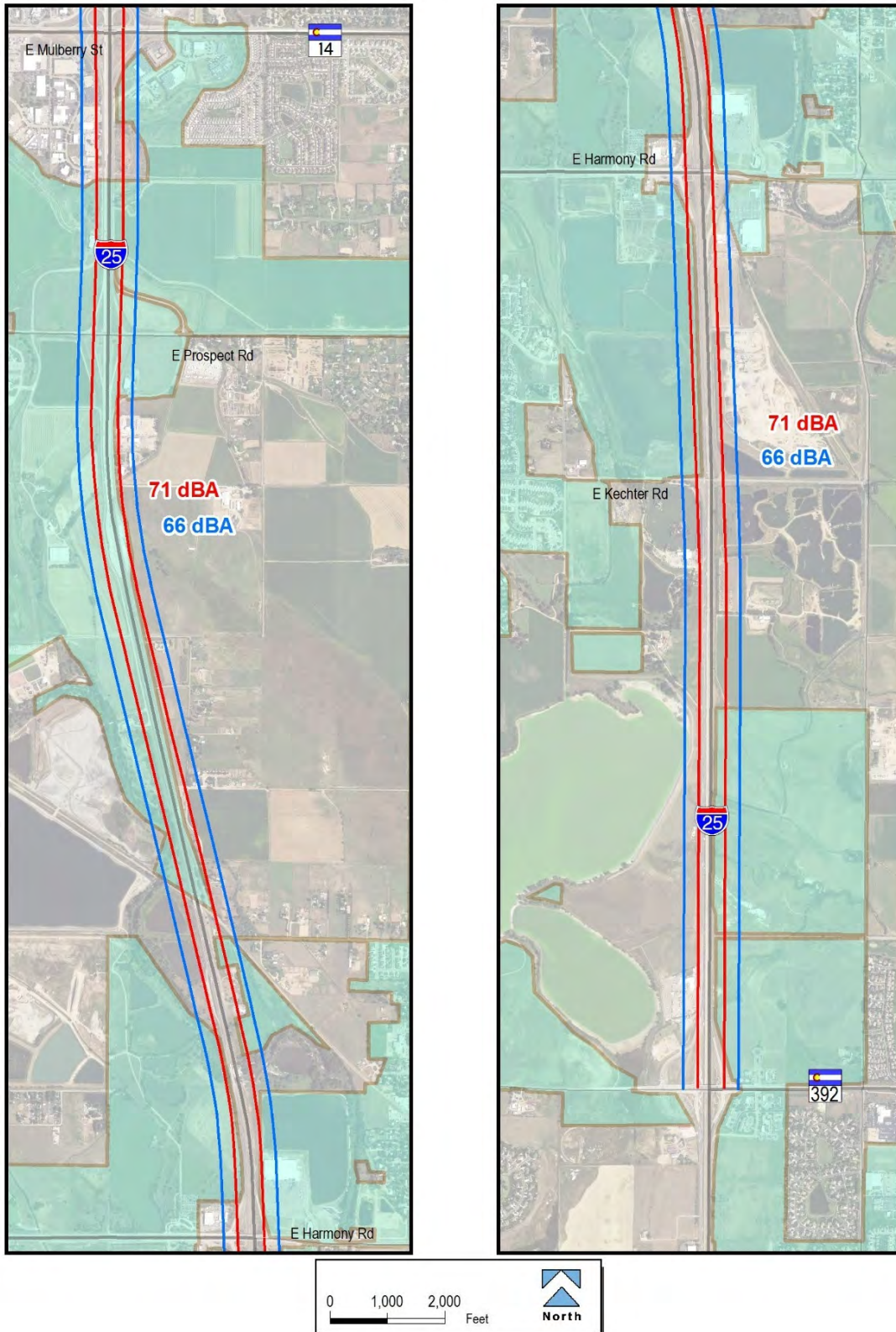
The Express Lane Alternative abuts residential areas and recreation sites. To minimize construction noise levels, typical best practices should be incorporated into construction contracts where it is appropriate to do so. These may include:

- ▶ Notify neighbors in advance when construction noise may occur and its expected duration so that they may plan appropriately.
- ▶ Manage construction activities to keep noisy activities as far from sensitive receptors as possible.
- ▶ Keep exhaust systems on equipment in good working order. Equipment would be maintained on a regular basis, and equipment may be subject to inspection by the construction project manager to ensure maintenance.
- ▶ Properly designed engine enclosures and intake silencers would be used where appropriate.
- ▶ New equipment would be subject to new product noise emission standards.
- ▶ Stationary equipment would be located as far from sensitive receptors as possible.
- ▶ Perform construction activities in noise sensitive areas during hours that are least disturbing to adjacent and nearby residents.

3.6 INFORMATION FOR LOCAL OFFICIALS

To support local land use planning decisions and future development, the 2040 distances to the CDOT Category B/C (66 dBA) and E (71 dBA) NAC sound levels for the Express Lane Alternative were evaluated. The distances will vary somewhat over the corridor due to topography and changing road alignments, but in general, land within approximately 550 feet from the proposed new edge of I-25 may be above 66 dBA during peak traffic noise hours. Under CDOT and FHWA guidelines, undeveloped properties may not be compatible with residential uses without abatement for traffic noise. The distance to 71 dBA for sensitive commercial properties would be approximately 300 feet from the proposed new edge of I-25. An overview of these contours is provided on **Figure 3-4**.

Figure 3-4 Estimated Noise Contour Lines, Express Lane Alternative (2040)





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4.0 NOISE ABATEMENT EVALUATION

Abatement evaluations for the traffic noise impacts for the Express Lane Alternative were performed for the follow-up analyses because receptors in the project corridor were predicted to be above the applicable CDOT NAC (**Table 1.1**). This includes multiple geographic areas and multiple land uses.

Impacted areas are not guaranteed abatement measures under CDOT's policies, but abatement measures need to be evaluated. Typically, noise barriers are the primary abatement action evaluated but other kinds of abatement were also considered. For reasons described below, barriers appeared to be the only viable abatement action and were the only abatement evaluated in detail. CDOT's minimum feasible noise reduction from abatement is 5 dBA while the design goal is a reduction of at least 7 dBA.

Numerous locations were evaluated for barrier placement (**Figure 4-1**). In accordance with the guidelines (CDOT, 2015), at least two barrier placements and heights were analyzed, unless only one location/height would be possible. For each evaluation, hypothetical barriers protecting the impacted areas were included in a TNM model and the model was run to assess and optimize barrier effectiveness, after which a preferred location was selected (**Appendix B**). Barrier heights from 6-20 feet tall were examined to provide comprehensive data for evaluation of the potential barrier effectiveness and optimization of the barrier cost-benefit index. After the minimum parameters for a feasible barrier were established in a given area (if possible), each barrier was optimized and assessed for reasonability (**Appendix C**). The overall feasibility and reasonableness of each barrier determined whether the barrier was then recommended for construction.

The topography of the project corridor plays a very important role in the overall noise environment. Any significant topographic changes between I-25 and the adjoining areas will affect the traffic noise levels and also have a major impact on the constructability of noise barriers. Because of topographic changes, a barrier may not be a constant height throughout its length even if the top elevation may be constant. These factors contribute to complexity of the barrier evaluations.

4.1 NON-BARRIER ABATEMENT EVALUATION

These items were discussed in the previous technical report (FHU, 2008) and Final EIS (CDOT, 2011a). The previous conclusions still hold true—these kinds of abatement measures do not appear to be feasible and reasonable for I-25 and the study corridor. Therefore, non-barrier abatement measures are not recommended or discussed further.

4.2 REVIEW OF NOISE ABATEMENT FINDINGS

For a traffic noise abatement action to be recommended for inclusion in a project, the abatement must be found to be both feasible and reasonable according to CDOT's guidelines (CDOT, 2015). In general terms, a barrier must be buildable and provide a substantial noise reduction to impacted receptors while also meeting the cost/benefit criterion (\$6,800/receptor/dBA). When these conditions are met, an abatement action can be recommended. Final decisions on barrier size, placement, feasibility, reasonableness and materials will be made during final design.

Figure 4-1 Prospective Noise Abatement Barriers Evaluated



Several noise barriers were evaluated (**Figure 4-1**). The findings for these barriers are presented in **Table 4-1**.

Table 4-1 Express Lane Alternative Abatement Barrier Summary

Impacted Location ^a	Barrier Height (feet)	Barrier Length (feet)	Total Noise Benefit from Barrier (dBA) ^b	Cost Analysis (\$/receptor/dB)	Feasible?	Reasonable?	Recommended?	Comment
1—ABC Signs	9-11	600	7.0	37,286	Yes	No	No	Cost-benefit was calculated to be prohibitive.
2—St. James Church	10-20	1,337	7.0	155,355	Yes	No	No	Cost-benefit was calculated to be prohibitive.
3—Arbee Lane, Stable Lane, and Lake Street	7-20	2,640	38.9	36,410	Yes	No	No	Cost-benefit was calculated to be prohibitive.
4—Arapaho Bend and Archery Range	7-20	2,800	17.2	103,081	Yes	No	No	Cost-benefit was calculated to be prohibitive.
5—N. Harrison Ave, E CR 40	6-13	2,243	12.1	90,851	Yes	No	No	Cost-benefit was calculated to be prohibitive.
6—South of Kechter Rd	20	3,800	NA	NA	Yes	No	No	Could not achieve 7 dBA noise reduction.

^a = See Figure 4-1

^b = Total benefit from all benefitting receptors

NA = Not applicable; could not achieve 7 dBA noise reduction

None of the barriers examined were found to meet the benefit-cost criterion. Based on these results, no barriers are recommended for construction in association with Express Lane Alternative. **Appendices B and C** include additional supporting information about the barrier evaluations.

4.3 STATEMENT OF LIKELIHOOD

Twelve receptors were concluded to be impacted by traffic noise in 2040 under the Express Lane Alternative (**Figure 3-3**). For a noise abatement action to be implemented, it must be both feasible and reasonable according to the evaluation guidelines (CDOT, 2015). The noise abatement analysis and the associated abatement measures were described above and the conclusion was that none of the abatement barriers would be both feasible and reasonable. Consequently, none of the receptors identified as impacted (**Figure 3-2**) have feasible and reasonable noise abatement options. No noise barriers have been recommended for inclusion with the Express Lane Alternative. Note that these feasibility and reasonableness determinations for this project may change if there are changes in final design after approval of the National Environmental Policy Act documentation. The preliminary CDOT 1209 forms are presented in **Appendix C**.



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5.0 REFERENCES

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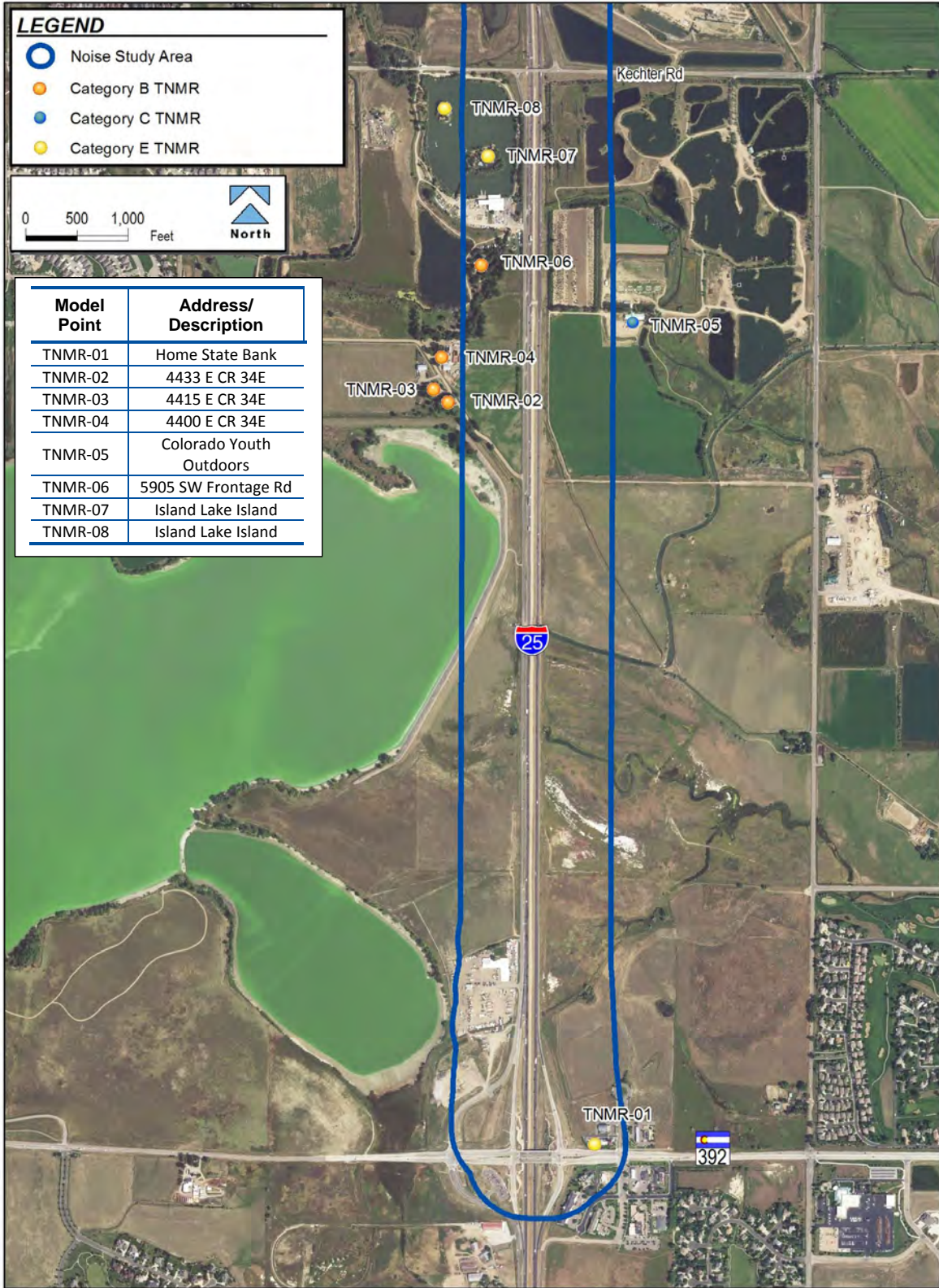
**APPENDIX A
TNM NOISE MODEL RECEIVERS,
TRAFFIC DATA, AND RESULTS**

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TNM NOISE MODEL RECEIVERS







TNM TRAFFIC DATA

Road	Vehicles per hour			Speed (mph)
	Cars	Medium Trucks	Heavy Trucks	
Existing Conditions (2005)				
SB Frontage Rd at Crossroads Blvd	395	19	4	45
NB Off Ramp at SH 392	365	17	38	45
NB On Ramp at SH 392	426	20	44	45
SB Off Ramp at SH 392	619	28	64	45
SB On Ramp at SH 392	244	11	25	45
SB Frontage Rd at SH 392	128	6	1	45
Kechter Rd Overpass	10	0	0	35
NB Frontage Rd at Kechter Rd	71	3	1	45
NB off ramp at Harmony Rd	940	43	97	45
NB on ramp at Harmony Rd	400	18	41	45
SB off ramp at Harmony Rd	436	20	45	45
SB on ramp at Harmony Rd	888	41	92	45
Harmony Road Overpass	491	23	5	45
NB Frontage Rd at CR 76	92	4	1	45
SB Frontage Rd at Prospect Rd	25	1	0	40
Prospect Rd Overpass	829	39	9	35
NB off Ramp at Prospect Rd	412	19	43	45
NB on Ramp at Prospect Rd	184	8	19	45
SB off Ramp at Prospect Rd	137	6	14	45
SB on Ramp at Prospect Rd	661	30	68	45
NB Frontage Rd at Prospect Rd	232	18	22	45
EB SH 14 Overpass	642	50	60	40
WB SH 14 Overpass	699	55	66	40
NB Off Ramp at SH 14	191	9	20	45
NB On Ramp at SH 14	275	13	28	45
SB Off Ramp at SH 14	165	8	17	45
SB On Ramp at SH 14	687	32	71	45
Frontage Rd at SH14 NE	252	20	24	40
Frontage Rd at SH 14 NW	203	16	19	35
I-25 SB 3	2220	102	230	75
I-25 NB 4	1692	78	175	75
NB Frontage Rd at Crossroads Blvd 2	406	19	4	45
I-25 SB 1	1024	47	106	75
I-25 SB 2	1692	78	175	75
I-25 NB 5	1024	47	106	75
SH14 Frontage SW	376	30	35	45
I-25 NB 3	2220	102	230	75
WB SH392 A	631	23	7	45
EB SH392 B	870	31	9	45
WB SH392 C	645	23	7	45
EB SH392 A	573	21	6	45
WB SH392 B	707	25	7	45



EB SH392 C	879	31	9	45
County Road	46	2	1	35
Harmony Road Overpass 2	1408	67	15	45
Harmony EB1	940	45	10	45
Harmony EB2	586	28	6	45
NB Frontage Rd at Kechter Rd 2	71	3	1	35
2040 No Action				
SB Frontage Rd at Crossroads Blvd	1448	49	18	45
NB Off Ramp at SH 392	927	31	12	45
NB On Ramp at SH 392	1032	35	13	45
SB Off Ramp at SH 392	1044	48	108	45
SB On Ramp at SH 392	1109	37	14	45
SB Frontage Rd at SH 392	2151	72	27	45
Kechter Rd Overpass	10	0	0	35
NB Frontage Rd at Kechter Rd	71	3	1	45
NB off ramp at Harmony Rd	1730	58	22	45
NB on ramp at Harmony Rd	784	26	10	45
SB off ramp at Harmony Rd	1376	46	17	45
SB on ramp at Harmony Rd	1606	54	20	45
Harmony Road Overpass	2428	82	30	45
NB Frontage Rd at CR 76	92	4	1	45
SB Frontage Rd at Prospect Rd	25	1	0	40
Prospect Rd Overpass	829	39	9	35
NB off Ramp at Prospect Rd	918	31	12	45
NB on Ramp at Prospect Rd	1252	42	16	45
SB off Ramp at Prospect Rd	1185	40	15	45
SB on Ramp at Prospect Rd	1128	38	14	45
NB Frontage Rd at Prospect Rd	232	18	22	45
EB SH 14 Overpass	3832	134	159	40
WB SH 14 Overpass	1565	55	65	40
NB Off Ramp at SH 14	910	32	38	45
NB On Ramp at SH 14	474	17	20	45
SB Off Ramp at SH 14	344	12	14	45
SB On Ramp at SH 14	1068	37	44	45
Frontage Rd at SH14 NE	252	20	24	40
Frontage Rd at SH 14 NW	203	16	19	35
I-25 SB 3	2852	97	252	75
I-25 NB 4	2852	97	252	75
NB Frontage Rd at Crossroads Blvd 2	1802	61	23	45
I-25 SB 1	2852	97	252	75
I-25 SB 2	2852	97	252	75
I-25 NB 5	2852	97	252	75
SH14 Frontage SW	376	30	35	45
I-25 NB 3	2852	97	252	75
WB SH392 A	2399	81	30	45
EB SH392 B	2122	71	27	45
WB SH392 C	2007	67	25	45

EB SH392 A	1826	61	23	45
WB SH392 B	2237	75	28	45
EB SH392 C	2179	73	27	45
County Road	46	2	1	35
Harmony Road Overpass 2	2428	82	30	45
Harmony EB1	5334	179	67	45
Harmony EB2	3986	134	50	45
NB Frontage Rd at Kechter Rd-2	71	3	1	71
EB SH 14 Overpass-2	2165	76	90	40
WB SH 14 Overpass-2	2420	85	100	40
Harmony EB1-2	3986	134	50	45
Harmony Road Overpass-2-2	4493	151	56	45
Accel/Decel Alternative (SH 392 to SH 14) (2040)				
SB Frontage Rd at Crossroads Blvd	732	35	8	55
NB Off Ramp at Hwy-392	927	31	12	45
NB On Ramp at Hwy-392	1032	35	13	55
SB Off Ramp at Hwy-392	1176	39	15	45
SB On Ramp at Hwy-392	1109	37	14	55
SB Frontage Rd at hwy-392	2275	76	29	55
Kechter Rd Overpass	50	0	0	35
NB Frontage Rd at Kechter Rd	288	14	3	45
NB off ramp at Harmony Rd	1730	58	22	45
NB on ramp at Harmony Rd	784	26	10	55
SB off ramp at Harmony Rd	1376	46	17	45
SB on ramp at Harmony Rd	1606	54	20	55
Harmony Road Overpass EB	5334	179	67	45
NB Frontage Rd at CR-76	468	22	5	45
SB Frontage Rd at Prospect Rd	184	9	2	40
Prospect Rd Overpass WB	2667	90	33	35
NB off Ramp at Prospect Rd	918	31	12	45
NB on Ramp at Prospect Rd	1252	42	16	55
SB off Ramp at Prospect Rd	1185	40	15	45
SB on Ramp at Prospect Rd	1128	38	14	55
NB Frontage Rd at Prospect Rd	763	60	72	35
EB SH 14 Overpass	3832	134	159	35
WB SH 14 Overpass	1565	55	65	45
NB Off Ramp at SH 14	910	32	38	45
NB On Ramp at SH 14	474	17	20	55
SB Off Ramp at SH 14	344	12	14	45
SB On Ramp at SH 14	1068	37	44	55
NB Frontage Rd at SH14	674	53	63	55
SB Frontage Rd at SH 14	563	44	53	45
EB SH392 B	2179	73	27	45
I-25 SB 5	4278	145	377	75
I-25 NB 2	4278	145	377	75
NB Frontage Rd at Crossroads Blvd-2	936	45	10	55
I-25 SB 1	4278	145	377	75

I-25 SB 2	4278	145	377	75
I-25 NB 5	4278	145	377	75
SH14 frontage SW	1040	50	11	45
SH14 loop	171	13	16	30
SH14 connector	171	13	16	35
I-25 NB 4	4278	145	377	75
Harmony Road Overpass WB	2428	82	30	35
Prospect Rd Overpass EB	2504	84	31	35
I-25 SB 4	4278	145	377	75
I-25 NB 1	4278	145	377	75
Roadway249	234	11	3	35
I-25 NB 3	4278	145	377	75
I-25 SB 3	4278	145	377	75
EB SH 14 Overpass-2	2165	76	90	45
WB SH 14 Overpass-2	2420	85	100	45
Harmony Road Overpass WB-2	4493	151	56	45
Harmony Road Overpass EB-2	3986	134	50	45
EB SH392 A	1826	61	23	45
EB SH392 C	2179	73	27	45
WB SH392 A	2399	81	30	45
WB SH392 B	2399	81	30	45
WB SH392 C	2007	67	25	45

Express Lane Alternative (2040)

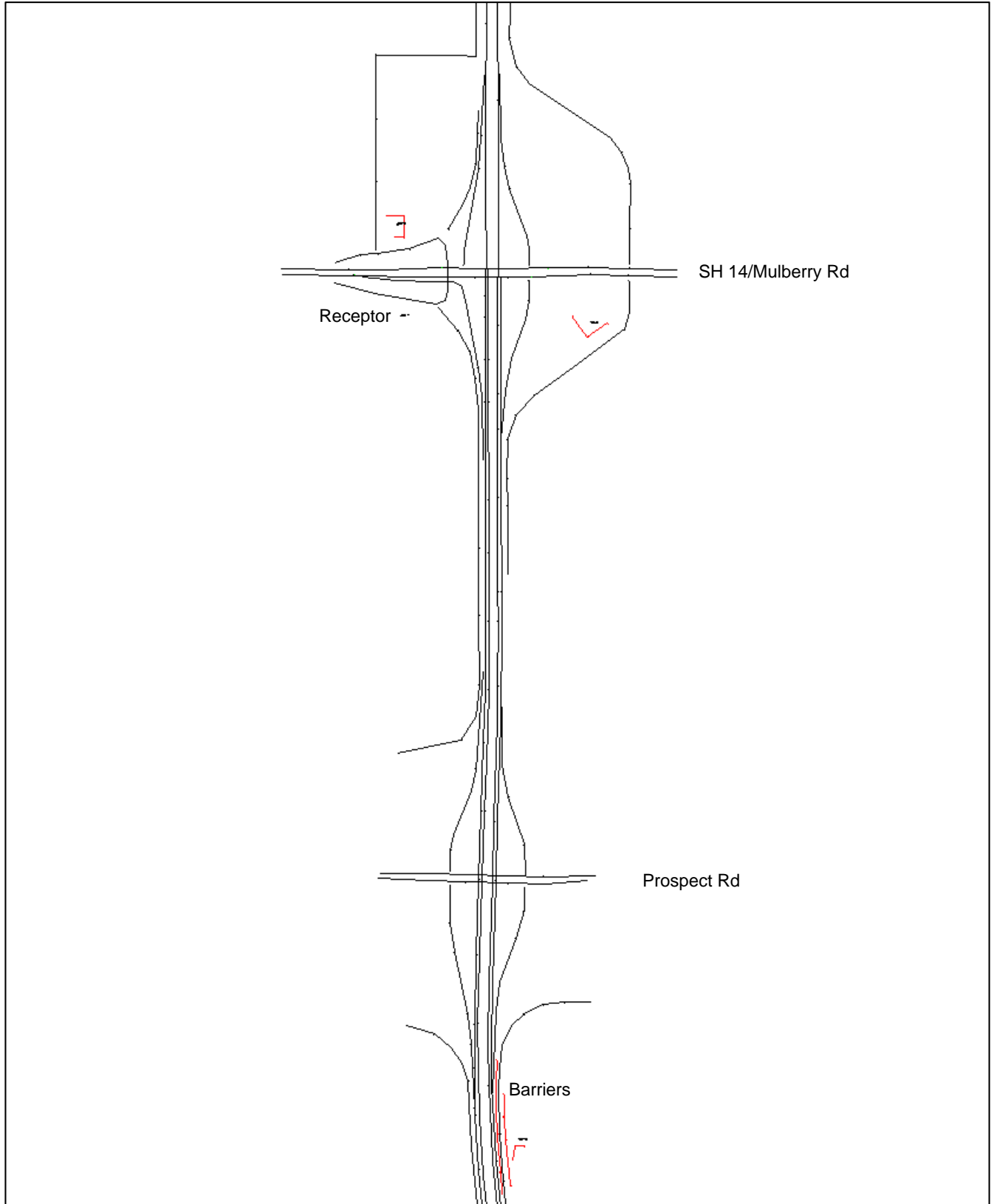
County Road	234	11	3	35
EB SH 14 OverpassA	3832	134	159	45
EB SH 14 OverpassB	3832	134	159	35
EB SH 14 OverpassC	2165	76	90	45
EB SH392 A	1826	61	23	45
EB SH392 B	2122	71	27	45
EB SH392 C	2179	73	27	45
Harmony Road Overpass EB	3088	104	39	45
Harmony Road Overpass EB-2	1740	58	22	45
Harmony Road Overpass EB-2	1740	58	22	45
Harmony Road Overpass WB	1386	47	17	40
Harmony Road Overpass WB-2	1386	47	17	45
Harmony Road Overpass WB-2-2	3279	110	41	45
I-25 NB 1	2852	97	252	75
I-25 NB 2	2852	97	252	75
I-25 NB 3	2852	97	252	75
I-25 NB 3a	4278	145	377	75
I-25 NB 4	4278	145	377	75
I-25 NB 5	2852	97	252	75
I-25 SB 1	2852	97	252	75
I-25 SB 2	4278	145	377	75
I-25 SB 3	4278	145	377	75
I-25 SB 3a	2852	97	252	75
I-25 SB 4	2852	97	252	75

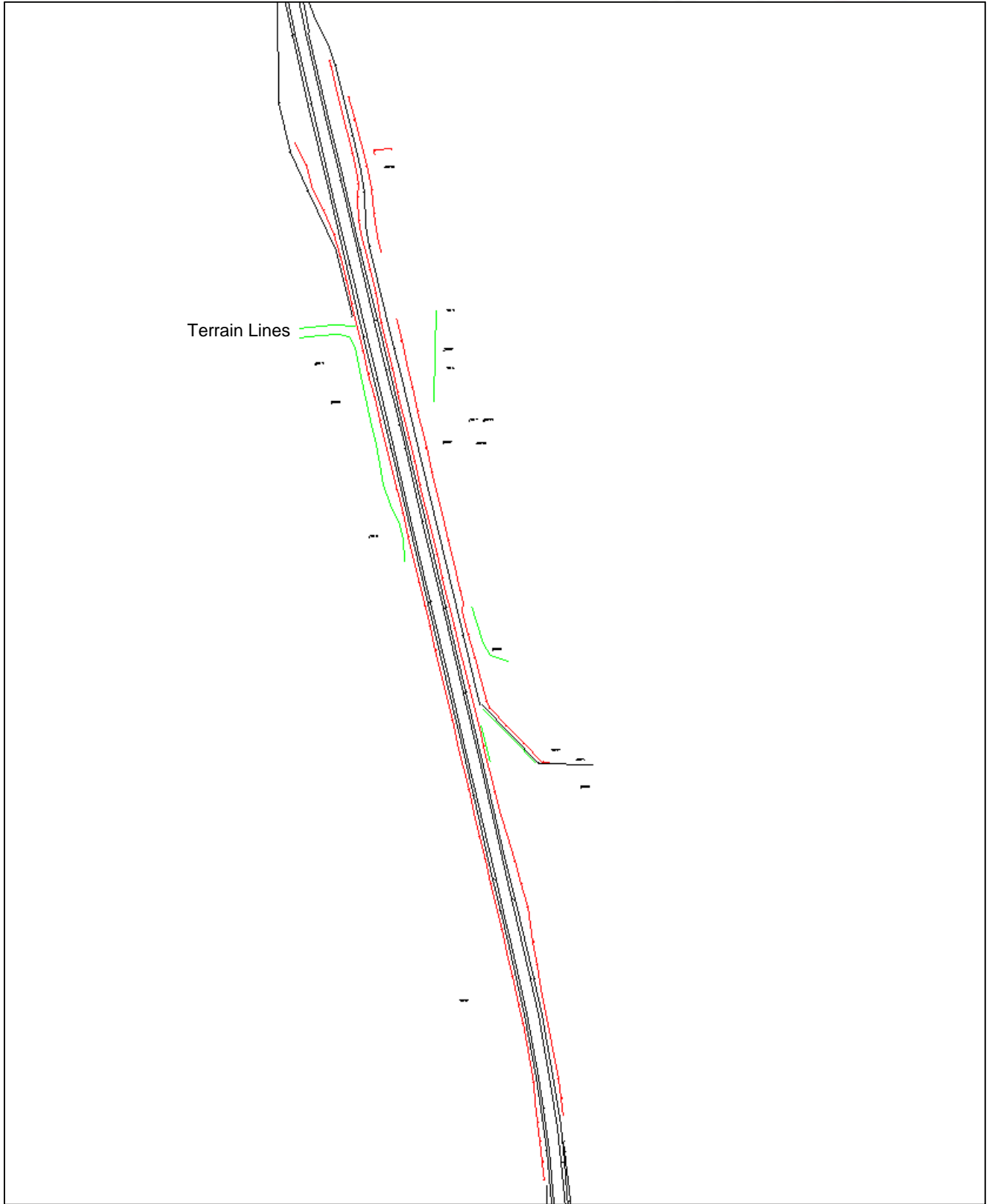


I-25 SB 5	2852	97	252	75
Kechter Rd Overpass	50	0	0	35
NB Frontage Rd at CR-76	468	22	5	45
NB Frontage Rd at Kechter Rd	288	14	3	45
NB Frontage Rd at Prospect Rd	763	60	72	35
NB Frontage Rd at SH14	862	68	81	55
NB off ramp at Harmony Rd	1355	46	119	45
NB Off Ramp at Hwy-392	749	25	66	45
NB off Ramp at Prospect Rd	722	24	64	45
NB Off Ramp at SH 14	1818	62	160	45
NB on ramp at Harmony Rd	726	24	9	55
NB On Ramp at Hwy-392	650	22	8	55
NB on Ramp at Prospect Rd	1042	35	13	55
NB On Ramp at SH 14	474	17	20	55
Prospect Rd Overpass EB	2399	81	30	35
Prospect Rd Overpass WB	2667	90	33	35
SB Frontage Rd at hwy-392	2275	76	29	55
SB Frontage Rd at Prospect Rd	184	9	2	40
SB Frontage Rd at SH 14	563	44	53	45
SB off ramp at Harmony Rd	1274	43	112	45
SB Off Ramp at Hwy-392	579	20	51	45
SB off Ramp at Prospect Rd	856	29	75	45
SB Off Ramp at SH 14	356	12	31	45
SB on ramp at Harmony Rd	1549	52	19	55
SB On Ramp at Hwy-392	631	21	8	55
SB on Ramp at Prospect Rd	889	30	11	55
SB On Ramp at SH 14	1068	37	44	55
SH14 connector	171	13	16	35
SH14 frontage SW	1040	50	11	45
SH14 loop	171	13	16	30
TEL NB 1 ^a	1300	0	0	75
TEL NB 2 ^a	1100	0	0	75
TEL NB 3 ^a	1150	0	0	75
TEL NB 4 ^a	1150	0	0	75
TEL SB 1 ^a	870	0	0	75
TEL SB 2 ^a	870	0	0	75
TEL SB 3 ^a	810	0	0	75
TEL SB 4 ^a	1160	0	0	75
WB SH 14 OverpassA	1565	55	65	45
WB SH 14 OverpassB	2420	85	100	35
WB SH 14 OverpassC	2420	85	100	45
WB SH392 A	2399	81	30	45
WB SH392 B	2237	75	28	45
WB SH392 C	2007	67	25	45

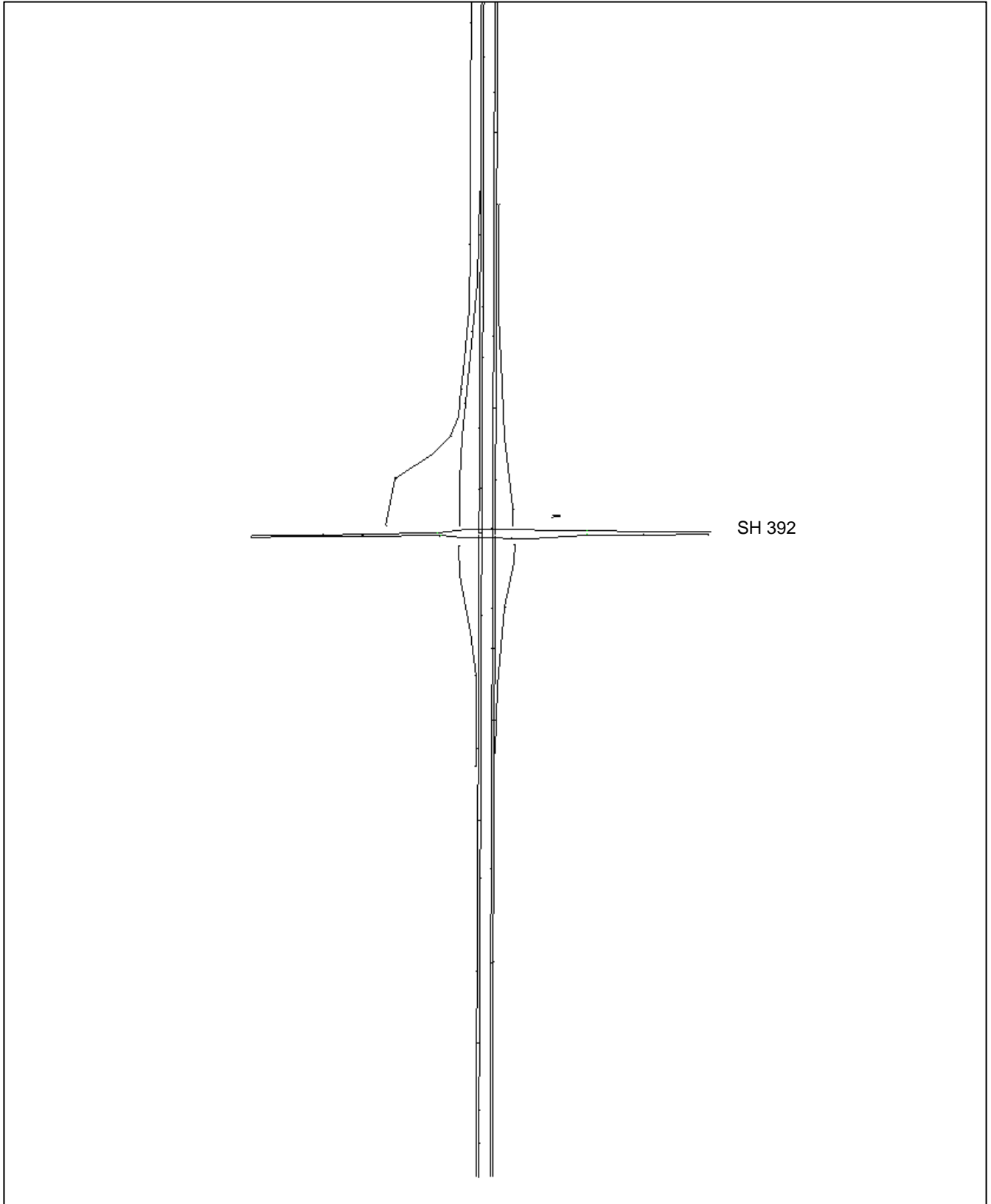
^a Plus 5 buses per hour

TNM MODEL OBJECTS (TNM SCREEN SHOTS)









TNM RESULTS

Model Point	Activity Category / CDOT NAC (dBA)	Dwelling Units	Existing (2005) L _{eq} (dBA)	No Action (2040) L _{eq} (dBA)	Accel/Decel Alt. (2040) L _{eq} (dBA)	Express Lane Alternative (2040) L _{eq} (dBA)	Express Lane Alternative L _{eq} Result*	Express Lane Alternative change Over Existing (dBA)
TNMR-01	E / 71	1	62.6	66.6	67.3	66.5		+3.9
TNMR-02	B / 66	1	57.9	60.3	62.3	60.2		+2.3
TNMR-03	B / 66	1	56.8	59.2	61.7	59.1		+2.3
TNMR-04	B / 66	1	59.2	61.5	64.2	61.8		+2.6
TNMR-05	C / 66	1	58.9	61.3	63.5	61.9		+3.0
TNMR-06	B / 66	3	64.6	66.9	69.6	66.1	I	+1.5
TNMR-07	E / 71	1	64.8	67.1	69.9	65.3		+0.5
TNMR-08	E / 71	1	58.8	61.1	62.1	57.7		-1.1
TNMR-09	E / 71	1	65.4	67.5	69.3	69.1		+3.7
TNMR-12	E / 71	1	68.7	70.9	71.9	69.1		+0.4
TNMR-13	C / 66	1	62.3	64.5	66.4	62.9		+0.6
TNMR-14	B / 66	1	60.0	62.2	64.4	63.1		+3.1
TNMR-15	B / 66	1	61.4	63.2	66.8	66.1	I	+4.7
TNMR-16	B / 66	1	66.1	68.3	<i>Acquired under Phase 1</i>			
TNMR-17	B / 66	1	63.7	65.8	68.4	68.0	I	+4.3
TNMR-18	B / 66	1	70.1	72.3	75.2	72.4	I	+2.3
TNMR-19	C / 66	1	65.3	67.5	69.0	67.1	I	+1.8
TNMR-20	B / 66	1	62.3	64.5	65.9	64.1		+1.8
TNMR-21	B / 66	1	66.8	69.0	72.0	70.9	I	+4.1
TNMR-22	B / 66	2	62.5	64.7	65.6	64.5		+2.0
TNMR-23	B / 66	2	60.1	62.2	64.1	62.9		+2.8
TNMR-24	C / 66	1	63.0	65.2	67.5	66.4	I	+3.4
TNMR-25	B / 66	1	63.6	65.8	66.2	65.9	I	+2.3
TNMR-26	C / 66	1	61.7	63.8	66.0	65.3		+3.6
TNMR-27	B / 66	1	63.3	65.5	65.2	65.3		+2.0
TNMR-28	B / 66	1	62.0	64.2	64.2	64.2		+2.2
TNMR-29	C / 66	1	66.2	68.3	69.1	68.6	I	+2.4
TNMR-30	E / 71	1	70.4	72.5	75.0	76.1	I	+5.7
TNMR-31	E / 71	1	58.0	60.0	61.9	61.5		+3.5
TNMR-32	E / 71	1	62.9	64.8	65.7	66.4		+3.5
TNMR-33	E / 71	1	55.0	58.4	62.9	63.5		+8.5
TNMR-34	E / 71	1	60.2	64.3	65.1	62.8		+2.6
TNMR-35	E / 71	1	63.1	66.8	68.7	65.1		+2.0

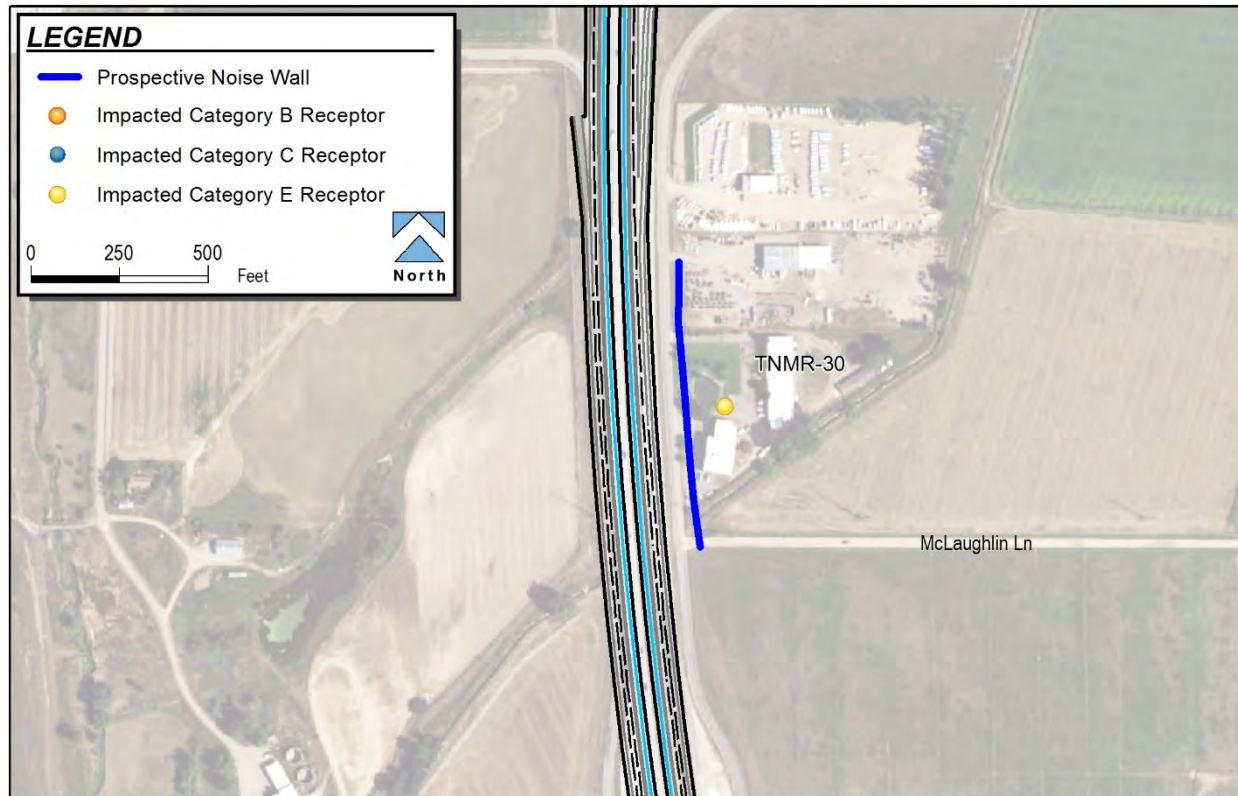
Highlighted results equal or exceed the relevant NAC but are not considered to be impacts

* I = Impacted

**APPENDIX B
TRAFFIC NOISE ABATEMENT BARRIERS
EVALUATED - EXPRESS LANE ALTERNATIVE**

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ABC SIGNS BARRIER (RIGHT-OF-WAY)



TNMR = Traffic Noise Model Receiver

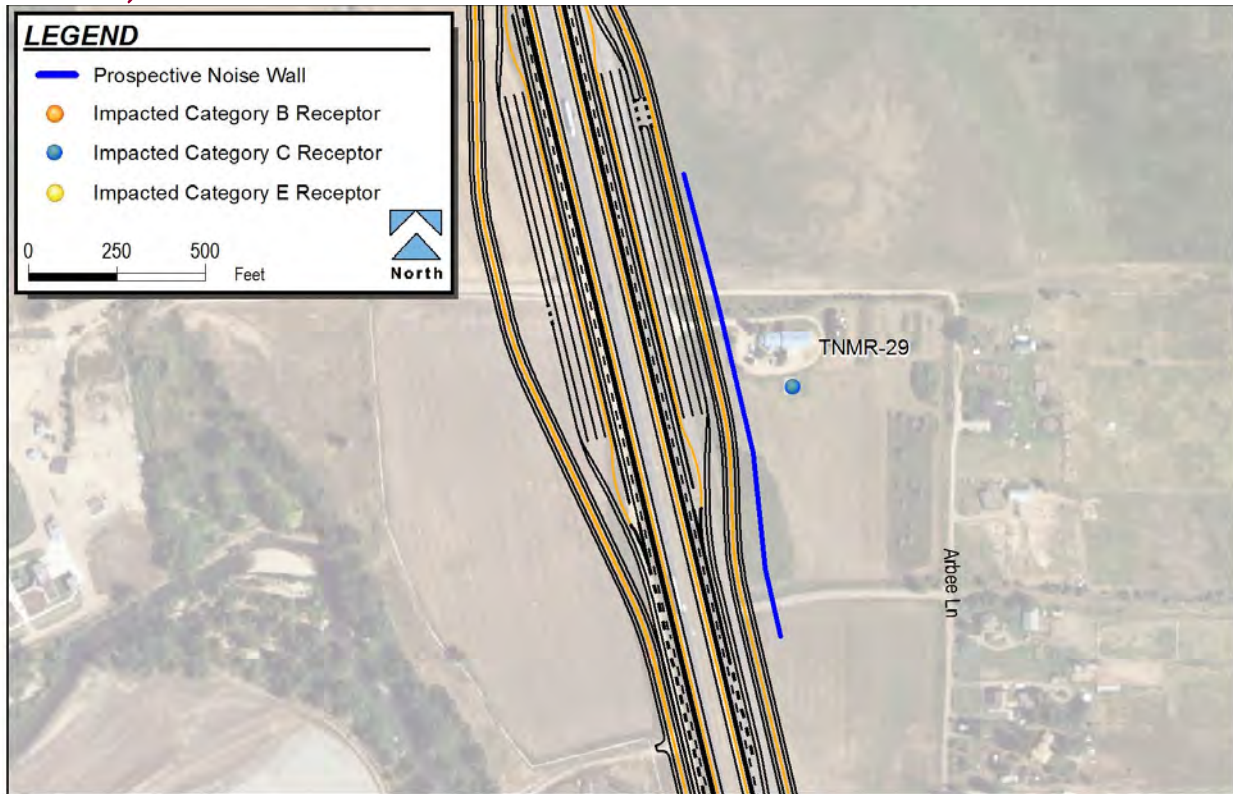
Approximate dimensions and cost of the traffic noise abatement wall:

Barrier Height & Length (feet)	Overall Barrier Size (sq. ft.)	Overall Cost
9 x 399	5,800	\$261,005
11x200		

Noise abatement results from TNM for the above wall:

Receptor Benefitting from Barrier	Total Decibels of Benefit Provided (dBA)	Calculated Sound Level with Barrier (dBA)	Cost Benefit Index (\$/dBA/receptor)
TNMR-30	7.0	69.1	\$37,286

ST. JAMES CHURCH BARRIER (RIGHT-OF-WAY)



TNMR = Traffic Noise Model Receiver

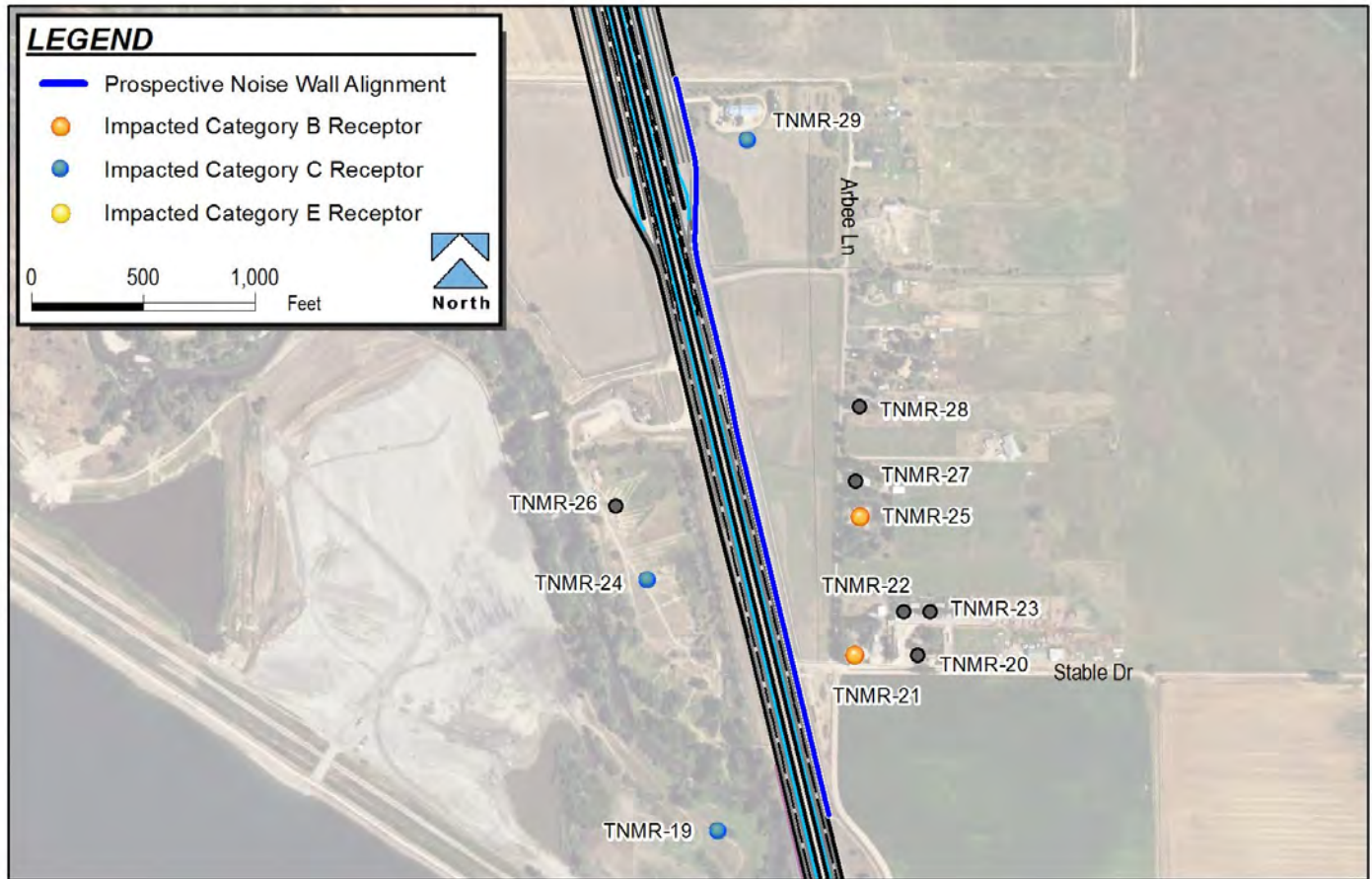
Approximate dimensions and cost of the traffic noise abatement wall:

Barrier Height & Length (feet)	Overall Barrier Size (sq. ft.)	Overall Cost
10 x 137	24,166	\$1,087,484
14 x 200		
20 x 1,000		

Noise abatement results from TNM for the above wall:

Receptor Benefitting from Barrier	Total Decibels of Benefit Provided (dBA)	Calculated Sound Level with Barrier (dBA)	Cost Benefit Index (\$/dBA/receptor)
TNMR-29	7.0	61.6	\$155,355

ARBEE LN, STABLE LN, & LAKE ST BARRIER (EDGE OF PAVEMENT)



TNMR = Traffic Noise Model Receiver

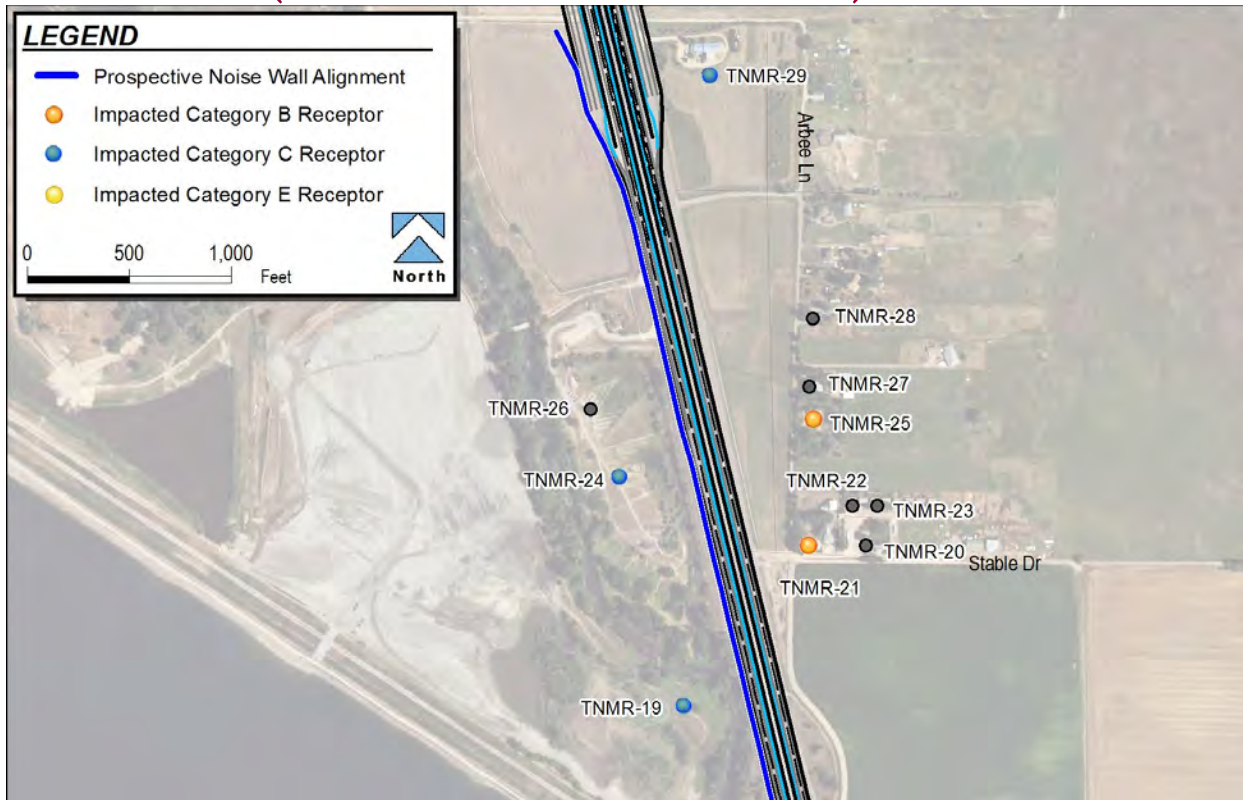
Approximate dimensions and cost of the traffic noise abatement wall:

Barrier Height & Length (feet)	Overall Barrier Size (sq. ft.)	Overall Cost
7 x 650	31,475	\$1,416,371
8 x 590		
9 x 200		
11 x 400		
20 x 800		

Noise abatement results from TNM for the above wall:

Receptors Benefitting from Barrier	Total Decibels of Benefit Provided (dBA)	Average Calculated Sound Level with Barrier (dBA)	Cost Benefit Index (\$/dBA/receptor)
TNMR-21, 22, 23, 25, 27	38.9	60.2	\$36,410

ARAPAHO BEND AND ARCHERY RANGE BARRIER (EDGE OF PAVEMENT)



TNMR = Traffic Noise Model Receiver

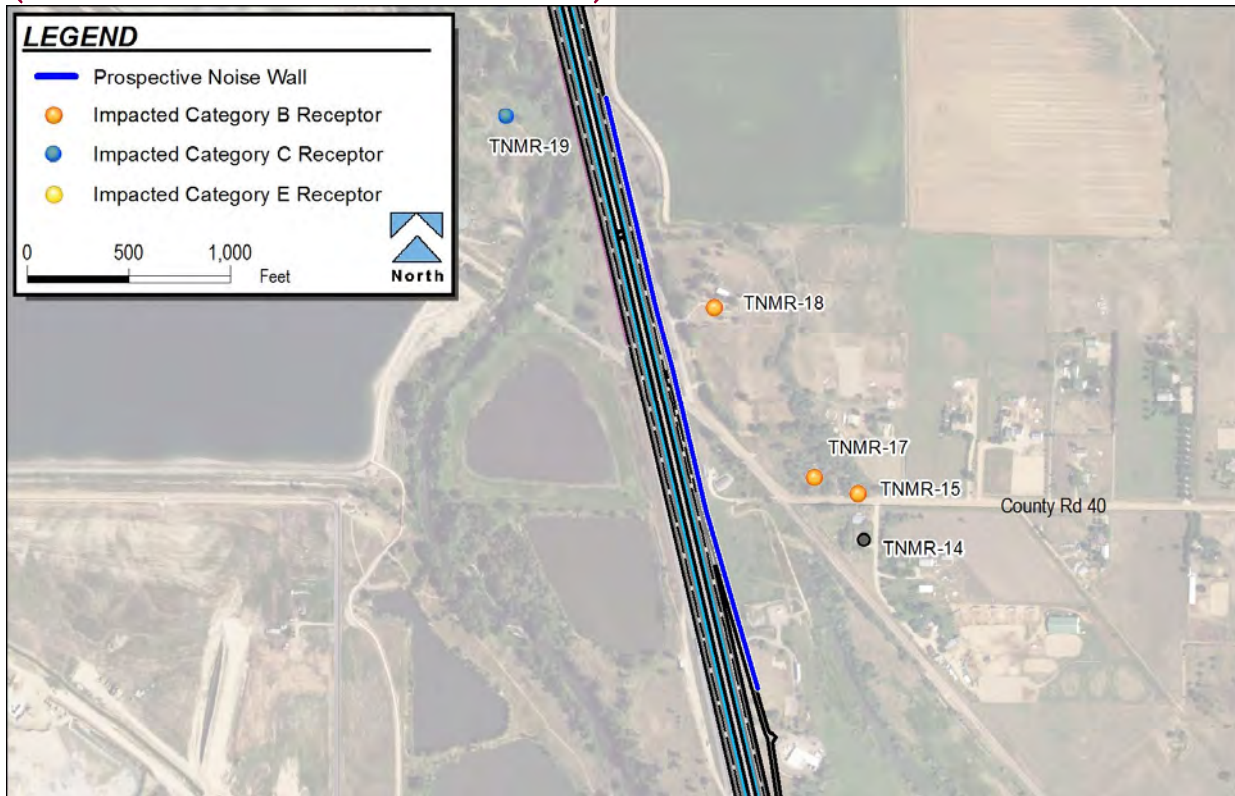
Approximate dimensions and cost of the traffic noise abatement wall:

Barrier Height & Length (feet)	Overall Barrier Size (sq. ft.)	Overall Cost
7 x 200	39,400	\$1,773,000
9 x 200		
11 x 400		
12 x 800		
17 x 400		
19 x 600		
20 x 200		

Noise abatement results from TNM for the above wall:

Receptors Benefitting from Barrier	Total Decibels of Benefit Provided (dBA)	Average Calculated Sound Level with Barrier (dBA)	Cost Benefit Index (\$/dBA/receptor)
TNMR-19, 24, 26	17.2	60.5	\$103,081

N. HARRISON AVE AND E. CR 40 BARRIER (EDGE OF PAVEMENT)



TNMR = Traffic Noise Model Receiver

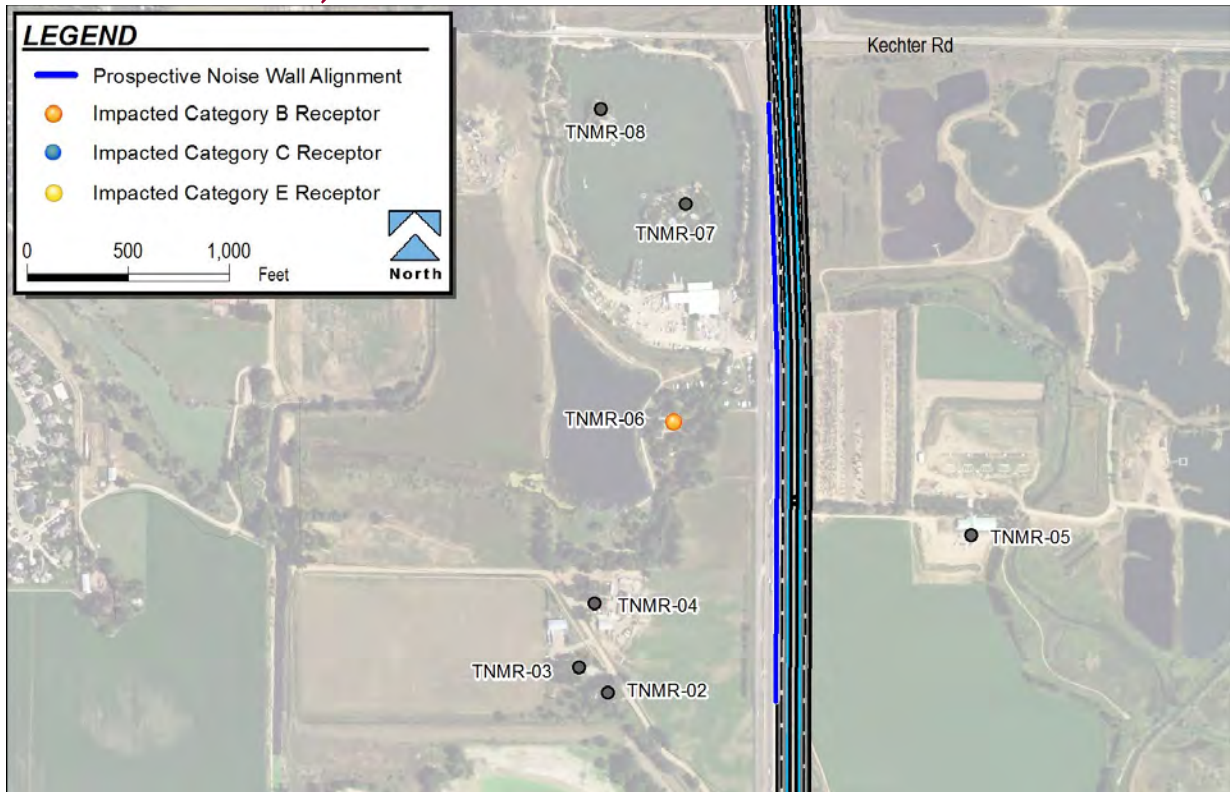
Approximate dimensions and cost of the traffic noise abatement wall:

Barrier Height & Length (feet)	Overall Barrier Size (sq. ft.)	Overall Cost
6 x 203	24,429	\$1,099,290
7 x 201		
10 x 230		
12 x 1,413		
13 x 197		

TNMR-15 did not benefit from the barriers examined. Noise abatement results from TNM for the above wall:

Receptors Benefitting from Barrier	Total Decibels of Benefit Provided (dBA)	Average Calculated Sound Level with Barrier (dBA)	Cost Benefit Index (\$/dBA/receptor)
TNMR-17, 18	12.1	63.2	\$90,851

BARRIER SOUTH OF KECHTER RD (EDGE OF PAVEMENT)



TNMR = Traffic Noise Model Receiver

Barriers at both the edge of pavement and right-of-way were examined. A 5-dBA reduction could be achieved, but a 7-dBA noise reduction could not be achieved at any of the receivers even with 20 foot barriers. Therefore, a barrier is feasible but not reasonable and is not recommended for these receivers.

APPENDIX C
CDOT 1209 EVALUATION FORMS

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Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION
NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____ Date of Analysis: 12/15/16

Project Name & Location: North I-25: SH 392- SH 14 Revised ROD1: ABC Signs

A. FEASIBILITY:

- 1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm? [X] YES [] NO
2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm? [] YES [X] NO
3. Can a noise barrier or berm less than 20 feet tall be constructed? [X] YES [] NO

B. REASONABLENESS:

- 1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor? [X] YES [] NO
2. Is the Cost Benefit Index below \$6800 per receptor per dBA? [] YES [X] NO
3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure? [] YES [] NO

C. INSULATION CONSIDERATION:

- 1. Are normal noise abatement measures physically infeasible or economically unreasonable? [X] YES [] NO
If the answer to 1 is YES, then:
2. a. Does this project have noise impacts to NAC Activity Category D? [] YES [X] NO
b. If yes, is it reasonable and feasible to provide insulation for these buildings? [] YES [] NO

D. ADDITIONAL CONSIDERATIONS:

None

E. STATEMENT OF LIKELIHOOD:

- 1. Are noise mitigation measures feasible? [X] YES [] NO
2. Are noise mitigation measures reasonable? [] YES [X] NO
3. Is insulation of buildings both feasible and reasonable? [] YES [X] NO
4. Shall noise abatement measures be provided? [] YES [X] NO

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

The cost benefit index is too high at nearly \$37,286. Abatement is not recommend.

Completed by: [Signature] Date: 12/15/16



Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION
NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____ Date of Analysis: 12/15/16 _____

Project Name & Location: North I-25: SH 392- SH 14 Revised ROD1: St. James Church

A. FEASIBILITY:

- 1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
- 2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
- 3. Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

- 1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
- 2. Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
- 3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

- 1. Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
- 2. a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
- b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

None

E. STATEMENT OF LIKELIHOOD:

- 1. Are noise mitigation measures feasible?
 YES NO
- 2. Are noise mitigation measures reasonable?
 YES NO
- 3. Is insulation of buildings both feasible and reasonable?
 YES NO
- 4. Shall noise abatement measures be provided?
 YES NO

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

The cost benefit index is too high at nearly \$155,355. Abatement is not recommend.

Completed by: Jodie W. Snyder Date: 1/10/17



Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____ Date of Analysis: 12/15/16

Project Name & Location: North I-25: SH 392- SH 14 Revised ROD1: Arbee Ln, Stable Ln, Lake St

A. FEASIBILITY:

1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
3. Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
2. Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

1. Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
 - a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
 - b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

None

E. STATEMENT OF LIKELIHOOD:

- | | |
|--|---|
| 1. Are noise mitigation measures feasible?
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | 2. Are noise mitigation measures reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |
| 3. Is insulation of buildings both feasible and reasonable?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | 4. Shall noise abatement measures be provided?
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

The cost benefit index is too high at nearly \$36,500. Abatement is not recommend.

Completed by: Jodie W. Snyder Date: 1/10/17

CDOT Form #1209 Revised 02/11



Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION
NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____ Date of Analysis: 12/15/16

Project Name & Location: North I-25: SH 392- SH 14 Revised ROD1: Arapaho Bend, Archery Range

A. FEASIBILITY:

- 1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
- 2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
- 3. Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

- 1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
- 2. Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
- 3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

- 1. Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
- 2. a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
- b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

None

E. STATEMENT OF LIKELIHOOD:

- 1. Are noise mitigation measures feasible?
 YES NO
- 2. Are noise mitigation measures reasonable?
 YES NO
- 3. Is insulation of buildings both feasible and reasonable?
 YES NO
- 4. Shall noise abatement measures be provided?
 YES NO

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

The cost benefit index is too high at nearly \$103,081. Abatement is not recommend.

Completed by: Jodie W. Snyder Date: 1/10/17



Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION
NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____ Date of Analysis: 12/15/16

Project Name & Location: North I-25: SH 392- SH 14 Revised ROD1: N. Harrison Ave, CR 40

A. FEASIBILITY:

- 1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm? [X] YES [] NO
2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm? [] YES [X] NO
3. Can a noise barrier or berm less than 20 feet tall be constructed? [X] YES [] NO

B. REASONABLENESS:

- 1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor? [X] YES [] NO
2. Is the Cost Benefit Index below \$6800 per receptor per dBA? [] YES [X] NO
3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure? [] YES [] NO

C. INSULATION CONSIDERATION:

- 1. Are normal noise abatement measures physically infeasible or economically unreasonable? [X] YES [] NO
If the answer to 1 is YES, then:
2. a. Does this project have noise impacts to NAC Activity Category D? [] YES [X] NO
b. If yes, is it reasonable and feasible to provide insulation for these buildings? [] YES [] NO

D. ADDITIONAL CONSIDERATIONS:

None

E. STATEMENT OF LIKELIHOOD:

- 1. Are noise mitigation measures feasible? [X] YES [] NO
2. Are noise mitigation measures reasonable? [] YES [X] NO
3. Is insulation of buildings both feasible and reasonable? [] YES [X] NO
4. Shall noise abatement measures be provided? [] YES [X] NO

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

The cost benefit index is too high at nearly \$90,851. Abatement is not recommend.

Completed by: Julie W. Snyder Date: 12/15/16



Noise Analysis and Abatement Guidelines

COLORADO DEPARTMENT OF TRANSPORTATION
NOISE ABATEMENT DETERMINATION WORKSHEET

Instructions: To complete this form refer to CDOT Noise Analysis Guidelines

STIP # _____ Date of Analysis: 12/15/16 _____

Project Name & Location: North I-25: SH 392- SH 14 Revised ROD1: Kechter Rd

A. FEASIBILITY:

- 1. Can a 5dBA noise reduction be achieved by constructing a noise barrier or berm?
 YES NO
- 2. Are there any fatal flaw drainage, terrain, safety, or maintenance issues involving the proposed noise barrier or berm?
 YES NO
- 3. Can a noise barrier or berm less than 20 feet tall be constructed?
 YES NO

B. REASONABLENESS:

- 1. Has the Design goal of 7 dBA noise reduction for abatement measure been met for at least one impacted receptor?
 YES NO
- 2. Is the Cost Benefit Index below \$6800 per receptor per dBA?
 YES NO
- 3. Are more than 50% of benefited resident/owners in favor of the recommended noise abatement measure?
 YES NO

C. INSULATION CONSIDERATION:

- 1. Are normal noise abatement measures physically infeasible or economically unreasonable?
 YES NO
If the answer to 1 is YES, then:
- 2. a. Does this project have noise impacts to NAC Activity Category D?
 YES NO
- b. If yes, is it reasonable and feasible to provide insulation for these buildings?
 YES NO

D. ADDITIONAL CONSIDERATIONS:

None

E. STATEMENT OF LIKELIHOOD:

- 1. Are noise mitigation measures feasible?
 YES NO
- 2. Are noise mitigation measures reasonable?
 YES NO
- 3. Is insulation of buildings both feasible and reasonable?
 YES NO
- 4. Shall noise abatement measures be provided?
 YES NO

F. ABATEMENT DECISION DESCRIPTION AND JUSTIFICATION:

A 5-dBA reduction could be achieved, but a 7-dBA noise reduction could not be achieved at any of the receivers even with 20 foot barriers.

Completed by: Jodie W. Snyder Date: 1/10/17

Attachment E: Initial Site Assessments

COLORADO DEPARTMENT OF TRANSPORTATION INITIAL SITE ASSESSMENT (ISA)	Region: 4 Route ID:	Project No.: 18357 IM 0253-221 Project Code (SA#):
--	------------------------	---

Project Description

Project Name: **North I-25 Revised Record of Decision 1 (SH 392 to SH 14)**
 Milepost Begin: ~262 Milepost End: ~270 County: Larimer
 Location: **I-25 Between SH 392 and SH 14**
 Main Project Elements: **Reconstruction of I-25 to construct express lanes from SH 392 to SH 14.**

Project Features (Check if applies)

<input type="checkbox"/> Structure Acquisition	<input type="checkbox"/> Structure Modification	<input type="checkbox"/> Structure Demolition
<input checked="" type="checkbox"/> New ROW	<input checked="" type="checkbox"/> Easements	<input checked="" type="checkbox"/> Utility Relocation
<input checked="" type="checkbox"/> Excavation/Drilling	Disturbance depth (if known): 5-10 ft	<input checked="" type="checkbox"/> Dewatering
Gw Anticipated: Yes	Depth to gw (if known): >7 ft	Gw flow direction (if known): ENE

Records Review & Interview(s)

The following records/sources were used in this assessment ('No' is implied if unchecked):

- ASTM Standard Environmental Record Sources OPS CDPHE CDOT Internal Database Date:
 ASTM Standard Search Radii or Modified Search Radii:
 Previous Environmental Reports/CDOT Files: **North I-25 EIS Modified Phase I Site Assessment Addendum**
 Other Files/Databases (Assessor, Fire dept., Building, Planning, etc.):

Topographic Map(s) Current – date: **2015** Historic – year(s):
 Aerial Photograph(s) Current – date: **September 2016** Historic – year(s): **1999, 2004-2006, 2009-2012, 2014**

- Sanborn Map(s) – year(s): **N/A**
 Local Street Directories – year(s): **N/A**

Historic Land use(s) within the project area (if known): **The project area and surrounding properties have historically been utilized for residential, agricultural, and aggregate mining purposes. The subject property is vacant, undeveloped agricultural land immediately adjacent to Kechter Road. The subject property is located on a larger parcel that contains a house that was constructed in 1990. The property appears to have been undeveloped before the construction of the residence although previous agricultural activity may have occurred.**

Interviews (Names/Title/Date/Comments): **None Conducted**

Site Reconnaissance & Description

Visual inspection conducted Inspection Date: **11/16/2016**
 If 'No' document the reason:

Project area and land use(s) description:

A vacant strip of undeveloped land adjoining Kechter road, on the north edge of a residential and light agricultural parcel.

- Industrial Light Industrial Commercial Residential Agricultural Undeveloped Other:

Adjacent land use(s) description:

The project is bordered by a variety of land use including a residential property with light agricultural activity to the south, undeveloped protected natural area to the west, a retail/recreational boat dealer to the east, and an inactive mining operation to the north. Further to the west are densely populated single family housing developments. To the northwest is what appears to be an abandoned small landing strip on a residential property. To the east of the subject property on the east side of I-25 are several other mining and agricultural operations. Many previously mined gravel operations are now used as water storage and natural ponds.

- Industrial Light Industrial Commercial Residential Agricultural Undeveloped Other:

Potential Environmental Concerns on the immediate project area or directly adjacent to it
 (Select from dropdown menu – Yes, No, Expected, or Unknown)

Potential Environmental Concern	Project Area	Adjacent Area	Potential Environmental Concern	Project Area	Adjacent Area
Evidence of underground tanks (pipes, vents, fill caps, etc.)	No	No	Protected/fenced/placarded area(s)	No	Yes
Aboveground storage tank(s)	No	Expected	Liquid waste (pits, ponds, etc.)	No	Yes
Monitoring/water well(s)	No	Yes	Oil sheen (soil/water)	No	No
Electrical/transformer Equipment	Yes	Yes	Oil/gas well(s)	No	Yes
Cistern(s), sump(s) drain(s)	No	Yes	Mine tailings/waste	No	Expected
Barrel(s), drum(s), container(s)	No	No	Painted/preserved material(s)	No	Unknown
Stockpile, surface trash, debris	No	No	Odor	No	No
Exposed/buried landfill	No	No	Chemical storage	No	No
Batteries	No	No	Suspect asbestos containing material	No	Expected
Surface staining	No	No	Suspected methamphetamine lab	No	No
Stressed vegetation	No	No			

Findings/Conclusions:

Are known hazardous or other waste sites on or adjacent to the project area, which may affect the project? **No**
 Explain: **The only site within ASTM search radii found in the EDR report is a Mining Property, previously utilized as a surface mine for sand and gravel. All mining activities appear to have ceased, no equipment was observed, and the excavated area now holds water. The site was inspected in 2009, and no violations were reported in the EDR report. Additionally, the site is located downgradient from the subject property so the migration of potential contaminants would be away from the subject property. The current site conditions and any unreported contamination on this mining property is unknown.**
The adjacent area contains residential properties and a boat retailer; due to the land use it is expected that AST(s) likely are located on adjoining properties although none were observed. Groundwater wells are located in adjoining properties as can be seen in the EDR report's physical setting map. During the site investigation, pole-mounted transformers were observed inside the subject property and along Kechter Road. The property to the north of the subject property contains a septic system; therefore, at least one cistern(s), sump(s), or drain(s) is located in the adjacent area; other properties in the area, specifically the older residences located to the NW likely also contain cistern(s), sump(s), and drain(s). As previously discussed, north of the subject property is an inactive mine, which has become a natural appearing pond, in which the quality of the water contained is unknown. The mining properties in the area are all protected by fenced areas, and a no trespassing sign was observed, which restricted further investigation. The property to the east of the subject property was also a gravel and sand mine before the construction of an artificial lake for recreational boating. Due to the mining activity in the adjoining properties, it is expected some waste rock is still present on the properties. The EDR physical setting map revealed there are 3 oil wells within a 1 mile radius of the subject property. The subject property and all adjoining properties were fenced off at the ROW; therefore, no inspection of structures on these properties could be conducted, thus the presence of painted/preserved materials is unknown. The property north of the subject property contains a house that was constructed in 1910 and remodeled in 1966; therefore, it is expected this structure contains asbestos containing materials.
Overall, none of the identified hazardous material concerns in and adjacent to the subject property are expected to affect project activities.

Recommendations:

Materials Management Plan Force Account Modified CDOT Specification(s) Additional Assessment/Investigation*
 Explain: **None.**

***Additional work must be approved by CDOT.**

Attachments:

<input checked="" type="checkbox"/> Environmental Database Map	EDR Radius Map Report with GeoCheck - November 11, 2016
<input type="checkbox"/> Modified CDOT Specification(s)	
<input type="checkbox"/> General Plan Note(s)	
<input checked="" type="checkbox"/> Maps & Figures	Hazardous Materials Map
<input type="checkbox"/> Agency File Data	
Photo Log	Photo Log - November 16, 2016

Completed by (Name and Title): **Ryan Walker, Environmental Engineer**

Signature: Ryan Walker Date: **12/19/16** Revised (if necessary):

CDOT Environmental Project Manager Approval: _____ Date:

N I-25 Kechter Rd Residence

4225 Kechter Road
Fort Collins, CO 80528

Inquiry Number: 4779546.2s
November 11, 2016

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

4225 KECHTER ROAD
FORT COLLINS, CO 80528

COORDINATES

Latitude (North): 40.5075180 - 40° 30' 27.06"
Longitude (West): 104.9969760 - 104° 59' 49.11"
Universal Transverse Mercator: Zone 13
UTM X (Meters): 500256.2
UTM Y (Meters): 4483878.0
Elevation: 4871 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5954855 TIMNATH, CO
Version Date:	2013
Southeast Map:	5954567 WINDSOR, CO
Version Date:	2013
Southwest Map:	5955109 LOVELAND, CO
Version Date:	2013
Northwest Map:	5955103 FORT COLLINS, CO
Version Date:	2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150825
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
4225 KECHTER ROAD
FORT COLLINS, CO 80528

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	HARRIS PIT		MINES	Lower	797, 0.151, ENE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List

EXECUTIVE SUMMARY

US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Sites & Facilities

State and tribal leaking storage tank lists

LUST..... Leaking Underground Storage Tank List
LAST..... Leaking Aboveground Storage Tank Listing
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
LUST TRUST..... RAP Site Listing

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Underground Storage Tank Database
AST..... Aboveground Tank List
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

AUL..... Environmental Covenants and Environmental Use Restrictions List

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup & Redevelopment Act Application Tracking Report

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF..... Historical Landfill List
SWRCY..... Registered Recyclers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

EXECUTIVE SUMMARY

ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
CDL..... Meth Lab Locations
US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CO ERNS..... Spills Database
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
FINDS..... Facility Index System/Facility Registry System
UXO..... Unexploded Ordnance Sites

EXECUTIVE SUMMARY

DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
AIRS.....	Permitted Facility & Emissions Listing
ASBESTOS.....	Asbestos Abatement & Demolition Projects
METHANE SITE.....	Methane Site Investigations - Jefferson County 1980
Methane Investigation.....	Methane Gas & Swamp Findings
DRYCLEANERS.....	Drycleaner Facilities
Financial Assurance.....	Financial Assurance Information Listing
NPDES.....	Permitted Facility Listing
UMTRA.....	Uranium Mill Tailings Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
ECHO.....	Enforcement & Compliance History Information
ABANDONED MINES.....	Abandoned Mines

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historic Gas Stations
EDR Hist Cleaner.....	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF.....	Recovered Government Archive Solid Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property. Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

MINES: This dataset represents permitted mines in the State of Colorado

A review of the MINES list, as provided by EDR, and dated 07/27/2015 has revealed that there is 1 MINES site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HARRIS PIT		ENE 1/8 - 1/4 (0.151 mi.)	1	8

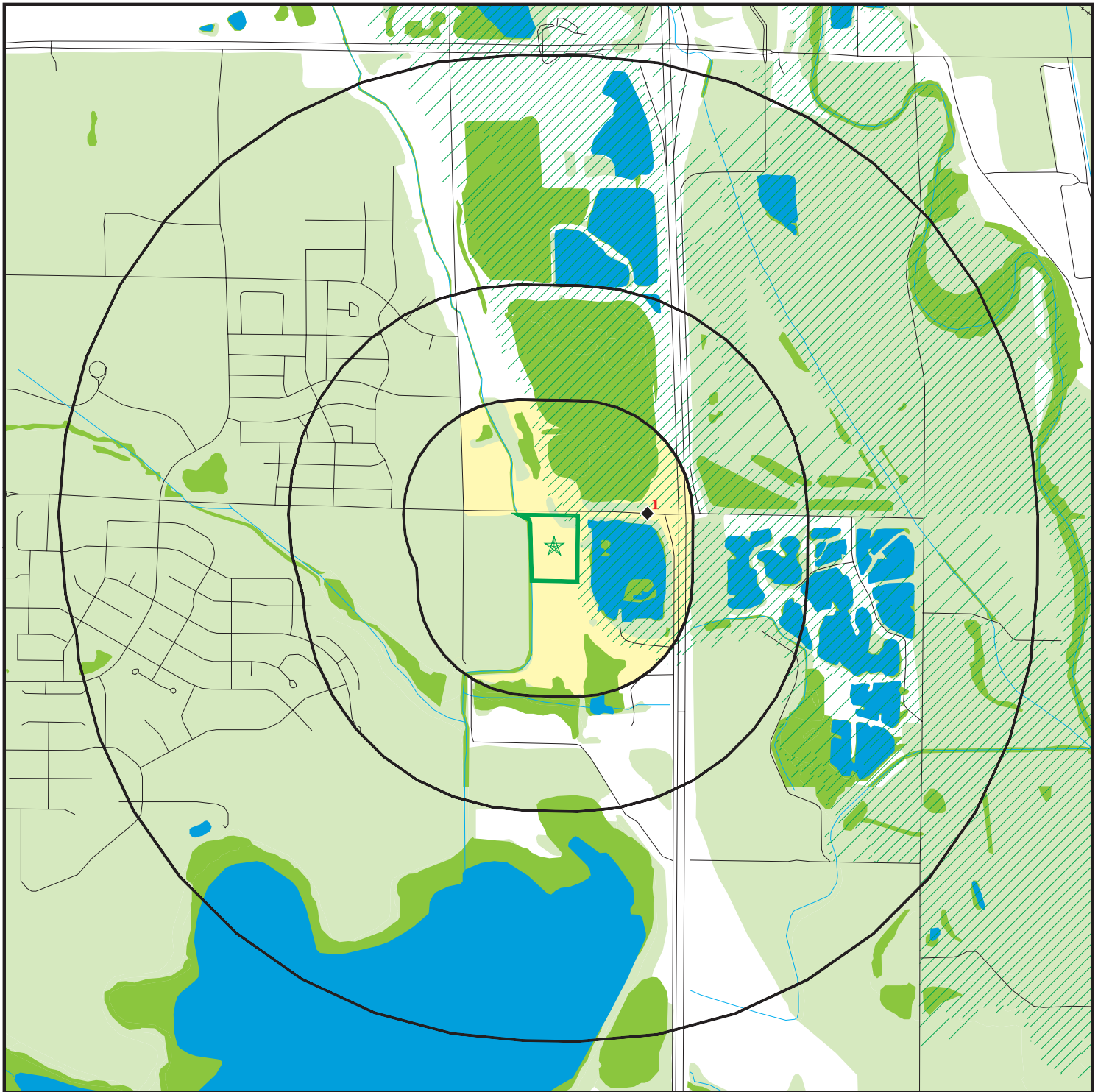
EXECUTIVE SUMMARY







Facility Id: M1987135






EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 4779546.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites

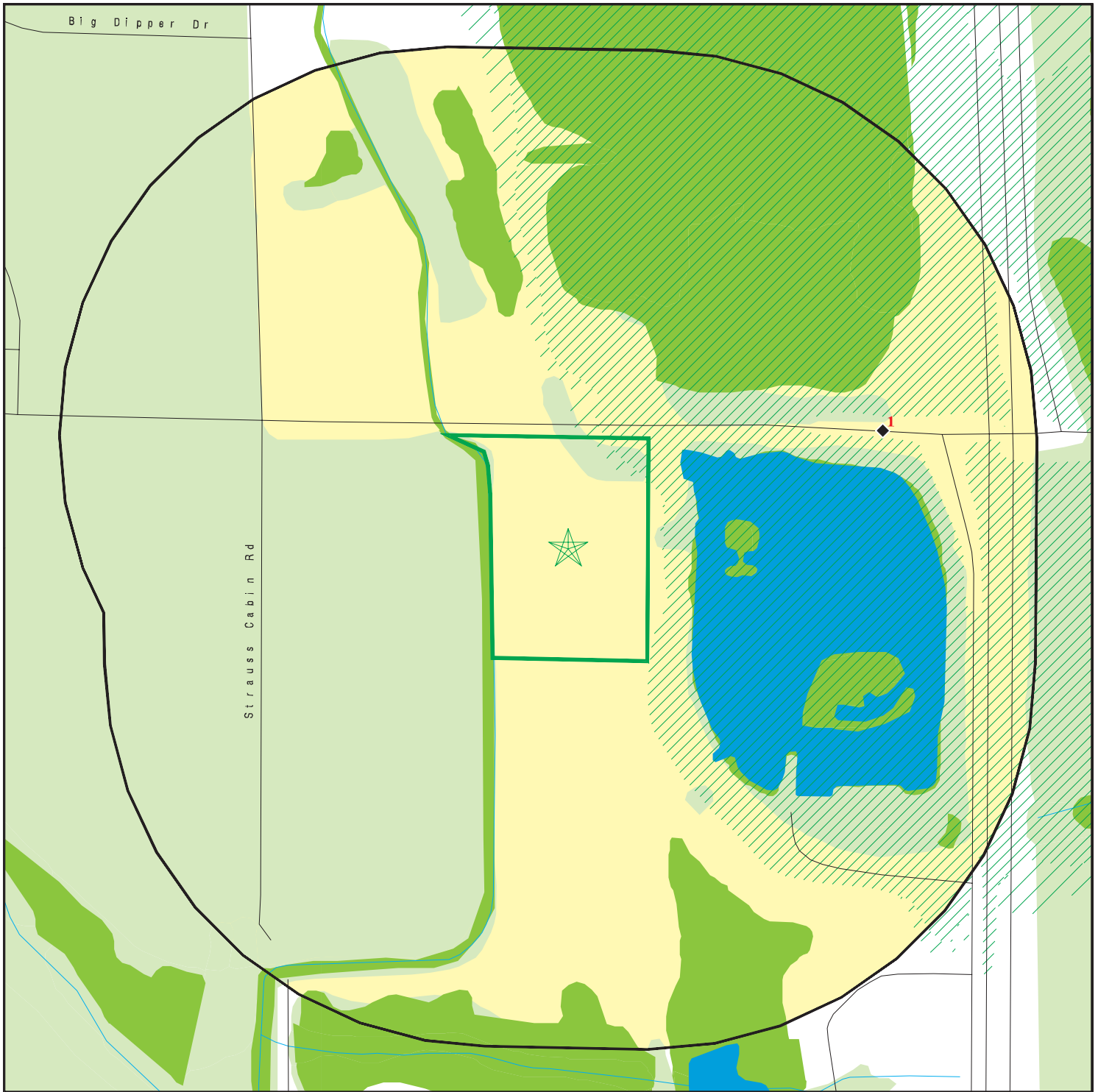
-  Indian Reservations BIA
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands








This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.






SITE NAME: NI-25 Kechter Rd Residence
 ADDRESS: 4225 Kechter Road
 Fort Collins CO 80528
 LAT/LONG: 40.507518 / 104.996976

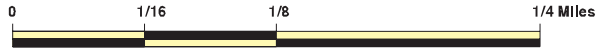
CLIENT: Felsburg Holt & Ullevig
 CONTACT: Ryan Walker
 INQUIRY #: 4779546.2s
 DATE: November 11, 2016 8:20 pm

DETAIL MAP - 4779546.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: NI-25 Kechter Rd Residence
 ADDRESS: 4225 Kechter Road
 Fort Collins CO 80528
 LAT/LONG: 40.507518 / 104.996976

CLIENT: Felsburg Holt & Ullevig
 CONTACT: Ryan Walker
 INQUIRY #: 4779546.2s
 DATE: November 11, 2016 8:20 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	N/A		N/A	N/A	N/A	N/A	N/A	N/A
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal institutional control / engineering control registries</i>								
AUL	0.500		0	0	0	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS 2	0.001		0	NR	NR	NR	NR	0
<i>Records of Emergency Release Reports</i>								
HMIRS	0.001		0	NR	NR	NR	NR	0
CO ERNS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<i>Other Ascertainable Records</i>								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
METHANE SITE	0.001		0	NR	NR	NR	NR	0
Methane Investigation	0.001		0	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
MINES	0.250		0	1	NR	NR	NR	1
NPDES	0.001		0	NR	NR	NR	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
ABANDONED MINES	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	0	1	0	0	0	1

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

1
ENE
1/8-1/4
0.151 mi.
797 ft.

HARRIS PIT
LARIMER (County), CO

MINES S112330395
N/A

Relative:
Lower

MINES:
Facility Id: M1987135
Mine Type: Surface
Status Description: Active
Date Status: 08/19/1987
Permittee: Luther E Harris
Permit Type: 112c
Date Permit Issued: 02/10/1988
Permit Acreage: 45.319999690000003
Commodity 2: Not reported
Annual Fee: 791
Required Surety: 50000
Required I: 48
Actual Surety: 50000
Township: 6
North or South: N
Range: 68
Range Direction: W
Prime Meridian: 06
Section: 10
Quarter: NW
Quarter Quarter: NE
Quarter1: Not reported
UTM X: 500582
UTM Y: 4483998.0999999996
PS X UTM: 500582
PS Y UTM: 4483998.0999999996
Latitude: 40.508600000000001
Longitude: -104.99312999999999
Post Mining: Industrial/Commercial
Pre Mining: General Agriculture
Max Allowed Disturbed Acres: 45.319999690000003
Affected Acres: 45.319999690000003
Date Last Inspection: 01/13/2009
Mineral Owner: Private
Surface Owner: Private
Permit Specialist Assigned: ECS

Actual:
4828 ft.

Count: 0 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/14/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2016	Telephone: 703-603-8704
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/04/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016	Source: EPA
Date Data Arrived at EDR: 06/30/2016	Telephone: 800-424-9346
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 10/14/2016
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: Department of Public Health & Environment
Telephone: 303-692-3300
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: N/A

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Sites & Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/04/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 19

Source: Department of Public Health & Environment
Telephone: 303-692-3300
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 08/01/2016
Number of Days to Update: 38

Source: Department of Labor and Employment, Oil Inspection Section
Telephone: 303-318-8521
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Listing

A listing of leaking aboveground storage tank sites.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 08/01/2016
Number of Days to Update: 38

Source: Department of Labor & Employment
Telephone: 303-318-8525
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016	Source: EPA, Region 5
Date Data Arrived at EDR: 04/27/2016	Telephone: 312-886-7439
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/27/2016	Telephone: 415-972-3372
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015	Source: EPA Region 8
Date Data Arrived at EDR: 10/23/2015	Telephone: 303-312-6271
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 118	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015	Source: EPA Region 7
Date Data Arrived at EDR: 02/12/2016	Telephone: 913-551-7003
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 112	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/19/2016	Telephone: 214-665-6597
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 105	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016	Source: EPA Region 4
Date Data Arrived at EDR: 04/29/2016	Telephone: 404-562-8677
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015

Source: EPA Region 1

Date Data Arrived at EDR: 10/29/2015

Telephone: 617-918-1313

Date Made Active in Reports: 01/04/2016

Last EDR Contact: 10/28/2016

Number of Days to Update: 67

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

TRUST: Lust Trust Sites

Reimbursement application package. The 1989 Colorado General Assembly established Colorado's Petroleum Storage Tank Fund. The Fund reimburses eligible applicants for allowable costs incurred in cleaning up petroleum contamination from underground and aboveground petroleum storage tanks, as well as for third-party liability expenses. Remediation of contamination caused by railroad or aircraft fuel is not eligible for reimbursement. The Fund satisfies federal Environmental Protection Agency financial assurance requirements. Monies in the Fund come from various sources, predominantly the state environmental surcharge imposed on all petroleum products except railroad or aircraft fuel.

Date of Government Version: 07/07/2016

Source: Department of Labor and Employment, Oil Inspection Section

Date Data Arrived at EDR: 07/11/2016

Telephone: 303-318-8521

Date Made Active in Reports: 08/01/2016

Last EDR Contact: 09/26/2016

Number of Days to Update: 21

Next Scheduled EDR Contact: 01/09/2017

Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010

Source: FEMA

Date Data Arrived at EDR: 02/16/2010

Telephone: 202-646-5797

Date Made Active in Reports: 04/12/2010

Last EDR Contact: 10/11/2016

Number of Days to Update: 55

Next Scheduled EDR Contact: 01/23/2017

Data Release Frequency: Varies

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/21/2016

Source: Department of Labor and Employment, Oil Inspection Section

Date Data Arrived at EDR: 06/24/2016

Telephone: 303-318-8521

Date Made Active in Reports: 08/16/2016

Last EDR Contact: 09/19/2016

Number of Days to Update: 53

Next Scheduled EDR Contact: 12/19/2016

Data Release Frequency: Quarterly

AST: Aboveground Tank List

Aboveground storage tank locations.

Date of Government Version: 06/21/2016

Source: Department of Labor and Employment, Oil Inspection Section

Date Data Arrived at EDR: 06/24/2016

Telephone: 303-318-8521

Date Made Active in Reports: 08/16/2016

Last EDR Contact: 09/19/2016

Number of Days to Update: 53

Next Scheduled EDR Contact: 12/19/2016

Data Release Frequency: Semi-Annually

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/05/2016	Source: EPA Region 4
Date Data Arrived at EDR: 04/29/2016	Telephone: 404-562-9424
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016	Source: EPA Region 9
Date Data Arrived at EDR: 04/27/2016	Telephone: 415-972-3368
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016	Source: EPA Region 8
Date Data Arrived at EDR: 02/05/2016	Telephone: 303-312-6137
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 119	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 10/28/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/04/2016	Telephone: 214-665-7591
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 120	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/20/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 10/29/2015	Telephone: 617-918-1313
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015	Source: EPA Region 5
Date Data Arrived at EDR: 11/13/2015	Telephone: 312-886-6136
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Environmental Real Covenants List

Senate Bill 01-145 gave authority to the Colorado Department of Public Health and Environment to approve requests to restrict the future use of a property using an enforceable agreement called an environmental covenant. When a contaminated site is not cleaned up completely, land use restrictions may be used to ensure that the selected cleanup remedy is adequately protective of human health and the environment.

Date of Government Version: 08/22/2016	Source: Department of Public Health & Environment
Date Data Arrived at EDR: 08/01/2016	Telephone: 303-692-3331
Date Made Active in Reports: 09/21/2016	Last EDR Contact: 10/31/2016
Number of Days to Update: 51	Next Scheduled EDR Contact: 02/13/2017
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/26/2016
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

VCP: Voluntary Cleanup & Redevelopment Act Application Tracking Report

The Voluntary Cleanup and Redevelopment Act is intended to permit and encourage voluntary cleanups by providing a method to determine clean-up responsibilities in planning the reuse of property. The VCRA was intended for sites which were not covered by existing regulatory programs.

Date of Government Version: 12/16/2015	Source: Department of Public Health and Environmental
Date Data Arrived at EDR: 01/13/2016	Telephone: 303-692-3331
Date Made Active in Reports: 03/04/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 51	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites Listing

Brownfields Sites Listing

Date of Government Version: 07/21/2016

Date Data Arrived at EDR: 07/25/2016

Date Made Active in Reports: 08/16/2016

Number of Days to Update: 22

Source: Department of Public Health & Environment

Telephone: 303-692-3331

Last EDR Contact: 10/24/2016

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/21/2016

Date Data Arrived at EDR: 06/22/2016

Date Made Active in Reports: 09/02/2016

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: 202-566-2777

Last EDR Contact: 09/21/2016

Next Scheduled EDR Contact: 01/02/2017

Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

HISTORICAL LANDFILL: Historical Landfill List

Abandoned/Inactive Landfills.

Date of Government Version: 01/31/1993

Date Data Arrived at EDR: 04/24/1994

Date Made Active in Reports: 05/30/1994

Number of Days to Update: 36

Source: Department of Public Health & Environment

Telephone: 303-692-3300

Last EDR Contact: 09/05/1996

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SWRCY: Registered Recyclers Listing

A listing of registered recycler locations in the state of Colorado.

Date of Government Version: 06/06/2016

Date Data Arrived at EDR: 06/13/2016

Date Made Active in Reports: 08/01/2016

Number of Days to Update: 49

Source: Department of Public Health & Environment

Telephone: 303-692-3337

Last EDR Contact: 09/12/2016

Next Scheduled EDR Contact: 12/26/2016

Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998

Date Data Arrived at EDR: 12/03/2007

Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245

Last EDR Contact: 10/31/2016

Next Scheduled EDR Contact: 02/13/2017

Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 11/04/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 08/31/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: No Update Planned

CDL: Meth Lab Locations

Meth lab locations that were reported to the Department of Public Health & Environment.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/05/2016
Date Made Active in Reports: 08/16/2016
Number of Days to Update: 42

Source: Department of Public Health and Environment
Telephone: 303-692-3023
Last EDR Contact: 10/17/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 17

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/2016	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/28/2016	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 09/27/2016
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Annually

CO ERNS: Spills Database

State reported spills.

Date of Government Version: 06/30/2016	Source: Department of Public Health and Environmental
Date Data Arrived at EDR: 07/05/2016	Telephone: 303-692-2000
Date Made Active in Reports: 08/16/2016	Last EDR Contact: 10/17/2016
Number of Days to Update: 42	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/15/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/06/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 09/09/2016
Number of Days to Update: 97	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 10/20/2016
Number of Days to Update: 54	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 07/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/17/2016	Telephone: 202-566-1917
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 08/17/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/08/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/23/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/01/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/26/2016	Telephone: 202-564-8600
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 07/25/2016
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/07/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 127	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/05/2016	Telephone: 202-564-5088
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/11/2016
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 11/07/2016
Number of Days to Update: 43	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 09/09/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/06/2016
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/28/2016
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/03/2016
Date Data Arrived at EDR: 10/05/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/05/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 11/02/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Biennially

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 12/08/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016	Source: Department of Energy
Date Data Arrived at EDR: 07/26/2016	Telephone: 202-586-3559
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 11/08/2016
Number of Days to Update: 59	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010	Source: Department of Energy
Date Data Arrived at EDR: 10/07/2011	Telephone: 505-845-0011
Date Made Active in Reports: 03/01/2012	Last EDR Contact: 09/09/2016
Number of Days to Update: 146	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/07/2016	Telephone: 703-603-8787
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 148	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 88

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 88

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016
Date Data Arrived at EDR: 09/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (303) 312-6312
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/24/2016
Number of Days to Update: 91	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015	Source: Department of Defense
Date Data Arrived at EDR: 01/29/2016	Telephone: 571-373-0407
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 10/17/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Varies

AIRS: Permitted Facility & Emissions Listing

A listing of Air Pollution Control Division permits and emissions data.

Date of Government Version: 09/06/2016	Source: Department of Public Health & Environment
Date Data Arrived at EDR: 09/07/2016	Telephone: 303-692-3213
Date Made Active in Reports: 09/22/2016	Last EDR Contact: 09/02/2016
Number of Days to Update: 15	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

ASBESTOS: Asbestos Abatement & Demolition Projects

Asbestos abatement and demolition projects by the contractor.

Date of Government Version: 03/31/2016	Source: Department of Public Health & Environment
Date Data Arrived at EDR: 08/09/2016	Telephone: 303-692-3100
Date Made Active in Reports: 09/21/2016	Last EDR Contact: 08/09/2016
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/21/2016
	Data Release Frequency: Semi-Annually

METHANE SITE: Methane Site Investigations - Jefferson County 1980

The objectives of the study are to define as closely as possible the boundaries of methane producing solid waste landfills.

Date of Government Version: 12/31/1980	Source: Jefferson County Health Department
Date Data Arrived at EDR: 02/13/1995	Telephone: 303-239-7175
Date Made Active in Reports: 04/04/1995	Last EDR Contact: 01/27/1995
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

METHANE INVESTIGATION: Methane Gas & Swamp Findings

The primary objective of this study was to assess methane gas related hazards at selected landfill sites in Colorado. These sites were selected by the Colorado Department of Health following evaluation of responses received from County and Municipal agencies about completed and existing landfills within their jurisdiction.

Date of Government Version: 03/15/1979	Source: Department of Health
Date Data Arrived at EDR: 02/13/1995	Telephone: 303-640-3335
Date Made Active in Reports: 04/04/1995	Last EDR Contact: 01/27/1995
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

DRYCLEANERS: Drycleaner Facilities

A listing of drycleaning facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/21/2016
Number of Days to Update: 15

Source: Department of Public Health & Environment
Telephone: 303-692-3213
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 07/19/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 08/16/2016
Number of Days to Update: 22

Source: Department of Public Health & Environment
Telephone: 303-692-3350
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 07/19/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 08/16/2016
Number of Days to Update: 22

Source: Department of Public Health & Environment
Telephone: 303-392-3350
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

MINES: Permitted Mines Listing

This dataset represents permitted mines in the State of Colorado

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 04/19/2016
Date Made Active in Reports: 05/23/2016
Number of Days to Update: 34

Source: Division of Reclamation Mining and safety
Telephone: 303-866-3567
Last EDR Contact: 10/21/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Varies

NPDES: Permitted Facility Listing

A listing of permitted facilities from the Water Quality Control Division.

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 05/23/2016
Number of Days to Update: 20

Source: Department of Public Health & Environment
Telephone: 303-692-3611
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

There were nine uranium mill tailings sites in Colorado designated for cleanup under the federal Uranium Mill Tailings Radiation Control Act. These nine sites, know commonly as UMTRA sites, were remediated jointly by the State of Colorado and the U.S. Department of Energy during the late 1980's and early 1990's. Mill tailings were removed from 8 of the mill sites and relocated in engineered disposal cells. A disposal cell is designed to encapsulate the material, reduce radon emanation, and prevent the movement of water through the material. At one site, Maybell, CO, the tailings were stabilized in-place at the mill site. After remediation of the tailings was completed, the State and DOE began to investigate the residual impacts to groundwater at the mill sites. The groundwater phase of the UMTRA program is on-going.

Date of Government Version: 11/23/2004
Date Data Arrived at EDR: 03/21/2007
Date Made Active in Reports: 05/02/2007
Number of Days to Update: 42

Source: Department of Public Health & Environment
Telephone: 970-248-7164
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2016	Source: EPA
Date Data Arrived at EDR: 08/23/2016	Telephone: 800-385-6164
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 08/23/2016
Number of Days to Update: 59	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/20/2016	Telephone: 202-564-2280
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 09/20/2016
Number of Days to Update: 31	Next Scheduled EDR Contact: 01/02/2017
	Data Release Frequency: Quarterly

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/09/2016	Source: Department of Interior
Date Data Arrived at EDR: 06/13/2016	Telephone: 202-208-2609
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/12/2016
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/26/2016
	Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Public Health & Environment in Colorado.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Public Health & Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Labor and Employment, Oil Inspection Section in Colorado.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Labor and Employment, Oil Inspection Section
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ADAMS COUNTY:

Summary Report on Methane Gas Hazards and Surveys Conducted on Domestic and Demolition Landfills in Adams County
As of May 8, 1978, all known landfills or dumping sites in the Adams County area have been surveyed.

Date of Government Version: 05/08/1978
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

ARAPAHOE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

A Survey of Landfills in Arapahoe County

A survey of Arapahoe County was conducted from August through November, 1977, of all open and closed landfills and dumpsites in the county. Each of the sites found was classified as domestic or demolition.

Date of Government Version: 12/31/1978
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

BOULDER COUNTY:

Old Landfill Sites

Landfill sites in Boulder county.

Date of Government Version: 05/01/1986
Date Data Arrived at EDR: 11/14/1995
Date Made Active in Reports: 12/07/1995
Number of Days to Update: 23

Source: Boulder County Health Department
Telephone: 303-441-1182
Last EDR Contact: 01/30/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DENVER COUNTY:

Landfills in Denver County

Landfill sites in the city and county of Denver.

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 05/16/2014
Date Made Active in Reports: 06/13/2014
Number of Days to Update: 28

Source: City and County of Denver
Telephone: 720-913-4839
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: No Update Planned

Investigation of Methane Gas Hazards

The purpose of this study was to assess the actual and potential generation, migration, explosive and related problem associated with specified old landfills, and to identify existing and potential problems, suggested strategies to prevent, abate, and control such problems and recommend investigative and monitoring functions as may be deemed necessary. Eight sites determined to be priorities due to population density and potential hazards to population and property were selected by the Colorado Department of Health.

Date of Government Version: 01/01/1981
Date Data Arrived at EDR: 01/29/2013
Date Made Active in Reports: 03/08/2013
Number of Days to Update: 38

Source: City and County of Denver Department of Environmental Health
Telephone: 720-865-5522
Last EDR Contact: 01/15/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DOUGLAS COUNTY:

Douglas County Landfill Key

Landfill sites in Douglas county.

Date of Government Version: 06/12/1991
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PUEBLO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Designated Disposal & Landfill Sites

Only inert materials. Asphalt, cement, dirt & rock unless otherwise specified. These sites are no longer active.

Date of Government Version: 04/30/1990
Date Data Arrived at EDR: 11/16/1995
Date Made Active in Reports: 12/07/1995
Number of Days to Update: 21

Source: Pueblo City-County Health Department
Telephone: 719-583-4300
Last EDR Contact: 11/13/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

TRI COUNTY:

Tri-County Area Solid Waste Facilities List (Adams, Arapahoe and Douglas Counties)

Closed Domestic Landfills in Adams County, Closed Domestic Landfills in Arapahoe County, Closed Demolition Landfills in Arapahoe County, Closed Domestic Landfills in Douglas County.

Date of Government Version: 10/15/1983
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

WELD COUNTY:

Solid Waste Facilities in Weld County

Solid Waste Facilities in Weld County.

Date of Government Version: 12/05/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/07/2015
Number of Days to Update: 26

Source: Weld County Department of Public Health
Telephone: 970-304-6415
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/03/2016
Date Made Active in Reports: 09/09/2016
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/02/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/14/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/12/2016
Next Scheduled EDR Contact: 12/26/2016
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Daycare Centers: Daycare Listing
Source: Department of Human Services
Telephone: 303-866-5958

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Riparian Vegetation Data
Source: Division of Wildlife
Telephone: 970-416-3360

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

N I-25 KECHTER RD RESIDENCE
4225 KECHTER ROAD
FORT COLLINS, CO 80528

TARGET PROPERTY COORDINATES

Latitude (North): 40.507518 - 40° 30' 27.06"
Longitude (West): 104.996976 - 104° 59' 49.11"
Universal Transverse Mercator: Zone 13
UTM X (Meters): 500256.2
UTM Y (Meters): 4483878.0
Elevation: 4871 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5954855 TIMNATH, CO
Version Date: 2013

Southeast Map: 5954567 WINDSOR, CO
Version Date: 2013

Southwest Map: 5955109 LOVELAND, CO
Version Date: 2013

Northwest Map: 5955103 FORT COLLINS, CO
Version Date: 2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

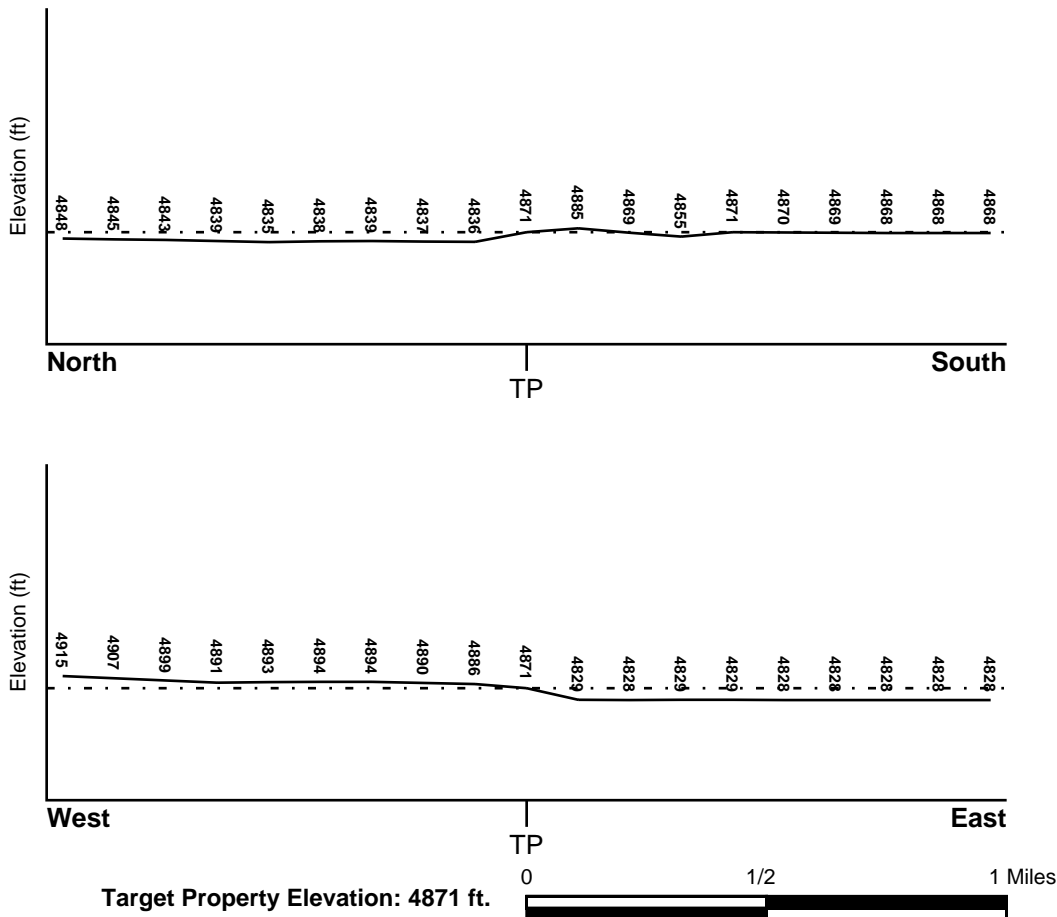
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ENE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
08069C1013F	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
08069C0994F	FEMA FIRM Flood data
0801010207B	FEMA Q3 Flood data
0801010208C	FEMA Q3 Flood data
08069C1201F	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

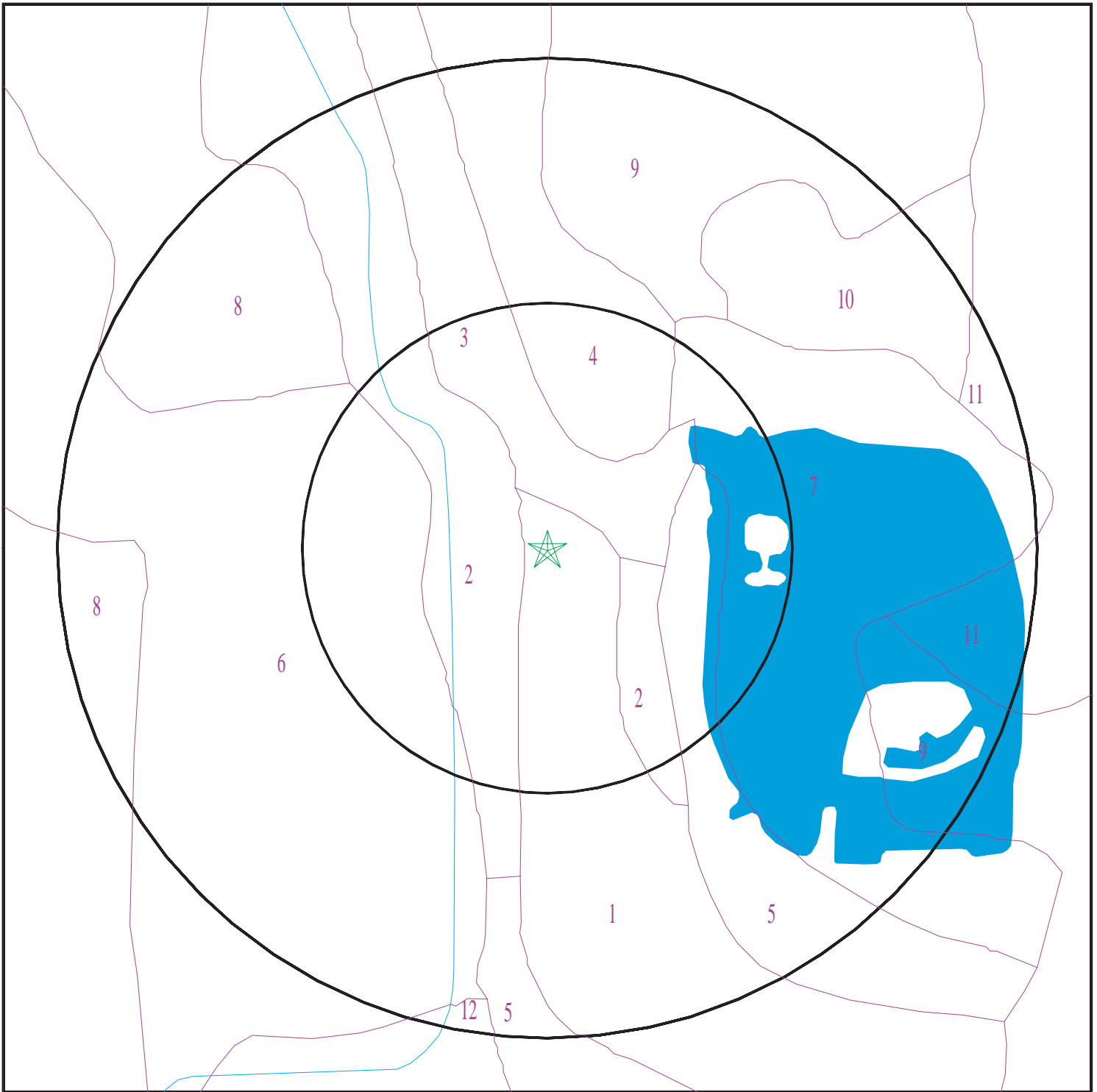
Era: Mesozoic
System: Cretaceous
Series: Taylor Group
Code: uK3 (*decoded above as Era, System & Series*)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4779546.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: NI-25 Kechter Rd Residence
ADDRESS: 4225 Kechter Road
Fort Collins CO 80528
LAT/LONG: 40.507518 / 104.996976

CLIENT: Felsburg Holt & Ullevig
CONTACT: Ryan Walker
INQUIRY #: 4779546.2s
DATE: November 11, 2016 8:20 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Fort Collins

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 42.34 Min: 4.23	Max: 7.8 Min: 6.6
2	7 inches	22 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
3	22 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 9 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Larim

Soil Surface Texture: gravelly sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 7.8 Min: 6.1
2	3 inches	14 inches	very gravelly sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 14.11 Min: 4.23	Max: 9 Min: 6.6
3	14 inches	59 inches	very gravelly loamy sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Clean gravels, Poorly Graded Gravel.	Max: 141.14 Min: 42.34	Max: 9 Min: 7.9

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 3

Soil Component Name: Stoneham

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
2	3 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
3	9 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.9

Soil Map ID: 4

Soil Component Name: Stoneham

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	3 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
2	3 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
3	9 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.9

Soil Map ID: 5

Soil Component Name: Fort Collins

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 42.34 Min: 4.23	Max: 7.8 Min: 6.6
2	5 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
3	18 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 9 Min: 7.9

Soil Map ID: 6

Soil Component Name: Nunn

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.1
2	9 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 1.41 Min: 0.42	Max: 8.4 Min: 6.1

Soil Map ID: 7

Soil Component Name: Fluvaquents

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	variable	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 42.34 Min: 1.41	Max: 7.8 Min: 6.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	9 inches	59 inches	stratified very gravelly sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 141.14 Min: 42.34	Max: 7.8 Min: 6.6

Soil Map ID: 8

Soil Component Name: Nunn

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.1
2	9 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.42	Max: 8.4 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 9

Soil Component Name: Loveland

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 9 Min: 7.9
2	14 inches	31 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14.11 Min: 4.23	Max: 9 Min: 7.9
3	31 inches	59 inches	very gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 705 Min: 141.14	Max: 9 Min: 7.9

Soil Map ID: 10

Soil Component Name: Paoli

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	29 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42.34 Min: 14.11	Max: 7.8 Min: 6.6
2	29 inches	59 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 9 Min: 7.4

Soil Map ID: 11

Soil Component Name: Table Mountain

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	35 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 7.3 Min: 6.1
2	35 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 6.6

Soil Map ID: 12

Soil Component Name: Fort Collins

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 42.34 Min: 4.23	Max: 7.8 Min: 6.6
2	9 inches	20 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
3	20 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 9 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
G27	USGS40000221988	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
G28	USGS40000221987	1/2 - 1 Mile West

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

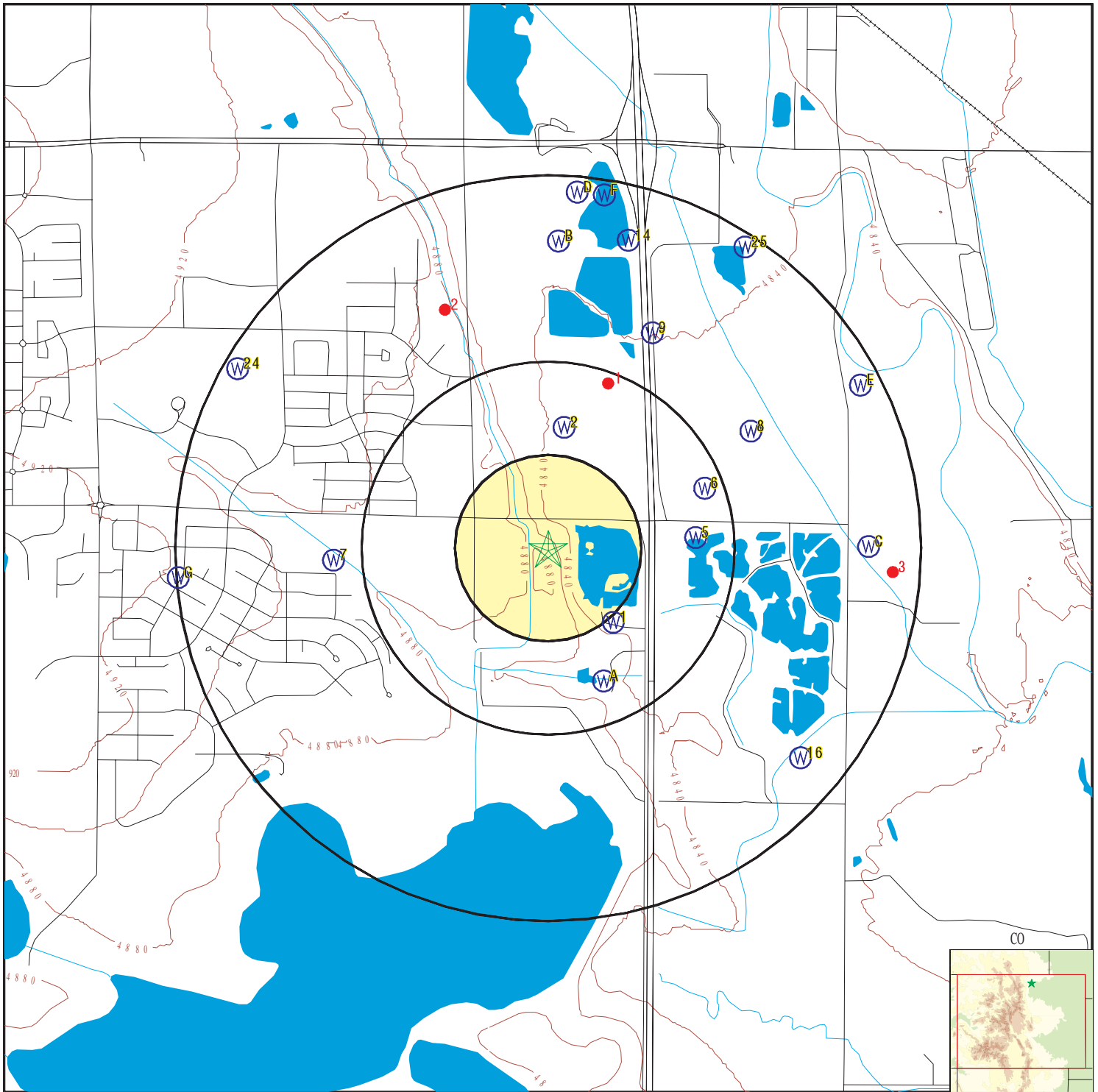
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CO6000000327775	1/4 - 1/2 Mile SE
2	CO6000000382873	1/4 - 1/2 Mile North
A3	CO6000000327776	1/4 - 1/2 Mile SSE
A4	CO6000000331042	1/4 - 1/2 Mile SSE
5	CO6000000281040	1/4 - 1/2 Mile East
6	CO6000000285028	1/4 - 1/2 Mile ENE
7	CO6000000080705	1/2 - 1 Mile West
8	CO6000000424545	1/2 - 1 Mile ENE
9	CO6000000317664	1/2 - 1 Mile NNE
B10	CO6000000336598	1/2 - 1 Mile North
B11	CO6000000434517	1/2 - 1 Mile North
B12	CO6000000480809	1/2 - 1 Mile North
C13	CO6000000083771	1/2 - 1 Mile East
14	CO6000000348709	1/2 - 1 Mile NNE
C15	CO6000000492336	1/2 - 1 Mile East
16	CO6000000426440	1/2 - 1 Mile SE
D17	CO6000000285027	1/2 - 1 Mile North
E18	CO6000000367702	1/2 - 1 Mile ENE
E19	CO6000000367701	1/2 - 1 Mile ENE
F20	CO6000000215064	1/2 - 1 Mile North
F21	CO6000000206205	1/2 - 1 Mile North
F22	CO6000000445421	1/2 - 1 Mile North
F23	CO6000000348708	1/2 - 1 Mile North
24	CO6000000444381	1/2 - 1 Mile WNW
25	CO6000000477438	1/2 - 1 Mile NNE
D26	CO6000000365445	1/2 - 1 Mile North








OTHER STATE DATABASE INFORMATION





STATE OIL/GAS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	COOG10000017511	1/4 - 1/2 Mile NNE
2	COOG10000017512	1/2 - 1 Mile NNW
3	COOG10000017510	1/2 - 1 Mile East

PHYSICAL SETTING SOURCE MAP - 4779546.2s



-  County Boundary
-  Major Roads
-  Contour Lines
-  Earthquake epicenter, Richter 5 or greater
-  Water Wells
-  Public Water Supply Wells
-  Cluster of Multiple Icons

-  Groundwater Flow Direction
-  Indeterminate Groundwater Flow at Location
-  Groundwater Flow Varies at Location
-  Oil, gas or related wells



SITE NAME: NI-25 Kechter Rd Residence
 ADDRESS: 4225 Kechter Road
 Fort Collins CO 80528
 LAT/LONG: 40.507518 / 104.996976

CLIENT: Felsburg Holt & Ullevig
 CONTACT: Ryan Walker
 INQUIRY #: 4779546.2s
 DATE: November 11, 2016 8:20 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

1
SE
1/4 - 1/2 Mile
Lower **CO WELLS** **CO6000000327775**

Fid:	327774	Objectid:	327775
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0298467A		
Receipt:	0298467A	Permit:	11796-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	88CW0213
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	10
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1980
Coordewdir:	W	Coordns:	1428
Coordnsdir:	N		
Utmx:	500537.4		
Utmy:	4483769		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.504633		
Longdecdeg:	-104.993657		
Use1:	COMMERCIAL	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1989-04-04		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HARRIS LUTHER		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500537.4		
Disputmy:	4483769		
Latitude:	40.5046328783		
Longitude:	-104.993657353		
Site id:	CO6000000327775		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

2
North
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000382873

Fid:	382872	Objectid:	382873
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0389577		
Receipt:	0389577	Permit:	46664-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	WELLINGTON DOWNS GRAVEL PIT	Case no:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	SW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500325.4		
Utmy:	4484610		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.51221		
Longdecdeg:	-104.996159		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1996-06-10		
Permexpire:	1997-06-10		
Wellconstr:	1996-09-15		
Firstbenef:	1996-09-15		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	M-95-035		
Elev:	0	Welldepth:	14
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	10		
Applicantn:	CONNELL RESOURCES INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500325.4		
Disputmy:	4484610		
Latitude:	40.5122095649		
Longitude:	-104.996159044		
Site id:	CO6000000382873		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A3
SSE
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000327776

Fid:	327775	Objectid:	327776
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0298467B		
Receipt:	0298467B	Permit:	11795-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	88CW0213
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	10
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1850
Coordewdir:	W	Coordns:	2261
Coordnsdir:	N		
Utmx:	500496.2		
Utmy:	4483516		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.502354		
Longdecdeg:	-104.994144		
Use1:	COMMERCIAL	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1989-04-04		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HARRIS LUTHER		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500496		
Disputmy:	4483516		
Latitude:	40.502353623		
Longitude:	-104.994143812		
Site id:	CO6000000327776		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A4
SSE
1/4 - 1/2 Mile
Lower

CO WELLS CO600000331042

Fid:	331041	Objectid:	331042
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0304849		
Receipt:	0304849	Permit:	37431-F
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	Not Reported	Caseno:	88CW0213
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	10
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1850
Coordewdir:	W	Coordns:	2261
Coordnsdir:	N		
Utmx:	500496.2		
Utmy:	4483516		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.502354		
Longdecdeg:	-104.994144		
Use1:	COMMERCIAL	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1990-08-07		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HARRIS LUTHER		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500506.3		
Disputmy:	4483544.2		
Latitude:	40.502353623		
Longitude:	-104.994143812		
Site id:	CO600000331042		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

5
East
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000281040

Fid:	281039	Objectid:	281040
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0208797		
Receipt:	0208797	Permit:	9162-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	GRAVEL PIT	Caseno:	80CW0296
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	10
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	2140
Coordewdir:	E	Coordns:	200
Coordnsdir:	N		
Utmx:	500893		
Utmy:	4484135		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.50793		
Longdecdeg:	-104.98946		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SWIFT LOUIS F		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500893		
Disputmy:	4484135		
Latitude:	40.5079298703		
Longitude:	-104.989459878		
Site id:	CO6000000281040		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

6
ENE
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000285028

Fid:	285027	Objectid:	285028
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0216806B		
Receipt:	0216806B	Permit:	10909-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	2000
Coordewdir:	E	Coordns:	500
Coordnsdir:	S		
Utmx:	500932.1		
Utmx:	4484347.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.509844		
Longdecdeg:	-104.988998		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1985-11-05		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	STUTE CNSTR. CO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500932.1		
Disputmy:	4484347.5		
Latitude:	40.5098442418		
Longitude:	-104.988998066		
Site id:	CO6000000285028		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

7
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000080705

Fid:	80704	Objectid:	80705
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038429		
Receipt:	9038429	Permit:	7028-R
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499330.5		
Utmy:	4484037		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.507047		
Longdecdeg:	-105.007902		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1948-11-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	12
Topperfcas:	0	Botperfcas:	0
Yield:	330		
Staticwl:	0		
Applicantn:	STALEY JAMES M		
Complewewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499330.5		
Disputmy:	4484037		
Latitude:	40.5070471983		
Longitude:	-105.007902037		
Site id:	CO6000000080705		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

8
ENE
1/2 - 1 Mile
Lower

CO WELLS CO6000000424545

Fid:	424544	Objectid:	424545
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0448681		
Receipt:	0448681	Permit:	53419-F
Wdid:	0303018	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	SE	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	501131.3		
Utmy:	4484594		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.512065		
Longdecdeg:	-104.986646		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2000-03-20		
Permexpire:	2001-03-20		
Wellconstr:	Not Reported		
Firstbenef:	2000-06-05		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	TIMNATH CONNELL PIT M99065		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONNELL RESOURCES INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501131.3		
Disputmy:	4484594		
Latitude:	40.5120647138		
Longitude:	-104.986646392		
Site id:	CO6000000424545		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

9
NNE
1/2 - 1 Mile
Lower

CO WELLS CO6000000317664

Fid:	317663	Objectid:	317664
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0275344		
Receipt:	0275344	Permit:	11363-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	2610
Coordewdir:	W	Coordns:	2610
Coordnsdir:	N		
Utmx:	500706		
Utmy:	4485018		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.515885		
Longdecdeg:	-104.991666		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1987-07-15		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	STERLING PAVING		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500706		
Disputmy:	4485018		
Latitude:	40.5158850006		
Longitude:	-104.991666063		
Site id:	CO6000000317664		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B10
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000336598

Fid:	336597	Objectid:	336598
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0315478		
Receipt:	0315478	Permit:	41268-F
Wdid:	0303024	Currstatus:	Permit Canceled
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500301.3		
Utmy:	4485414		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.519453		
Longdecdeg:	-104.996443		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1992-06-02		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1992-06-02		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	H W ROGERS & ASSOC		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500301		
Disputmy:	4485414		
Latitude:	40.5194528081		
Longitude:	-104.996443133		
Site id:	CO6000000336598		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B11
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000434517

Fid:	434516	Objectid:	434517
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0462433		
Receipt:	0462433	Permit:	54407-F
Wdid:	0303024	Currstatus:	Permit Canceled
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500301.3		
Utmy:	4485414		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.519453		
Longdecdeg:	-104.996443		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2000-08-29		
Permexpire:	2001-08-29		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	DMG # M-86-050, Weitzel Pit-See 64642-F		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	WESTERN MOBILE/ LAFARGE CORP		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500311.3		
Disputmy:	4485442.2		
Latitude:	40.5194528081		
Longitude:	-104.996443133		
Site id:	CO6000000434517		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B12
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000480809

Fid:	480808	Objectid:	480809
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0544531		
Receipt:	0544531	Permit:	64642-F
Wdid:	0303024	Currstatus:	Well Constructed
Wellname:	WEITZEL PIT M-86-050	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500301.4		
Utmy:	4485414		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.519452		
Longdecdeg:	-104.996441		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2006-07-26		
Permexpire:	2007-07-26		
Wellconstr:	2006-07-27		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Included in the Middle Podre Combined Plan approved June 22, 2006. The requirement of Rule 17.1.4 were met thus this perm		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	LAFARGE WEST INC		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500320.3		
Disputmy:	4485437		
Latitude:	40.5194528081		
Longitude:	-104.996441952		
Site id:	CO6000000480809		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

C13
East
1/2 - 1 Mile
Lower

CO WELLS CO6000000083771

Fid:	83770	Objectid:	83771
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9041661		
Receipt:	9041661	Permit:	90295-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	11
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	215
Coordewdir:	W	Coordns:	175
Coordnsdir:	N		
Utmx:	501610.7		
Utmy:	4484129.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.507879		
Longdecdeg:	-104.980989		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1977-04-19		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Topperfcas:	0	Botperfcas:	0
Yield:	10		
Staticwl:	7		
Applicantn:	BRUMIT JERRY		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501610.7		
Disputmy:	4484129.5		
Latitude:	40.5078792375		
Longitude:	-104.980988845		
Site id:	CO6000000083771		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

14
NNE
1/2 - 1 Mile
Lower

CO WELLS CO6000000348709

Fid:	348708	Objectid:	348709
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0338116A		
Receipt:	0338116A	Permit:	12912-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	HARMONY PIT DWR	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	3000
Coordewdir:	E	Coordns:	1300
Coordnsdir:	N		
Utmx:	500602.2		
Utmy:	4485417.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.519484		
Longdecdeg:	-104.992891		
Use1:	INDUSTRIAL	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1992-10-05		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONNELL RESOURCES INC		
Complewewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500602.2		
Disputmy:	4485417.5		
Latitude:	40.5194841756		
Longitude:	-104.992890985		
Site id:	CO6000000348709		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

C15
East
1/2 - 1 Mile
Lower

CO WELLS CO6000000492336

Fid:	492335	Objectid:	492336
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0910592		
Receipt:	0910592	Permit:	75478-
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	11
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	400
Coordewdir:	W	Coordns:	400
Coordnsdir:	N		
Utmx:	501667.2		
Utmy:	4484062.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.507276		
Longdecdeg:	-104.980322		
Use1:	HOUSEHOLD USE ONLY	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HARMON TOMMY J		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501667.2		
Disputmy:	4484062.5		
Latitude:	40.5072755226		
Longitude:	-104.98032215		
Site id:	CO6000000492336		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

16
SE
1/2 - 1 Mile
Lower

CO WELLS CO6000000426440

Fid:	426439	Objectid:	426440
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0451164		
Receipt:	0451164	Permit:	53418-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	94CW0015
Div:	1	Wd:	8
County:	LARIMER	Mgmtldist:	UNKNOWN
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	10
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	501345.4		
Utmy:	4483184.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.499366		
Longdecdeg:	-104.984122		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2000-03-17		
Permexpire:	2001-03-17		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	SWIFT PIT M80172R		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SWIFT LOUIS F		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501345.4		
Disputmy:	4483184.5		
Latitude:	40.4993661903		
Longitude:	-104.984122199		
Site id:	CO6000000426440		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

D17
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000285027

Fid:	285026	Objectid:	285027
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0216806A		
Receipt:	0216806A	Permit:	10910-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1500
Coordewdir:	W	Coordns:	750
Coordnsdir:	N		
Utmx:	500349.7		
Utmy:	4485587.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.521016		
Longdecdeg:	-104.995872		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1985-11-05		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	STUTE CNSTR. CO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500349.7		
Disputmy:	4485587.5		
Latitude:	40.5210158487		
Longitude:	-104.995871672		
Site id:	CO6000000285027		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

E18
ENE
1/2 - 1 Mile
Lower

CO WELLS CO6000000367702

Fid:	367701	Objectid:	367702
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0368572B		
Receipt:	0368572B	Permit:	179143--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	REPLACES LR	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	2
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	200
Coordewdir:	W	Coordns:	2000
Coordnsdir:	S		
Utmx:	501591.8		
Utmy:	4484792		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.513848		
Longdecdeg:	-104.98121		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1994-06-21		
Permexpire:	1996-06-21		
Wellconstr:	1994-07-27		
Firstbenef:	Not Reported		
Pumpinstal:	1994-09-19		
Wellplugge:	Not Reported		
Comment :	RPL 1935 WELL; 40 AC PARCEL; 3SF, DOM ANIMALS, 13500 SQFT IRR		
Elev:	0	Welldepth:	28
Topperfcas:	19	Botperfcas:	28
Yield:	18		
Staticwl:	3		
Applicantn:	TERRA RESOURCES INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501591.8		
Disputmy:	4484792		
Latitude:	40.5138477403		
Longitude:	-104.981210256		
Site id:	CO6000000367702		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

E19
ENE
1/2 - 1 Mile
Lower

CO WELLS CO6000000367701

Fid:	367700	Objectid:	367701
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0368572A		
Receipt:	0368572A	Permit:	179143-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	2
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	280
Coordewdir:	W	Coordns:	2000
Coordnsdir:	S		
Utmx:	501616.2		
Utmy:	4484793		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.513857		
Longdecdeg:	-104.980922		
Use1:	DOMESTIC	Use2:	STOCK
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	3		
Permissued:	1994-06-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1994-09-30		
Comment :	1ST USE 1935; 40 AC PARCEL; 1SF, DOM ANIMALS; 13500 SQFT IRR		
Elev:	0	Welldepth:	28
Topperfcas:	0	Botperfcas:	0
Yield:	25		
Staticwl:	0		
Applicantn:	TERRA RESOURCES INC		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501616.2		
Disputmy:	4484793		
Latitude:	40.513856702		
Longitude:	-104.980922234		
Site id:	CO6000000367701		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

F20
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000215064

Fid:	215063	Objectid:	215064
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0021796		
Receipt:	0021796	Permit:	43293-F
Wdid:	0303019	Currstatus:	Permit Canceled
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500498.9		
Utmy:	4485613		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.521246		
Longdecdeg:	-104.99411		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1994-03-10		
Permexpire:	1995-03-10		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	See 61223-F		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONNELL RESOURCES INC		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500517.3		
Disputmy:	4485636		
Latitude:	40.5212455023		
Longitude:	-104.994110295		
Site id:	CO6000000215064		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

F21
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000206205

Fid:	206204	Objectid:	206205
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0015133		
Receipt:	0015133	Permit:	15133-MH
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500498.9		
Utmy:	4485613		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.521246		
Longdecdeg:	-104.99411		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1989-06-23		
Permexpire:	1989-09-21		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	STUTE CONST		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500498		
Disputmy:	4485613		
Latitude:	40.5212455023		
Longitude:	-104.994110295		
Site id:	CO6000000206205		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

F22
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000445421

Fid:	445420	Objectid:	445421
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0481241		
Receipt:	0481241	Permit:	61223-F
Wdid:	0303019	Currstatus:	Well Constructed
Wellname:	STUTE PIT	Caseno:	M81-007
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500498.9		
Utmy:	4485613		
Locaccurac:	User supplied		
Latdecdeg:	40.521246		
Longdecdeg:	-104.99411		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2004-06-16		
Permexpire:	2005-06-16		
Wellconstr:	2004-07-01		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Included in the Connel Combined SWSP approved on December 3, 2003. The plan expires on October 31, 2004. The require		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	4		
Applicantn:	CONNELL RESOURCES INC		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500524		
Disputmy:	4485628		
Latitude:	40.5212455023		
Longitude:	-104.994110295		
Site id:	CO6000000445421		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

F23
North
1/2 - 1 Mile
Lower

CO WELLS CO6000000348708

Fid:	348707	Objectid:	348708
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0338116		
Receipt:	0338116	Permit:	12909-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	HARMONY PIT EVP	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500498.9		
Utmy:	4485613		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.521246		
Longdecdeg:	-104.99411		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	GRAVEL PIT	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1992-09-28		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONNELL RESOURCES INC		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500508.3		
Disputmy:	4485641.2		
Latitude:	40.5212455023		
Longitude:	-104.994110295		
Site id:	CO6000000348708		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

24
WNW
1/2 - 1 Mile
Higher

CO WELLS CO6000000444381

Fid:	444380	Objectid:	444381
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0479378		
Receipt:	0479378	Permit:	337-G
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	160		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	4
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	2000
Coordewdir:	W	Coordns:	2000
Coordnsdir:	S		
Utmx:	498917		
Utmy:	4484863.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.514493		
Longdecdeg:	-105.012784		
Use1:	GEOTHERMAL	Use2:	Not Reported
Specialuse:	CLOSED LOOP GEOTHERMAL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2001-09-06		
Permexpire:	2002-09-06		
Wellconstr:	2001-09-06		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	300
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE SCHOOL DISTRICT		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498917		
Disputmy:	4484863.5		
Latitude:	40.5144927035		
Longitude:	-105.012783947		
Site id:	CO6000000444381		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

25
NNE
1/2 - 1 Mile
Lower

CO WELLS CO6000000477438

Fid:	477437	Objectid:	477438
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0538518		
Receipt:	0538518	Permit:	62690-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	WEITZEL SUMP	Caseno:	W4258
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	200		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	1350
Coordewdir:	E	Coordns:	1380
Coordnsdir:	N		
Utmx:	501105.7		
Utmy:	4485388.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.519222		
Longdecdeg:	-104.986947		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	QUATERNARY ALLUVIUM
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2005-08-09		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1954-04-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Included in the Cache La Poudre augmentation Plan in case no. W-7921 (75)		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CWH PROPERTIES LLC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501105.7		
Disputmy:	4485388.5		
Latitude:	40.5192223964		
Longitude:	-104.98694718		
Site id:	CO6000000477438		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

D26
North
1/2 - 1 Mile
Lower

CO WELLS CO600000365445

Fid:	365444	Objectid:	365445
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0365546C		
Receipt:	0365546C	Permit:	43236-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	R-4	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	6.0 N
Range:	68.0 W	Section :	3
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1720
Coordewdir:	W	Coordns:	500
Coordnsdir:	N		
Utmx:	500414.2		
Utmy:	4485663		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.521696		
Longdecdeg:	-104.99511		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-02-25		
Permexpire:	1995-02-25		
Wellconstr:	1994-02-01		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	RECOVERY WELL; WELL R-4; NO MH#		
Elev:	0	Welldepth:	13
Topperfcas:	2	Botperfcas:	12
Yield:	0		
Staticwl:	0		
Applicantn:	CONVIENENCE PLUS PARTNERS LTD		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500414.2		
Disputmy:	4485663		
Latitude:	40.5216959979		
Longitude:	-104.995110178		
Site id:	CO600000365445		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

G27
West
1/2 - 1 Mile
Higher

FED USGS USGS40000221988

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403023105005501		
Monloc name:	SB00606809BDD		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5063714
Longitude:	-105.0158102	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4917.00
Vert measure units:	feet	Vertacc measure val:	15
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported		
Welldepth units:	ft	Welldepth:	18
Wellholedepth units:	Not Reported	Wellholedepth:	Not Reported

Ground-water levels, Number of Measurements: 0

G28
West
1/2 - 1 Mile
Higher

FED USGS USGS40000221987

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403023105005500		
Monloc name:	B006068009BBD		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5063714
Longitude:	-105.0158102	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4917.00
Vert measure units:	feet	Vertacc measure val:	15
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type: Not Reported
Construction date: Not Reported
Welldepth units: ft
Wellholedepth units: Not Reported

Welldepth: 18
Wellholedepth: Not Reported

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance

Database EDR ID Number

1

NNE

1/4 - 1/2 Mile

OIL_GAS

COOG10000017511

Link fld:	06905083	Attrib 1:	05-069-05083
Attrib 2:	ALLISON DRILLING COMPANY INC	Attrib 3:	1 HUMMELL
Sdf key:	06905083&TYPE=WELL		
Facility id:	216682		
Facility type:	WELL	Facility s:	DA
Operator name:	1350		
Well num:	1	Well name:	HUMMELL
Field code:	99999		
Dist n s:	1917		
Dir n s:	S		
Dist e w:	1975		
Dir e w:	W	Qtrqtr:	NESW
Sec:	3	Twp:	6N
Meridian:	6		
Lat:	40.513922		
Ground ele:	4835		
Utm x:	500515		
Utm y:	4484800		
Locqual:	Planned Footage	Field name:	WILDCAT
Name:	ALLISON DRILLING COMPANY INC	Api seq nu:	05083
Api county:	069		
Location id:	386015		
Loc name n:	HUMMELL-66N68W 3NESW		
Site id:	COOG10000017511	Symbol :	LO_XX
Lon:	-104.993921		
Range :	68W		

2

NNW

1/2 - 1 Mile

OIL_GAS

COOG10000017512

Link fld:	06905084	Attrib 1:	05-069-05084
Attrib 2:	ASSOCIATED OIL & GAS CO	Attrib 3:	1 WEBSTER
Sdf key:	06905084&TYPE=WELL		
Facility id:	216683		
Facility type:	WELL	Facility s:	PA
Operator name:	100193		
Well num:	1	Well name:	WEBSTER
Field code:	82030		
Dist n s:	2310		
Dir n s:	N		
Dist e w:	330		
Dir e w:	E	Qtrqtr:	SENE
Sec:	4	Twp:	6N
Meridian:	6		
Lat:	40.516784		
Ground ele:	4925		
Utm x:	499811		
Utm y:	4485118		
Locqual:	Planned Footage	Field name:	TIMNATH
Name:	ASSOCIATED OIL & GAS CO	Api seq nu:	05084

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Api county: 069
 Location id: 386016
 Loc name n: WEBSTER-66N68W 4SENE
 Site id: COOG10000017512 Symbol : LO_XX
 Lon: -105.002235
 Range : 68W

3

East

1/2 - 1 Mile

OIL_GAS

COOG10000017510

Link fld:	06905082	Attrib 1:	05-069-05082
Attrib 2:	ALLISON ESTATE* B F	Attrib 3:	1 L F JOHNSTON
Sdf key:	06905082&TYPE=WELL		
Facility id:	216681		
Facility type:	WELL	Facility s:	DA
Operator name:	1300		
Well num:	1	Well name:	L F JOHNSTON
Field code:	99999		
Dist n s:	660		
Dir n s:	N		
Dist e w:	660		
Dir e w:	W	Qtrqtr:	NWNW
Sec:	11	Twp:	6N
Meridian:	6		
Lat:	40.506582		
Ground ele:	0		
Utm x:	501743		
Utm y:	4483986		
Locqual:	Planned Footage	Field name:	WILDCAT
Name:	ALLISON ESTATE* B F	Api seq nu:	05082
Api county:	069		
Location id:	386014		
Loc name n:	L F JOHNSTON-66N68W 11NWNW		
Site id:	COOG10000017510	Symbol :	LO_XX
Lon:	-104.979429		
Range :	68W		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for LARIMER County: 1

- Note: Zone 1 indoor average level > 4 pCi/L.
- : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
- : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for LARIMER COUNTY, CO

Number of sites tested: 55

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	3.158 pCi/L	79%	21%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	7.035 pCi/L	42%	53%	5%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Riparian Vegetation Data

Source: Division of Wildlife

Telephone: 970-416-3360

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Colorado GIS Well Database

Source: Office of State Engineer, Division of Water Resources

Telephone: 303-866-3581

The GIS Well database includes all wells that the Division of Water Resources permits.

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Locations

Source: Department of Natural Resources

Telephone: 303-894-2100

RADON

State Database: CO Radon

Source: Department of Public Health & Environment

Telephone: 303-692-3090

Radon Study in Colorado

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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North I-25 ROD 1 – 4225 Kechter Road Photo Log:



Photo 1

View of Residence Adjoining Subject Property

(A Google Earth street-view image of the residence south of the subject property. Multiple structures and sheds can be seen on the parcel.)



Photo 2

Aerial Image of Adjoining Residence

(Due to the topography, capturing a photo of the entire parcel from the right-of-way was not possible. This aerial image shows the main structures on the parcel.)

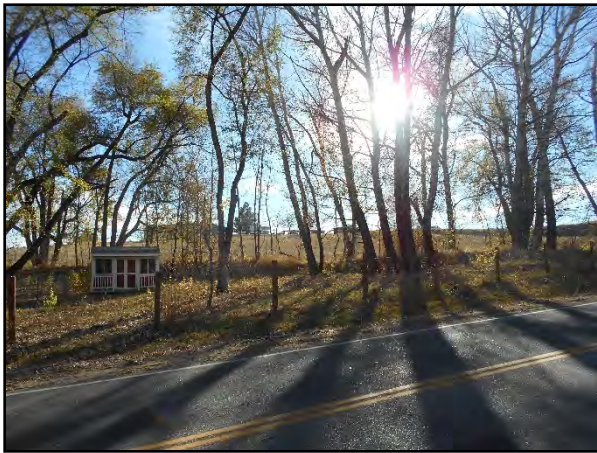


Photo 3

View of Residence from Roadway

(Looking southwest at the subject property and residential parcel from Kechter Road. A child's play house [pictured] and a tree house [not pictured, approximately 30 feet east of the play house] were located at the front of the parcel, likely inside the subject property. The main house, RV, truck, and other structures can be seen at the top of the hill.)



Photo 4

View of Residence from Strauss Cabin Rd

(Looking east at the residence. This provides another angle on the house, RV, truck, and other structures. Power lines and a pole-mounted transformer can be observed.)



Photo 5

View of Gravel Mining Property

(Looking north at a property that was previously used for sand and gravel mining. The previously excavated areas now are holding water and appear to be a natural pond.)



Photo 6

View of Gravel Mining Property

(Looking east at the gravel mining property. I-25 can be seen in the background.)



Photo 7

View of Abandoned Residence Adjacent to Site

(Looking north at what appears to be an abandoned home across the street from the subject property. House was built in 1910 and remodeled in 1966, so materials may contain asbestos and/or lead based paint.)



Photo 8

View of Island Lake Marine & Sports

(Looking southeast at the northern edge of Island Lake Marine & Sports, a boat dealer, and recreational lake directly to the east of the subject property. Adjacent to the road are two pole-mounted transformers.)

COLORADO DEPARTMENT OF TRANSPORTATION INITIAL SITE ASSESSMENT (ISA)	Region: 4 Route ID:	Project No.: 18357 IM 0253-221 Project Code (SA#):
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Project Description

Project Name: **North I-25 Revised Record of Decision 1 (SH 392 to SH 14)**
Milepost Begin: ~262 Milepost End: ~270 County: Larimer
Location: **I-25 Between SH 392 and SH 14**
Main Project Elements: **Reconstruction of I-25 to construct express lanes from SH 392 to SH 14.**

Project Features (Check if applies)

<input type="checkbox"/> Structure Acquisition	<input type="checkbox"/> Structure Modification	<input type="checkbox"/> Structure Demolition
<input checked="" type="checkbox"/> New ROW	<input checked="" type="checkbox"/> Easements	<input checked="" type="checkbox"/> Utility Relocation
<input checked="" type="checkbox"/> Excavation/Drilling	Disturbance depth (if known): 30 ft	<input checked="" type="checkbox"/> Dewatering
Gw Anticipated: Yes	Depth to gw (if known): 5-10ft	Gw flow direction (if known): S

Records Review & Interview(s)

The following records/sources were used in this assessment ('No' is implied if unchecked):

ASTM Standard Environmental Record Sources OPS CDPHE CDOT Internal Database Date:
 ASTM Standard Search Radii or Modified Search Radii:
 Previous Environmental Reports/CDOT Files: **North I-25 EIS Modified Phase I Site Assessment Addendum.**
 Other Files/Databases (Assessor, Fire dept., Building, Planning, etc.): **Colorado Division of Oil and Public Safety Documents and Reports for: 3808 Mulberry Street, 3809 Mulberry Street, 4228 Mulberry Street, and 121 John Deere Drive.**

Topographic Map(s) Current – date: **2015** Historic – year(s):
Aerial Photograph(s) Current – date: **September 2016** Historic – year(s): **1999, 2002, 2005, 2006, 2009-2012, 2014**

Sanborn Map(s) – year(s): **N/A**
 Local Street Directories – year(s): **N/A**

Historic Land use(s) within the project area (if known): **This area has been dominated by commercial and light industrial activity for several decades, with many of the buildings dating back to the 1960s, 1970s, and 1980s. Development along SH 14 appears to have begun from the west, near the SH 14 intersections with Link Lane and Air Park Drive, and moved east after the construction of Interstate 25 (I-25), which was completed in 1964. After the completion of I-25, the development in the direct vicinity of the SH 14 and I-25 interchange increased, including the construction of gas stations, restaurants, and hotels that are still located in the area. Agricultural activity has also historically been located in the vicinity of the subject property; some of these agricultural properties are now being redeveloped, predominantly for residential use, but some remain operational. Most recently the subject property was a gas station before the current hotel was constructed in the mid 1990s.**

Interviews (Names/Title/Date/Comments): **None Conducted**

Site Reconnaissance & Description

Visual inspection conducted Inspection Date: **11/16/2016**
If 'No' document the reason:

Project area and land use(s) description:

A strip of parking lot and grassed ditch located on the south edge of a commercial property with a hotel (Red Lion Inn & Suites). A small stream/ditch runs north-south adjacent to the west edge of the subject property.

Industrial Light Industrial Commercial Residential Agricultural Undeveloped Other:

Adjacent land use(s) description:

Directly adjacent to the subject property are two hotels and a few restaurants (Denny's, Waffle House, Hacienda). Multiple self-storage businesses, a vet pharmacy, and other commercial businesses are located to the north. Further to the north are some light industrial operations including a FedEx Shipping Center and Colorado Machinery, a tractor dealer that appears to service vehicles. Other activity in the area includes

multiple building and metal fabrication companies, a livestock auction, car maintenance and retailers, office parks, New Belgium Brewery shipping hub, and gas stations. Single family housing is located about 0.3 miles southwest of the project.

Industrial Light Industrial Commercial Residential Agricultural Undeveloped Other:

Potential Environmental Concerns on the immediate project area or directly adjacent to it

(Select from dropdown menu – Yes, No, Expected, or Unknown)

Potential Environmental Concern	Project Area	Adjacent Area	Potential Environmental Concern	Project Area	Adjacent Area
Evidence of underground tanks (pipes, vents, fill caps, etc.)	No	Yes	Protected/fenced/placarded area(s)	No	No
Aboveground storage tank(s)	No	Yes	Liquid waste (pits, ponds, etc.)	No	No
Monitoring/water well(s)	Yes	Yes	Oil sheen (soil/water)	No	No
Electrical/transformer Equipment	Yes	Yes	Oil/gas well(s)	No	no
Cistern(s), sump(s) drain(s)	Expected	Expected	Mine tailings/waste	No	No
Barrel(s), drum(s), container(s)	Unknown	Unknown	Painted/preserved material(s)	No	Expected
Stockpile, surface trash, debris	No	No	Odor	No	No
Exposed/buried landfill	No	No	Chemical storage	No	Expected
Batteries	No	No	Suspect asbestos containing material	No	Expected
Surface staining	No	No	Suspected methamphetamine lab	No	Unknown
Stressed vegetation	No	No			

Findings/Conclusions:

Are known hazardous or other waste sites on or adjacent to the project area, which may affect the project? **Yes**
 Explain: **The subject property is on the south edge of a parcel that contained leaking underground storage tanks for petroleum products when it was an operating gas station. It is expected that a portion of the former underground storage tank area will be within the acquired subject property. The tanks were removed in 1990. During removal, inspection of these tanks revealed numerous holes and deteriorating tank seams; substances were observed floating on the groundwater in the excavation zone. The contaminated soil was excavated and replaced with clean structural fill material beginning in December 1990. In 1994-1995 it was determined further action was necessary, which is when a Corrective Action Plan (CAP) was requested and eventually completed in 1997. The CAP delineated the impacted area and recommended groundwater monitoring be conducted over the next two years to confirm the petroleum constituents dissolved in the groundwater are decreasing over time. Multiple monitoring well caps were observed in the parking lot south of the building during the field investigation; A site map included with the CAP showed three monitoring wells in the parking lot south of the hotel, one on the northwest edge of the parcel, and two in the shoulder between the frontage road and SH 14. Multiple monitoring wells are inside the proposed subject property to be acquired. After completing the monitoring period, it was found the petroleum constituents were decreasing naturally over time. The site was given a No Further Action (NFA) letter from the Colorado Department of Labor and Employment (CDLE) in September 1998. No soil or water samples have been taken since 1998 therefore it is necessary to utilize a Materials Management Plan during any excavation or construction activities due to a known presence of contaminants at an unknown concentration.**
Across the street from the project area are two gas stations, both of which contain USTs. One of the gas stations, Country Store #340 at 3809 E Mulberry Street, had a leaking underground storage tank that was removed after a 1989 release. In 2009, a second release was discovered during routine monitoring for the original release but the source of the release is unknown as it was upgradient from the operating tanks and dispensers on the property. Therefore, Country Store #340 is an active LUST site that is currently in the process of implementing a CAP: groundwater monitoring is in progress every three months and dual-phase extraction (DPE) is being used to remediate the contaminated groundwater and soil vapor. Monitoring well caps were observed during the field investigation throughout the parking lot. After reviewing the monitoring reports, it was found the groundwater flow of the contaminated plume is towards the south, therefore, it is not a concern to the subject property that is located to the north.
Two operating aboveground storage tanks are listed for the Sunstate Equipment Co property, located adjoining the NE quadrant of the I-25 and Mulberry Street interchange. Sunstate Equipment Co property is also impacted by contaminants from a leaking UST. The property has received an NFA letter and the direction of groundwater flow on the site is south-southeast; therefore, contaminants from this property would not impact the subject property.

A tractor and equipment retailer, now Colorado Machinery LLC, located 0.3 miles north of the subject property, also contained a release from a UST. This property was evaluated in 2009 after the discovery of the release and given an NFA letter due to the low concentration of contaminants found. In 2011, the USTs were removed and TEPH and TVPH soil contamination was above Tier I criteria but BTEX and PAH were below Tier I criteria. The groundwater was found to be non-detect for BTEX; therefore, an NFA letter was given. The Colorado Machinery LLC property does have a groundwater flow south, towards the project area, but due to the low concentration of contaminants and the distance from the project area, the migration of contaminants from this site are not expected to impact the target property.

Pad and pole-mounted electrical transformers were observed in and adjoining the subject property, most of which were found at the west end of the subject property. Any electrical equipment with no label or unknown concentration is assumed to be "PCB-contaminated equipment" per EPA regulation and should be managed accordingly. In general, legal and financial responsibility for PCB containing equipment lies with the equipment owner; however, if another party causes the equipment to fail, financial and legal responsibility may be transferred to the responsible party. The subject property and surrounding area contain multiple hotels and light industrial activities; therefore, it is expected these properties contain some form of cistern, sump, or drain although these features were not observed during the site investigation. Although no barrels, drums, or containers were observed, the industrial and hotel activity in the project area and adjacent properties result in an unknown designation as many properties have storage rooms with cleaning solvents, paints, aerosols, and other containers that may contain hazardous materials. Chemical storage is also expected in some of the adjoining properties, particularly Colorado Machinery LLC and Sunstate Equipment Co due to the vehicle maintenance activity conducted on the properties or Architectural Sheet Metal & Panels Inc. due to their sheet metal fabrication activities. Two self-storage facilities are located north of the subject property; self-storage locations can be utilized for methamphetamine labs and due to an inability to access individual self-storage facilities, the presence of methamphetamine labs is considered unknown.

Recommendations:

<input checked="" type="checkbox"/> Materials Management Plan	<input type="checkbox"/> Force Account	<input type="checkbox"/> Modified CDOT Specification(s)	<input type="checkbox"/> Additional Assessment/Investigation*
---	--	---	---


Explain: **A Materials Management Plan will be necessary to ensure worker safety as subsurface excavations will encounter contamination in the soil and groundwater from the petroleum release. The relocation of electrical transformers and equipment will be required and will be the responsibility of the equipment owner. Groundwater monitoring wells on the subject property will require abandonment; CDOT specification 202.02 procedures for abandoning water wells shall be followed.**

*Additional work must be approved by CDOT.

Attachments:

<input checked="" type="checkbox"/> Environmental Database Map	EDR Radius Map Report with GeoCheck - November 11, 2016
<input type="checkbox"/> Modified CDOT Specification(s)	
<input type="checkbox"/> General Plan Note(s)	
<input checked="" type="checkbox"/> Maps & Figures	Hazardous Materials Map
<input type="checkbox"/> Agency File Data	
Photo Log	Photo Log - November 16, 2016

Completed by (Name and Title): **Ryan Walker, Environmental Engineer**

Signature:  Date: **12/19/16** Revised (if necessary):

CDOT Environmental Project Manager Approval: _____ Date:

N I-25 Red Lion Inn/Sleep Inn
3808 E MULBERRY ST
Fort Collins, CO 80524

Inquiry Number: 4779546.6s
November 11, 2016

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

3808 E MULBERRY ST
FORT COLLINS, CO 80524

COORDINATES

Latitude (North): 40.5817570 - 40° 34' 54.32"
Longitude (West): 105.0065340 - 105° 0' 23.52"
Universal Transverse Mercator: Zone 13
UTM X (Meters): 499447.0
UTM Y (Meters): 4492118.5
Elevation: 4928 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5955103 FORT COLLINS, CO
Version Date: 2013

East Map: 5954855 TIMNATH, CO
Version Date: 2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150825
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 3808 E MULBERRY ST
 FORT COLLINS, CO 80524

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	CONVENIENCE PLUS #32	3808 E MULBERRY	LUST TRUST		TP
A2	ROY C HALL	3808 E MULBERRY	RGA LUST		TP
A3	CONVENIENCE PLUS #32	3808 E MULBERRY	LUST, UST, AST		TP
A4		3808 E MULBERRY FORT	RGA LUST		TP
A5	CONVENIENCE PLUS #32	3808 E MULBERRY FORT	RGA LUST		TP
A6	ROY C HALL	3808 E MULBERRY	RGA LUST		TP
A7	CONVENIENCE PLUS #32	3808 E MULBERRY	RGA LUST		TP
B8	JAY S NEGIN	3803 MULBERRY ST	UST	Higher	245, 0.046, South
B9	COUNTRY STORE #340	3809 E MULBERRY ST	LUST, LUST TRUST, UST	Higher	261, 0.049, South
B10		3809 E MULBERRY ST	EDR Hist Auto	Higher	261, 0.049, South
B11	SCHRADER'S COUNTRY S	3733 E MULBERRY ST	UST, AST	Lower	280, 0.053, SSW
12	GEN/RX INC	425 JOHN DEERE DR	RCRA NonGen / NLR, FINDS, ECHO	Higher	471, 0.089, NE
13	FEDERAL EXPRESS CORP	3800 WEICKER DR	RCRA-CESQG, FINDS, ECHO	Higher	581, 0.110, NNE
14	FIBERLOK INC	811 STOCKTON AVE	RCRA-SQG, US AIRS, FINDS, ECHO	Lower	1026, 0.194, SSE
C15	UPS FORT COLLINS CEN	3700 CANAL ST	LUST, UST	Lower	1145, 0.217, SSW
C16	UNITED PARCEL SERVIC	3700 CANAL ST	RCRA-CESQG, FINDS, ECHO	Lower	1145, 0.217, SSW
17	AUTO COLLISION EXPER	3525 E MULBERRY	RCRA NonGen / NLR	Higher	1215, 0.230, WSW
18	COLORADO MACHINERY	121 JOHN DEERE DR	LUST, UST	Higher	1467, 0.278, NNE
19	RYDER TRUCK RENTAL I	121 JOHN DEERE DR	LUST	Higher	1718, 0.325, North
D20	FRITO-LAY	3824 CANAL DR	LUST TRUST	Lower	1736, 0.329, South
D21	FRITO-LAY	3824 CANAL DR	LUST, UST	Lower	1736, 0.329, South
22	SUNSTATE EQUIPMENT C	4228 E MULBERRY ST	LUST, UST, AST	Higher	2444, 0.463, East
23	MARATHON METALLIC BU	I-25 & COLO 14	CORRACTS, RCRA NonGen / NLR	Higher	2860, 0.542, East

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
CONVENIENCE PLUS #32 3808 E MULBERRY FORT COLLINS, CO 80522	LUST TRUST Facility Id: 5632	N/A
ROY C HALL 3808 E MULBERRY FT COLLINS, CO	RGA LUST	N/A
CONVENIENCE PLUS #32 3808 E MULBERRY FORT COLLINS, CO 80522	LUST Facility Id: 5632 Status: Closed UST Tank Status: Permanently Closed Facility Id: 5632 AST Tank Status: Permanently Closed Facility Id: 5632	N/A
3808 E MULBERRY FORT 3808 E MULBERRY FORT FORT COLLINS, CO	RGA LUST	N/A
CONVENIENCE PLUS #32 3808 E MULBERRY FORT FORT COLLINS, CO	RGA LUST	N/A
ROY C HALL 3808 E MULBERRY FORT COLLINS, CO	RGA LUST	N/A
CONVENIENCE PLUS #32 3808 E MULBERRY FORT COLLINS, CO	RGA LUST	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent CERCLIS

SHWS..... This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Sites & Facilities

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LAST..... Leaking Aboveground Storage Tank Listing
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

AUL..... Environmental Covenants and Environmental Use Restrictions List

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup & Redevelopment Act Application Tracking Report

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF..... Historical Landfill List
SWRCY..... Registered Recyclers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
CDL..... Meth Lab Locations
US CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CO ERNS..... Spills Database
SPILLS 90..... SPILLS 90 data from FirstSearch

EXECUTIVE SUMMARY

Other Ascertainable Records

FUDS.....	Formerly Used Defense Sites
DOD.....	Department of Defense Sites
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR.....	Financial Assurance Information
EPA WATCH LIST.....	EPA WATCH LIST
2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
ROD.....	Records Of Decision
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PRP.....	Potentially Responsible Parties
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
AIRS.....	Permitted Facility & Emissions Listing
ASBESTOS.....	Asbestos Abatement & Demolition Projects
METHANE SITE.....	Methane Site Investigations - Jefferson County 1980
Methane Investigation.....	Methane Gas & Swamp Findings
DRYCLEANERS.....	Drycleaner Facilities
Financial Assurance.....	Financial Assurance Information Listing
MINES.....	Permitted Mines Listing
NPDES.....	Permitted Facility Listing
UMTRA.....	Uranium Mill Tailings Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
ECHO.....	Enforcement & Compliance History Information
ABANDONED MINES.....	Abandoned Mines

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
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EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 06/27/2016 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>MARATHON METALLIC BU</i>	<i>I-25 & COLO 14</i>	<i>E 1/2 - 1 (0.542 mi.)</i>	<i>23</i>	<i>59</i>

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/21/2016 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<i>FIBERLOK INC</i>	<i>811 STOCKTON AVE</i>	<i>SSE 1/8 - 1/4 (0.194 mi.)</i>	<i>14</i>	<i>44</i>

EXECUTIVE SUMMARY

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 2 RCRA-CESQG sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FEDERAL EXPRESS CORP	3800 WEICKER DR	NNE 0 - 1/8 (0.110 mi.)	13	42
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UNITED PARCEL SERVIC	3700 CANAL ST	SSW 1/8 - 1/4 (0.217 mi.)	C16	52

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Health's Leaking Underground Storage Tank List.

A review of the LUST list, as provided by EDR, and dated 06/21/2016 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COUNTRY STORE #340 Facility Id: 2608 Status: Closed Status: Implementing CAP	3809 E MULBERRY ST	S 0 - 1/8 (0.049 mi.)	B9	12
COLORADO MACHINERY Facility Id: 4731 Status: Closed	121 JOHN DEERE DR	NNE 1/4 - 1/2 (0.278 mi.)	18	55
RYDER TRUCK RENTAL I Facility Id: 13103 Status: Closed	121 JOHN DEERE DR	N 1/4 - 1/2 (0.325 mi.)	19	56
SUNSTATE EQUIPMENT C Facility Id: 6762 Status: Closed	4228 E MULBERRY ST	E 1/4 - 1/2 (0.463 mi.)	22	57
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
UPS FORT COLLINS CEN Facility Id: 207 Status: Closed	3700 CANAL ST	SSW 1/8 - 1/4 (0.217 mi.)	C15	51
FRITO-LAY Facility Id: 7333 Status: Closed	3824 CANAL DR	S 1/4 - 1/2 (0.329 mi.)	D21	56

EXECUTIVE SUMMARY

LUST TRUST: Reimbursement application package. The 1989 Colorado General Assembly established Colorado's Petroleum Storage Tank Fund. The Fund reimburses eligible applicants for allowable costs incurred in cleaning up petroleum contamination from underground and aboveground petroleum storage tanks, as well as for third-party liability expenses. Remediation of contamination caused by railroad or aircraft fuel is not eligible for reimbursement. The Fund satisfies federal Environmental Protection Agency financial assurance requirements. Monies in the Fund come from various sources, predominantly the state environmental surcharge imposed on all petroleum products except railroad or aircraft fuel.

A review of the LUST TRUST list, as provided by EDR, and dated 07/07/2016 has revealed that there are 2 LUST TRUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
COUNTRY STORE #340 Facility Id: 2608	3809 E MULBERRY ST	S 0 - 1/8 (0.049 mi.)	B9	12

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FRITO-LAY Facility Id: 7333	3824 CANAL DR	S 1/4 - 1/2 (0.329 mi.)	D20	56

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The source is the State Oil Inspector's Office's Tank List.

A review of the UST list, as provided by EDR, and dated 06/21/2016 has revealed that there are 4 UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
JAY S NEGIN Tank Status: Permanently Closed Facility Id: 9269	3803 MULBERRY ST	S 0 - 1/8 (0.046 mi.)	B8	11
COUNTRY STORE #340 Tank Status: Permanently Closed Tank Status: Currently In Use Facility Id: 2608	3809 E MULBERRY ST	S 0 - 1/8 (0.049 mi.)	B9	12

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SCHRADER'S COUNTRY S Tank Status: Currently In Use Facility Id: 4903	3733 E MULBERRY ST	SSW 0 - 1/8 (0.053 mi.)	B11	39
UPS FORT COLLINS CEN Tank Status: Permanently Closed Facility Id: 207	3700 CANAL ST	SSW 1/8 - 1/4 (0.217 mi.)	C15	51

EXECUTIVE SUMMARY

AST: The Aboveground Storage Tank database contains registered ASTs. The source is the State Oil Inspector's Office's Tank List.

A review of the AST list, as provided by EDR, and dated 06/21/2016 has revealed that there is 1 AST site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
SCHRADER'S COUNTRY S Tank Status: Permanently Closed Facility Id: 4903	3733 E MULBERRY ST	SSW 0 - 1/8 (0.053 mi.)	B11	39

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/21/2016 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
GEN/RX INC	425 JOHN DEERE DR	NE 0 - 1/8 (0.089 mi.)	12	40
AUTO COLLISION EXPER	3525 E MULBERRY	WSW 1/8 - 1/4 (0.230 mi.)	17	53

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

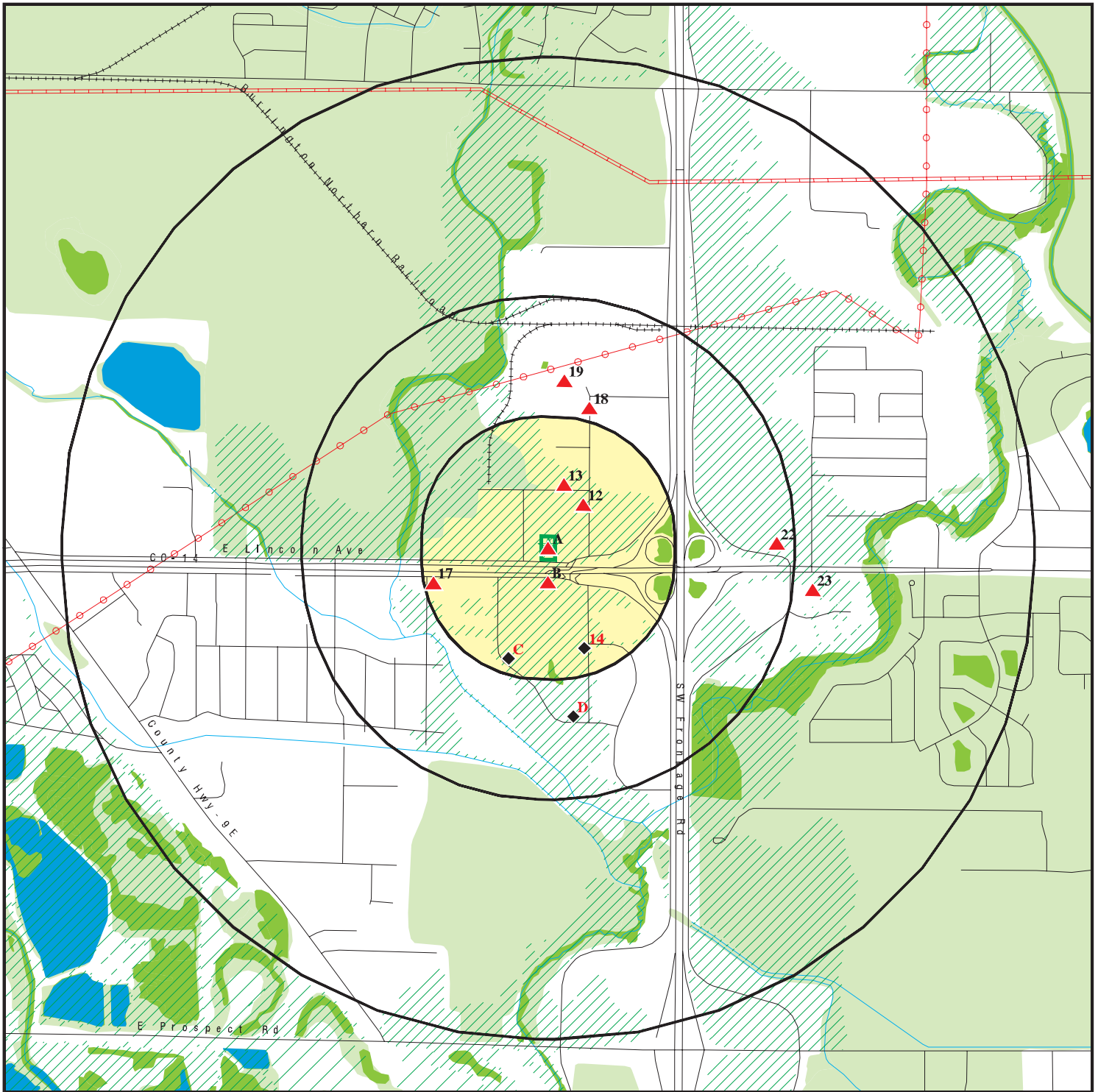
A review of the EDR Hist Auto list, as provided by EDR, has revealed that there is 1 EDR Hist Auto site within approximately 0.125 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
Not reported	3809 E MULBERRY ST	S 0 - 1/8 (0.049 mi.)	B10	38

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 4779546.6S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

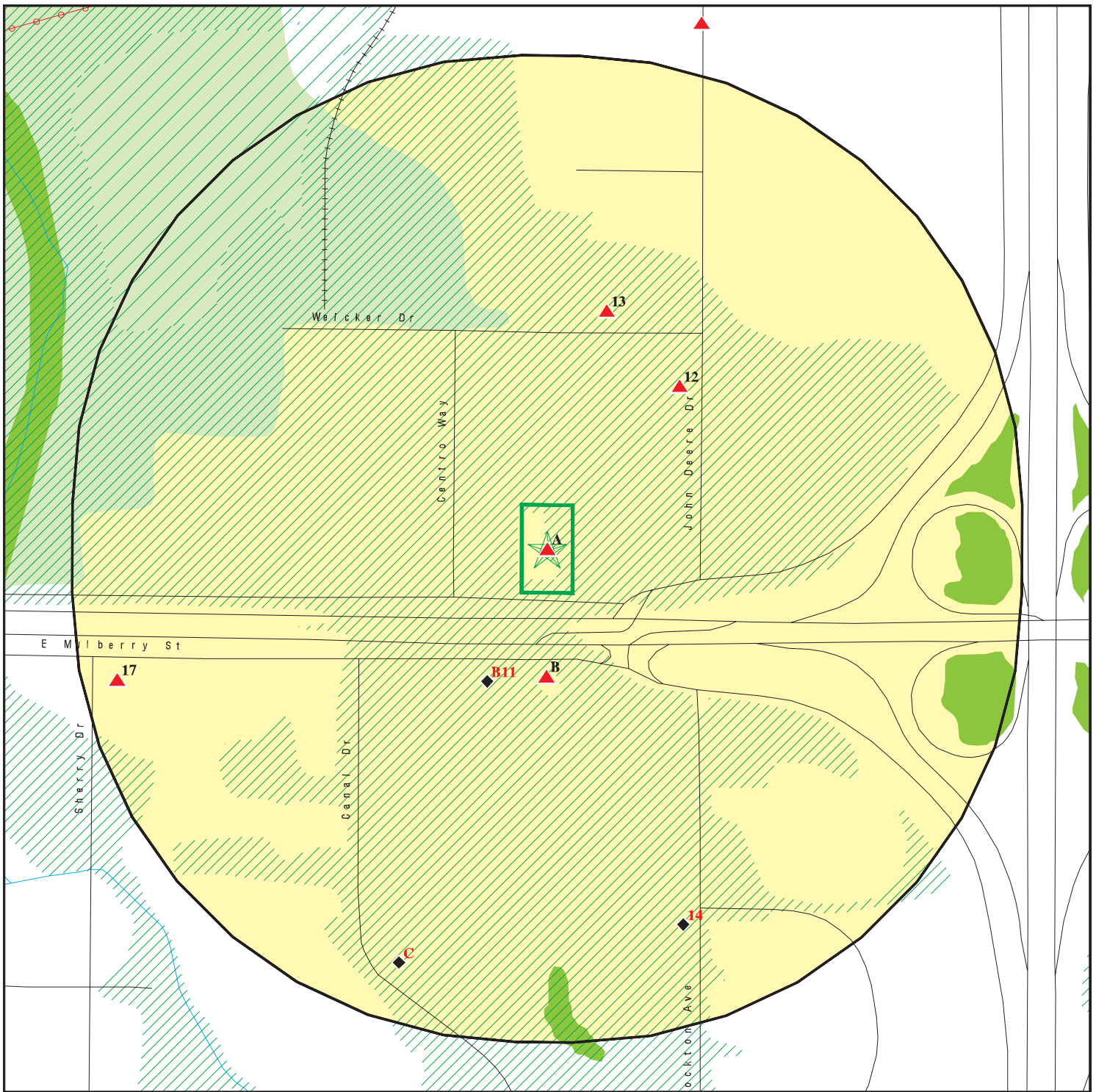
State Wetlands














This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: NI-25 Red Lion Inn/Sleep Inn
 ADDRESS: 3808 E MULBERRY ST
 Fort Collins CO 80524
 LAT/LONG: 40.581757 / 105.006534

CLIENT: Felsburg Holt & Ullevig
 CONTACT: Ryan Walker
 INQUIRY #: 4779546.6s
 DATE: November 11, 2016 8:19 pm

DETAIL MAP - 4779546.6S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Power transmission lines
-  100-year flood zone
-  500-year flood zone
-  National Wetland Inventory
-  State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: N I-25 Red Lion Inn/Sleep Inn
 ADDRESS: 3808 E MULBERRY ST
 Fort Collins CO 80524
 LAT/LONG: 40.581757 / 105.006534

CLIENT: Felsburg Holt & Ullevig
 CONTACT: Ryan Walker
 INQUIRY #: 4779546.6s
 DATE: November 11, 2016 8:19 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	1	NR	1
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-CESQG	0.250		1	1	NR	NR	NR	2
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
SHWS	N/A		N/A	N/A	N/A	N/A	N/A	N/A
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500	1	1	1	4	NR	NR	7
LAST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500	1	1	0	1	NR	NR	3

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<i>State and tribal registered storage tank lists</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250	1	3	1	NR	NR	NR	5
AST	0.250	1	1	0	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>State and tribal institutional control / engineering control registries</i>								
AUL	0.500		0	0	0	NR	NR	0
<i>State and tribal voluntary cleanup sites</i>								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
<i>State and tribal Brownfields sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
HIST LF	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS 2	0.001		0	NR	NR	NR	NR	0
<i>Records of Emergency Release Reports</i>								
HMIRS	0.001		0	NR	NR	NR	NR	0
CO ERNS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
<i>Other Ascertainable Records</i>								
RCRA NonGen / NLR	0.250		1	1	NR	NR	NR	2
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
AIRS	0.001		0	NR	NR	NR	NR	0
ASBESTOS	0.001		0	NR	NR	NR	NR	0
METHANE SITE	0.001		0	NR	NR	NR	NR	0
Methane Investigation	0.001		0	NR	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
ABANDONED MINES	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		1	NR	NR	NR	NR	1
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001	5	0	NR	NR	NR	NR	5
- Totals --		9	9	5	5	1	0	29

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

N/A = This State does not maintain a SHWS list. See the Federal CERCLIS list.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

A1 **CONVENIENCE PLUS #32**
Target **3808 E MULBERRY**
Property **FORT COLLINS, CO 80522**

LUST TRUST **S107555974**
 N/A

Site 1 of 7 in cluster A

Actual:
4928 ft.

CO LUST TRUST:

Facility ID:	5632
Payee Name:	Not reported
Event ID:	4167
RAP ID:	54
Commissioned Date:	05/08/1992
Cap Status:	Not reported
Eligibility Type Description:	Not reported
Total Percent Reduction:	0.0
Total Reimbursement for Event:	\$30,140.04
RAP Type Description:	Original
RAP Status:	Denied
RAP Filed Date:	06/17/1991
Total Reimbursement:	\$43,468.19
Net Reimbursement:	\$0.00
FPR Date:	Not reported
Pay Voucher Date:	Not reported
Protest Number:	Not reported
Special Conditions:	Not reported
Fund Analyst:	Joy Shulman
Category:	Retail Gas Station
Technical Reviewer:	Larry Delin
Technical Reviewer Phone:	(303) 318-8511
Fund Analyst Phone:	(303) 318-8537
Facility ID:	5632
Payee Name:	Convenience Plus Partners, Ltd.
Event ID:	4167
RAP ID:	3586
Commissioned Date:	03/16/2001
Cap Status:	Not reported
Eligibility Type Description:	Not reported
Total Percent Reduction:	0.0
Total Reimbursement for Event:	\$30,140.04
RAP Type Description:	Original
RAP Status:	Approved
RAP Filed Date:	09/01/1999
Total Reimbursement:	\$76,791.60
Net Reimbursement:	\$30,140.04
FPR Date:	03/16/2001
Pay Voucher Date:	04/03/2001
Protest Number:	Not reported
Special Conditions:	Recd W-9 and 147C dated 9/2/11 on 9/26/11 - CAHII
Fund Analyst:	Joy Shulman
Category:	Retail Gas Station
Technical Reviewer:	Larry Delin
Technical Reviewer Phone:	(303) 318-8511
Fund Analyst Phone:	(303) 318-8537

[Click here for COSTIS:](#)

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

A2
Target
Property

ROY C HALL
3808 E MULBERRY
FT COLLINS, CO

RGA LUST

S115324954
N/A

Site 2 of 7 in cluster A

Actual:
4928 ft.

RGA LUST:

1995	ROY C HALL	3808 E MULBERRY
1994	ROY C HALL	3808 E MULBERRY

A3
Target
Property

CONVENIENCE PLUS #32
3808 E MULBERRY
FORT COLLINS, CO 80522

LUST
UST
AST

U003121608
N/A

Site 3 of 7 in cluster A

Actual:
4928 ft.

LUST:

Facility Id:	5632
Status:	Closed
Event ID:	4167
Confirmed Release:	12/11/1990
Log Date:	12/11/1990

Click here for COSTIS:

CO UST:

Facility ID:	5632
--------------	------

Owner:

Owner Id:	18865
Owner Name:	Jacksons
Owner Address:	Po Box 610
Owner City/State/Zip:	Meridian, ID 83680
Owner County:	Ada

Tank Tag:	5632-1
Tank Status:	Permanently Closed
Date Tank Installed:	Not reported
Tank Age:	Not reported
Tank Chemical:	Gasoline
Tank Type:	UST

Tank Tag:	5632-2
Tank Status:	Permanently Closed
Date Tank Installed:	Not reported
Tank Age:	Not reported
Tank Chemical:	Gasoline
Tank Type:	UST

Tank Tag:	5632-3
Tank Status:	Permanently Closed
Date Tank Installed:	Not reported
Tank Age:	Not reported
Tank Chemical:	Gasoline
Tank Type:	UST

Tank Tag:	5632-4
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Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

CONVENIENCE PLUS #32 (Continued)

U003121608

Tank Status: Permanently Closed
 Date Tank Installed: Not reported
 Tank Age: Not reported
 Tank Chemical: Gasoline
 Tank Type: UST

Tank Tag: 5632-5
 Tank Status: Permanently Closed
 Date Tank Installed: Not reported
 Tank Age: Not reported
 Tank Chemical: Waste Oil
 Tank Type: UST

Click here for COSTIS:

AST:
 Facility ID: 5632

Owner:
 Owner Id: 18865
 Owner Name: Jacksons
 Owner Address: Po Box 610
 Owner City/State/Zip: Meridian, ID 83680
 Owner County: Ada

Tank Tag: 5632-6
 Tank Status: Permanently Closed
 Date Tank Installed: Not reported
 Tank Age: Not reported
 Tank Contents: LPG
 Tank Type: LPG

Click here for COSTIS:

A4
 Target
 Property

**3808 E MULBERRY FORT COLLINS CO 80522
 FORT COLLINS, CO**

**RGA LUST S115306625
 N/A**

Site 4 of 7 in cluster A

**Actual:
 4928 ft.**

RGA LUST:
 2003 TLAZZARO 3808 E MULBERRY FORT COLLINS CO 80522
 2002 TLAZZARO 3808 E MULBERRY FORT COLLINS CO 80522

A5
 Target
 Property

**CONVENIENCE PLUS #32
 3808 E MULBERRY FORT COLLINS CO 80522
 FORT COLLINS, CO**

**RGA LUST S115314496
 N/A**

Site 5 of 7 in cluster A

**Actual:
 4928 ft.**

RGA LUST:
 2001 CONVENIENCE PLUS #32 3808 E MULBERRY FORT COLLINS CO
 80522

MAP FINDINGS

Map ID
Direction
Distance
Elevation

Site

Database(s)

EDR ID Number
EPA ID Number

A6
Target
Property

ROY C HALL
3808 E MULBERRY
FORT COLLINS, CO

RGA LUST **S115324953**
N/A

Site 6 of 7 in cluster A

Actual:
4928 ft.

RGA LUST:

2012	ROY C HALL	3808 E MULBERRY
2011	ROY C HALL	3808 E MULBERRY
2010	ROY C HALL	3808 E MULBERRY
2009	ROY C HALL	3808 E MULBERRY
2008	ROY C HALL	3808 E MULBERRY
2007	ROY C HALL	3808 E MULBERRY
2006	ROY C HALL	3808 E MULBERRY
2005	ROY C HALL	3808 E MULBERRY
2004	ROY C HALL	3808 E MULBERRY
1998	ROY C HALL	3808 E MULBERRY
1997	ROY C HALL	3808 E MULBERRY
1996	ROY C HALL	3808 E MULBERRY

A7
Target
Property

CONVENIENCE PLUS #32
3808 E MULBERRY
FORT COLLINS, CO

RGA LUST **S115314497**
N/A

Site 7 of 7 in cluster A

Actual:
4928 ft.

RGA LUST:

2000	CONVENIENCE PLUS #32	3808 E MULBERRY
1999	CONVENIENCE PLUS #32	3808 E MULBERRY

B8
South
< 1/8
0.046 mi.
245 ft.

JAY S NEGIN
3803 MULBERRY ST
FORT COLLINS, CO 80524

UST **U003240892**
N/A

Site 1 of 4 in cluster B

Relative:
Higher

CO UST:

Facility ID: 9269

Actual:
4929 ft.

Owner:

Owner Id: 3005
Owner Name: Jay S Negin
Owner: Jay S Negin
Owner Address: 7100 Blvd E
Owner City/State/Zip: West New York, NJ 07093
Owner County: Hudson

Tank Tag: 9269-1
Tank Status: Permanently Closed
Date Tank Installed: Not reported
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Click here for COSTIS:

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B9
South
< 1/8
0.049 mi.
261 ft.

COUNTRY STORE #340
3809 E MULBERRY ST
FORT COLLINS, CO 80524

Site 2 of 4 in cluster B

LUST **U003700645**
LUST TRUST **N/A**
UST

Relative:
Higher

LUST:

Facility Id: 2608
Status: Closed
Event ID: 2205
Confirmed Release: 09/05/1989
Log Date: 09/05/1989

Actual:
4930 ft.

Facility Id: 2608
Status: Closed
Event ID: 9008
Confirmed Release: 07/24/2002
Log Date: 08/05/2002

Facility Id: 2608
Status: Implementing CAP
Event ID: 10929
Confirmed Release: 09/04/2009
Log Date: 09/09/2009

Click here for COSTIS:

CO LUST TRUST:

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 21033
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 04/23/2010
Total Reimbursement: \$9,817.58
Net Reimbursement: \$9,817.58
FPR Date: 07/07/2010
Pay Voucher Date: 07/26/2010
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Charles A Hammonds
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8515
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 21381
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 07/08/2010
Total Reimbursement: \$6,735.50
Net Reimbursement: \$6,735.50
FPR Date: 09/30/2010
Pay Voucher Date: 10/13/2010
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 21382
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 07/08/2010
Total Reimbursement: \$5,795.69
Net Reimbursement: \$5,795.69
FPR Date: 09/30/2010
Pay Voucher Date: 10/13/2010
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 21502
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 07/28/2010
Total Reimbursement: \$3,298.16
Net Reimbursement: \$3,298.16
FPR Date: 10/12/2010
Pay Voucher Date: 10/28/2010

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: John J Bonifacic
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8516
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 21562
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 08/11/2010
Total Reimbursement: \$15,432.60
Net Reimbursement: \$15,432.60
FPR Date: 10/22/2010
Pay Voucher Date: 11/04/2010
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 21805
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 10/05/2010
Total Reimbursement: \$5,436.77
Net Reimbursement: \$5,436.77
FPR Date: 12/06/2010
Pay Voucher Date: 12/22/2010
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 21806
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 10/05/2010
Total Reimbursement: \$7,649.80
Net Reimbursement: \$7,469.77
FPR Date: 03/01/2011
Pay Voucher Date: 03/16/2011
Protest Number: Not reported
Special Conditions: Recd 147C 3/21/11 - CAHII
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 21882
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 10/21/2010
Total Reimbursement: \$55,594.65
Net Reimbursement: \$55,594.65
FPR Date: 01/13/2011
Pay Voucher Date: 01/25/2011
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 22391
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 02/03/2011
Total Reimbursement: \$25,287.72
Net Reimbursement: \$25,287.72
FPR Date: 05/02/2011
Pay Voucher Date: 05/17/2011
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 22
Commissioned Date: 03/22/1991
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66

RAP Type Description: Original
RAP Status: Approved
RAP Filed Date: 01/17/1991
Total Reimbursement: \$0.00
Net Reimbursement: \$27,476.47
FPR Date: 01/01/1994
Pay Voucher Date: Not reported
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Unknown
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: No Listing
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Co
Event ID: 10929
RAP ID: 30061
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05

RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 03/02/2016
Total Reimbursement: \$14,684.67
Net Reimbursement: \$14,684.67
FPR Date: 04/13/2016
Pay Voucher Date: 05/09/2016
Protest Number: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Special Conditions: Installation payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: John J Bonifacic
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8516
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 11146
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 03/07/2005
Total Reimbursement: \$8,591.75
Net Reimbursement: \$8,591.75
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 22755
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 04/13/2011
Total Reimbursement: \$39,739.59
Net Reimbursement: \$39,739.59
FPR Date: 07/26/2011
Pay Voucher Date: 08/16/2011
Protest Number: Not reported
Special Conditions: Installation payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: ConocoPhillips Company
Event ID: 2205
RAP ID: 22770
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 04/18/2011
Total Reimbursement: \$5,807.91
Net Reimbursement: \$5,698.25
FPR Date: 07/28/2011
Pay Voucher Date: 08/16/2011
Protest Number: Not reported
Special Conditions: Recd 147C dated 3/21/14 and W-9 dated 3/17/14 for Phillips 66 Company on 3/27/14 - CAHII 4/2/14

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 23074
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 06/27/2011
Total Reimbursement: \$35,495.25
Net Reimbursement: \$35,418.85
FPR Date: 09/22/2011
Pay Voucher Date: 10/18/2011
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074 OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

RAP ID: 23221
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 08/11/2011
Total Reimbursement: \$12,823.67
Net Reimbursement: \$12,823.67
FPR Date: 11/21/2011
Pay Voucher Date: 12/19/2011
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 23909
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 02/09/2012
Total Reimbursement: \$10,446.71
Net Reimbursement: \$10,387.94
FPR Date: 03/27/2012
Pay Voucher Date: 04/20/2012
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 24250
Commissioned Date: Not reported
Cap Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 05/01/2012
Total Reimbursement: \$11,979.11
Net Reimbursement: \$11,979.11
FPR Date: 06/21/2012
Pay Voucher Date: 06/29/2012
Protest Number: Not reported
Special Conditions: Installment payments for equipped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when building permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 2097
Commissioned Date: 11/21/1997
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 07/22/1997
Total Reimbursement: \$17,471.53
Net Reimbursement: \$17,413.33
FPR Date: 11/21/1997
Pay Voucher Date: 12/18/1997
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Bev Snodgrass
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8506
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 2331
Commissioned Date: 04/17/1998
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 11/21/1997

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Total Reimbursement: \$4,075.61
Net Reimbursement: \$4,075.61
FPR Date: 04/17/1998
Pay Voucher Date: 05/06/1998
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Carolyn Skaggs
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8514
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 24952
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0

Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 10/18/2012
Total Reimbursement: \$15,542.49
Net Reimbursement: \$15,382.57
FPR Date: 01/10/2013
Pay Voucher Date: 02/15/2013
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882,
w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and
system is installed - system & building delivered 10/12/11

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 25394
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 02/25/2013
Total Reimbursement: \$12,686.76
Net Reimbursement: \$12,686.76
FPR Date: 04/09/2013
Pay Voucher Date: 05/02/2013
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882,

Map ID
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COUNTRY STORE #340 (Continued)

U003700645

w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when building permit issued and
system is installed - system & building delivered 10/12/11

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 26333
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 07/19/2013
Total Reimbursement: \$11,485.20
Net Reimbursement: \$11,484.74
FPR Date: 08/30/2013
Pay Voucher Date: 09/19/2013
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882,
w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when building permit issued and
system is installed - system & building delivered 10/12/11

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 26891
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 12/11/2013
Total Reimbursement: \$11,313.53
Net Reimbursement: \$11,313.53
FPR Date: 02/04/2014
Pay Voucher Date: 02/26/2014
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882,
w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when building permit issued and
system is installed - system & building delivered 10/12/11

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Fund Analyst: John J Bonifacic
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8516
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 27481
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 04/23/2014
Total Reimbursement: \$11,316.66
Net Reimbursement: \$11,316.66
FPR Date: 07/18/2014
Pay Voucher Date: 08/15/2017
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: John J Bonifacic
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8516
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 27801
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 07/22/2014
Total Reimbursement: \$12,467.03
Net Reimbursement: \$12,467.03
FPR Date: 08/05/2014
Pay Voucher Date: 08/20/2014
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Charles A Hammonds
Category: Retail Gas Station
Technical Reviewer: Orren Doss

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Technical Reviewer Phone: 303-318-8515
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Co
Event ID: 10929
RAP ID: 28345
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 12/12/2014
Total Reimbursement: \$12,599.38
Net Reimbursement: \$12,599.38
FPR Date: 03/10/2015
Pay Voucher Date: 04/03/2015
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Kristine Wilson
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8515
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Schrader Oil Co
Event ID: 10929
RAP ID: 28786
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 04/16/2015
Total Reimbursement: \$10,305.07
Net Reimbursement: \$10,305.07
FPR Date: 06/12/2015
Pay Voucher Date: 07/06/2015
Protest Number: Not reported
Special Conditions: Installment payments for equiped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when buidling permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Kristine Wilson
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8515
Fund Analyst Phone: 303-318-8542

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Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 10761
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 01/19/2005
Total Reimbursement: \$14,356.56
Net Reimbursement: \$14,356.56
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 10762
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 01/19/2005
Total Reimbursement: \$13,582.36
Net Reimbursement: \$13,582.36
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 11605
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66

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Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 05/12/2005
Total Reimbursement: \$5,369.35
Net Reimbursement: \$5,369.35
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 11818
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 06/13/2005
Total Reimbursement: \$6,551.53
Net Reimbursement: \$6,551.53
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 12003
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 07/01/2005
Total Reimbursement: \$3,137.30
Net Reimbursement: \$3,137.30
FPR Date: 08/08/2005
Pay Voucher Date: 08/31/2005
Protest Number: Not reported
Special Conditions: Not reported

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EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Fund Analyst: Jane Bral
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8510
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 12008
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 07/01/2005
Total Reimbursement: \$126,158.50
Net Reimbursement: \$126,158.50
FPR Date: 08/08/2005
Pay Voucher Date: 08/31/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Jane Bral
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8510
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 12083
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 07/19/2005
Total Reimbursement: \$4,854.29
Net Reimbursement: \$4,854.29
FPR Date: 11/29/2005
Pay Voucher Date: 12/21/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205

Map ID
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

RAP ID: 12350
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 08/23/2005
Total Reimbursement: \$13,849.24
Net Reimbursement: \$13,501.65
FPR Date: 11/28/2005
Pay Voucher Date: 12/19/2005
Protest Number: 77-337
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 12734
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 10/19/2005
Total Reimbursement: \$49,918.29
Net Reimbursement: \$49,358.93
FPR Date: 12/29/2005
Pay Voucher Date: 01/27/2006
Protest Number: 77-346
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 13118
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 12/29/2005

Map ID
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MAP FINDINGS

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Database(s)

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COUNTRY STORE #340 (Continued)

U003700645

Total Reimbursement: \$8,518.11
Net Reimbursement: \$6,371.22
FPR Date: 07/27/2006
Pay Voucher Date: 08/09/2006
Protest Number: 77-409
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Co
Event ID: 10929
RAP ID: 29280
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 08/21/2015
Total Reimbursement: \$11,712.56
Net Reimbursement: \$11,712.56
FPR Date: 09/29/2015
Pay Voucher Date: 10/27/2015
Protest Number: Not reported
Special Conditions: Installment payments for equipped remediation shed - 30% on RAP 21882, w/ POP - OK w/ JB 12/20/10 - CAHII 30% on RAP 22391 & 40% on RAP 23074
OK per JB - need delivery receipt when building permit issued and system is installed - system & building delivered 10/12/11

Fund Analyst: Michael Montoya
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: No Listing
Fund Analyst Phone: 303-318-8542

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 9757
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 07/09/2004
Total Reimbursement: \$11,439.85
Net Reimbursement: \$11,439.85
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported

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MAP FINDINGS

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EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 9758
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 07/09/2004
Total Reimbursement: \$5,178.65
Net Reimbursement: \$5,178.65
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 13487
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 03/03/2006
Total Reimbursement: \$4,822.81
Net Reimbursement: \$4,153.40
FPR Date: 07/27/2006
Pay Voucher Date: 08/09/2006
Protest Number: 77-408
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205

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MAP FINDINGS

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COUNTRY STORE #340 (Continued)

U003700645

RAP ID: 14025
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 05/31/2006
Total Reimbursement: \$6,014.64
Net Reimbursement: \$6,014.64
FPR Date: 10/05/2007
Pay Voucher Date: 10/25/2007
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 14113
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 06/13/2006
Total Reimbursement: \$3,236.33
Net Reimbursement: \$3,236.33
FPR Date: 10/05/2007
Pay Voucher Date: 10/25/2007
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 14674
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 09/19/2006

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MAP FINDINGS

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COUNTRY STORE #340 (Continued)

U003700645

Total Reimbursement: \$5,532.28
Net Reimbursement: \$5,532.28
FPR Date: 10/05/2007
Pay Voucher Date: 10/25/2007
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 15149
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 12/26/2006
Total Reimbursement: \$5,769.43
Net Reimbursement: \$5,769.43
FPR Date: 10/05/2007
Pay Voucher Date: 10/25/2007
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 15665
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 04/02/2007
Total Reimbursement: \$7,409.16
Net Reimbursement: \$7,409.16
FPR Date: 10/05/2007
Pay Voucher Date: 10/25/2007
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson

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MAP FINDINGS

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Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 10199
Commissioned Date: 05/20/2005
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 09/28/2004
Total Reimbursement: \$127,776.10
Net Reimbursement: \$0.00
FPR Date: 05/13/2005
Pay Voucher Date: Not reported
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Don Mcallister
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8515
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 10092
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: Supplemental
RAP Status: Approved
RAP Filed Date: 09/03/2004
Total Reimbursement: \$3,366.10
Net Reimbursement: \$0.00
FPR Date: 04/25/2005
Pay Voucher Date: Not reported
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Don Mcallister
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8515
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 11097
Commissioned Date: Not reported
Cap Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 02/28/2005
Total Reimbursement: \$2,215.23
Net Reimbursement: \$2,215.23
FPR Date: 10/31/2005
Pay Voucher Date: 11/28/2005
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 16037
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 06/18/2007
Total Reimbursement: \$5,050.50
Net Reimbursement: \$5,050.50
FPR Date: 10/05/2007
Pay Voucher Date: 10/25/2007
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 16491
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 09/24/2007
Total Reimbursement: \$5,911.38
Net Reimbursement: \$5,911.38
FPR Date: 08/25/2008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Pay Voucher Date: 09/04/2008
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 17182
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 02/25/2008
Total Reimbursement: \$5,279.15
Net Reimbursement: \$5,279.15
FPR Date: 08/25/2008
Pay Voucher Date: 09/04/2008
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 18259
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 10/16/2008
Total Reimbursement: \$4,123.06
Net Reimbursement: \$4,123.06
FPR Date: 12/12/2008
Pay Voucher Date: 12/22/2008
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 18288
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 10/21/2008
Total Reimbursement: \$5,673.94
Net Reimbursement: \$5,673.94
FPR Date: 01/07/2009
Pay Voucher Date: 01/20/2009
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Conocophillips Company
Event ID: 2205
RAP ID: 19245
Commissioned Date: Not reported
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$418,548.66
RAP Type Description: eRAP Supplemental
RAP Status: Approved
RAP Filed Date: 04/16/2009
Total Reimbursement: \$6,015.24
Net Reimbursement: \$6,015.24
FPR Date: 05/26/2009
Pay Voucher Date: 06/16/2009
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Joy Shulman
Category: Retail Gas Station
Technical Reviewer: Dawn Anderson
Technical Reviewer Phone: (303) 318-8511
Fund Analyst Phone: 303-318-8543

Facility ID: 2608
Payee Name: Schrader Oil Company
Event ID: 10929
RAP ID: 20598
Commissioned Date: 05/21/2010
Cap Status: Not reported
Eligibility Type Description: Tank Owner/Operator
Total Percent Reduction: 0.0
Total Reimbursement for Event: \$344,925.05

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

RAP Type Description: Original
RAP Status: Approved
RAP Filed Date: 01/29/2010
Total Reimbursement: \$11,192.21
Net Reimbursement: \$1,192.21
FPR Date: 05/21/2010
Pay Voucher Date: 06/16/2010
Protest Number: Not reported
Special Conditions: Not reported
Fund Analyst: Tiffany Becker
Category: Retail Gas Station
Technical Reviewer: Orren Doss
Technical Reviewer Phone: 303-318-8541
Fund Analyst Phone: 303-318-8542

Click here for COSTIS:

CO UST:

Facility ID: 2608

Owner:

Owner Id: 4743
Owner Name: Schrader Oil Co
Owner Address: PO Box 495
Owner City/State/Zip: Fort Collins, CO 80524
Owner County: Larimer

Tank Tag: 2608-1
Tank Status: Permanently Closed
Date Tank Installed: Not reported
Tank Age: Not reported
Tank Chemical: Diesel
Tank Type: UST

Tank Tag: 2608-2
Tank Status: Permanently Closed
Date Tank Installed: Not reported
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Tank Tag: 2608-3
Tank Status: Permanently Closed
Date Tank Installed: Not reported
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Tank Tag: 2608-4
Tank Status: Permanently Closed
Date Tank Installed: Not reported
Tank Age: Not reported
Tank Chemical: Diesel

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

COUNTRY STORE #340 (Continued)

U003700645

Tank Type: UST

Tank Tag: 2608-5
Tank Status: Permanently Closed
Date Tank Installed: Not reported
Tank Age: Not reported
Tank Chemical: Diesel
Tank Type: UST

Tank Tag: 2608-6
Tank Status: Currently In Use
Date Tank Installed: 10/01/1990
Tank Age: 25.8647538685946
Tank Chemical: Gasoline - Unleaded Regular (RUL)
Tank Type: UST

Tank Tag: 2608-7
Tank Status: Currently In Use
Date Tank Installed: 10/01/1990
Tank Age: 25.8647538685946
Tank Chemical: Gasoline - Mid-Grade (MUL)
Tank Type: UST

Tank Tag: 2608-8
Tank Status: Currently In Use
Date Tank Installed: 10/01/1990
Tank Age: 25.8647538685946
Tank Chemical: Gasoline - Premium (PUL)
Tank Type: UST

[Click here for COSTIS:](#)

B10
South
< 1/8
0.049 mi.
261 ft.

3809 E MULBERRY ST
FORT COLLINS, CO 80524

Site 3 of 4 in cluster B

EDR Hist Auto 1015459074
N/A

Relative:
Higher

EDR Historical Auto Stations:

Name: CONOCO INCORPORATED
Year: 1999
Address: 3809 E MULBERRY ST

Actual:
4930 ft.

Name: CONOCO INCORPORATED
Year: 2000
Address: 3809 E MULBERRY ST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

B11
SSW
< 1/8
0.053 mi.
280 ft.

SCHRADER'S COUNTRY STORE #440
3733 E MULBERRY ST
FORT COLLINS, CO 80525

UST U003118213
AST N/A

Site 4 of 4 in cluster B

Relative:
Lower

CO UST:
Facility ID: 4903

Actual:
4927 ft.

Owner:
Owner Id: 4743
Owner Name: Schrader Oil Co
Owner Address: PO Box 495
Owner City/State/Zip: Fort Collins, CO 80524
Owner County: Larimer

Tank Tag: 4903-1
Tank Status: Currently In Use
Date Tank Installed: 01/01/1988
Tank Age: 28.6154388001015
Tank Chemical: Gasoline - Unleaded Regular (RUL)
Tank Type: UST

Tank Tag: 4903-2
Tank Status: Currently In Use
Date Tank Installed: 01/01/1988
Tank Age: 28.6154388001015
Tank Chemical: Gasoline - Mid-Grade (MUL)
Tank Type: UST

Tank Tag: 4903-3
Tank Status: Currently In Use
Date Tank Installed: 01/01/1988
Tank Age: 28.6154388001015
Tank Chemical: Gasoline - Premium (PUL)
Tank Type: UST

Tank Tag: 4903-4
Tank Status: Currently In Use
Date Tank Installed: 01/01/1988
Tank Age: 28.6154388001015
Tank Chemical: Diesel
Tank Type: UST

Click here for COSTIS:

AST:
Facility ID: 4903

Owner:
Owner Id: 4743
Owner Name: Schrader Oil Co
Owner Address: PO Box 495
Owner City/State/Zip: Fort Collins, CO 80524
Owner County: Larimer

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

SCHRADER'S COUNTRY STORE #440 (Continued)

U003118213

Tank Tag: 4903-5
 Tank Status: Permanently Closed
 Date Tank Installed: 05/01/1989
 Tank Age: Not reported
 Tank Contents: LPG
 Tank Type: LPG

[Click here for COSTIS:](#)

12
 NE
 < 1/8
 0.089 mi.
 471 ft.

GEN/RX INC
425 JOHN DEERE DR
FORT COLLINS, CO 80524

RCRA NonGen / NLR
 FINDS
 ECHO

1000905759
CO0000855692

Relative:
Higher

RCRA NonGen / NLR:

Actual:
4931 ft.

Date form received by agency: 03/21/1996
 Facility name: GEN/RX INC
 Facility address: 425 JOHN DEERE DR
 FORT COLLINS, CO 80524
 EPA ID: CO0000855692
 Mailing address: DUFF DR
 FORT COLLINS, CO 80524
 Contact: JEFFREY MITCHELL
 Contact address: DUFF DR
 FORT COLLINS, CO 80524
 Contact country: US
 Contact telephone: (303) 221-9494
 Contact email: Not reported
 EPA Region: 08
 Classification: Non-Generator
 Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: APOTEX USA
 Owner/operator address: 1776 BROADWAY #1900
 NEW YORK, NY 10019
 Owner/operator country: Not reported
 Owner/operator telephone: (999) 999-9999
 Legal status: Private
 Owner/Operator Type: Owner
 Owner/Op start date: Not reported
 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
 Mixed waste (haz. and radioactive): No
 Recycler of hazardous waste: No
 Transporter of hazardous waste: No
 Treater, storer or disposer of HW: No
 Underground injection activity: No
 On-site burner exemption: No
 Furnace exemption: No
 Used oil fuel burner: No
 Used oil processor: No
 User oil refiner: No
 Used oil fuel marketer to burner: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GEN/RX INC (Continued)

1000905759

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U019
. Waste name: BENZENE (I,T)

. Waste code: U044
. Waste name: CHLOROFORM (OR) METHANE, TRICHLORO-

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

GEN/RX INC (Continued)

1000905759

- . Waste code: U056
- . Waste name: BENZENE, HEXAHYDRO- (I) (OR) CYCLOHEXANE (I)

- . Waste code: U080
- . Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

- . Waste code: U117
- . Waste name: ETHANE, 1,1'-OXYBIS-(I) (OR) ETHYL ETHER (I)

- . Waste code: U154
- . Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

- . Waste code: U188
- . Waste name: PHENOL

- . Waste code: U196
- . Waste name: PYRIDINE

- . Waste code: U213
- . Waste name: FURAN, TETRAHYDRO-(I) (OR) TETRAHYDROFURAN (I)

- . Waste code: U220
- . Waste name: BENZENE, METHYL- (OR) TOLUENE

Violation Status: No violations found

FINDS:

Registry ID: 110002960582

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1000905759
Registry ID: 110002960582
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002960582

13
NNE
< 1/8
0.110 mi.
581 ft.

FEDERAL EXPRESS CORP - FTCA
3800 WEICKER DR
FORT COLLINS, CO 80524

RCRA-CESQG 1000173197
FINDS COD076461235
ECHO

Relative:
Higher

RCRA-CESQG:
Date form received by agency: 10/19/2001
Facility name: FEDERAL EXPRESS CORP - FTCA
Facility address: 3800 WEICKER DR
FORT COLLINS, CO 80524
EPA ID: COD076461235
Mailing address: HACKS CROSS RD
BLDG B 2ND FL

Actual:
4932 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FEDERAL EXPRESS CORP - FTCA (Continued)

1000173197

Contact: MEMPHIS, TN 381257113
Contact address: TIMOTHY JAKCSON JR
3620 HACKS CROSS RD BLDG B 2ND FL
MEMPHIS, TN 381257113
Contact country: US
Contact telephone: (901) 434-8468
Contact email: Not reported
EPA Region: 08
Land type: Other land type
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: FEDERAL EXPRESS CORPORATION
Owner/operator address: 3620 HACKS CROSS RD BLDG B 2ND FL
MEMPHIS, TN 38125
Owner/operator country: Not reported
Owner/operator telephone: (901) 434-8468
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1800
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
Used oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FEDERAL EXPRESS CORP - FTCA (Continued)

1000173197

. Waste code: D002
. Waste name: CORROSIVE WASTE

Historical Generators:

Date form received by agency: 01/25/1996
Site name: FEDERAL EXPRESS CORP - FTCA
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 01/14/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/26/1985
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110002968520

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1000173197
Registry ID: 110002968520
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002968520

14
SSE
1/8-1/4
0.194 mi.
1026 ft.

FIBERLOK INC
811 STOCKTON AVE
FORT COLLINS, CO 80524

RCRA-SQG 1000858405
US AIRS COD983801382
FINDS
ECHO

Relative:
Lower

RCRA-SQG:

Date form received by agency: 09/19/2003
Facility name: FIBERLOK INC
Facility address: 811 STOCKTON AVE
FORT COLLINS, CO 80524
EPA ID: COD983801382
Mailing address: P O BOX 1727
FORT COLLINS, CO 805221727
Contact: LARRY SMITH
Contact address: STOCKTON AVE

Actual:
4922 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FIBERLOK INC (Continued)

1000858405

Contact country: FORT COLLINS, CO 80524
US
Contact telephone: (970) 221-1200
Contact email: Not reported
EPA Region: 08
Land type: Private
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name: BROWN ABRAMS
Owner/operator address: P.O. BOX 1010
FORT COLLINS, CO 80522
Owner/operator country: Not reported
Owner/operator telephone: (303) 221-1200
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1800
Owner/Op end date: Not reported

Owner/operator name: FIBERLOK INC
Owner/operator address: STOCKTON AVE
FORT COLLINS, CO 80524
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/19/2003
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:

Date form received by agency: 06/27/2000
Site name: FIBERLOK, INC.
Classification: Small Quantity Generator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FIBERLOK INC (Continued)

1000858405

- . Waste code: D000
- . Waste name: Not Defined

- . Waste code: D001
- . Waste name: IGNITABLE WASTE

- . Waste code: D035
- . Waste name: METHYL ETHYL KETONE

- . Waste code: F001
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- . Waste code: F002
- . Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- . Waste code: F003
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- . Waste code: F005
- . Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:

- Regulation violated: SR - 262.34D.5.III
- Area of violation: Generators - Pre-transport
- Date violation determined: 09/21/2000
- Date achieved compliance: 02/09/2001
- Violation lead agency: State

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FIBERLOK INC (Continued)

1000858405

Enforcement action: V3 Conversion Compliance Advisory
Enforcement action date: 09/21/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 262.34
Area of violation: Generators - Pre-transport
Date violation determined: 09/21/2000
Date achieved compliance: 02/09/2001
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 06/27/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 5418
Paid penalty amount: Not reported

Regulation violated: SR - 262.34D.5.III
Area of violation: Generators - Pre-transport
Date violation determined: 09/21/2000
Date achieved compliance: 02/09/2001
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 06/27/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 5418
Paid penalty amount: Not reported

Regulation violated: SR - 262.34
Area of violation: Generators - Pre-transport
Date violation determined: 09/21/2000
Date achieved compliance: 02/09/2001
Violation lead agency: State
Enforcement action: V3 Conversion Compliance Advisory
Enforcement action date: 09/21/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 06/15/2015
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FIBERLOK INC (Continued)

1000858405

Evaluation date: 05/20/2014
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/29/2013
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/25/2012
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/17/2011
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/12/2011
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/02/2010
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/07/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/21/2009
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/28/2008
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/14/2008
Evaluation: FACILITY SELF DISCLOSURE
Area of violation: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FIBERLOK INC (Continued)

1000858405

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/27/2008
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/16/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/29/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/09/2001
Evaluation: NON-FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/21/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 02/09/2001
Evaluation lead agency: State

US AIRS MINOR:

Envid: 1000858405
Region Code: 08
Programmatic ID: AIR CO0000000806900451
Facility Registry ID: 110002992343
D and B Number: Not reported
Primary SIC Code: 2399
NAICS Code: 315999
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 08
Programmatic ID: AIR CO0000000806900451
Facility Registry ID: 110002992343
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-05-03 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FIBERLOK INC (Continued)

1000858405

Region Code: 08
Programmatic ID: AIR CO0000000806900451
Facility Registry ID: 110002992343
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2013-10-22 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

FINDS:

Registry ID: 110002992343

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR EMISSIONS CLASSIFICATION UNKNOWN

Colorado's Department of Public Health & Environment (CDPHE)'s web-based database that allows environmental program managers to edit their facility locations and allows users to view this information read-only.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

AIR MINOR

ECHO:

Envid: 1000858405
Registry ID: 110002992343
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002992343

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

C15
SSW
1/8-1/4
0.217 mi.
1145 ft.

UPS FORT COLLINS CENTER
3700 CANAL ST
FORT COLLINS, CO 80521

Site 1 of 2 in cluster C

LUST U003117388
UST N/A

Relative:
Lower

LUST:

Facility Id: 207
Status: Closed
Event ID: 5199
Confirmed Release: 08/16/1991
Log Date: 08/16/1991

Actual:
4921 ft.

Facility Id: 207
Status: Closed
Event ID: 8495
Confirmed Release: 03/29/2001
Log Date: 04/02/2001

[Click here for COSTIS:](#)

CO UST:

Facility ID: 207

Owner:

Owner Id: 5480
Owner Name: United Parcel Service
Owner Address: 2535 Edward Babe Gomez Ave
Owner City/State/Zip: Omaha, NE 68107
Owner County: Douglas

Tank Tag: 207-1
Tank Status: Permanently Closed
Date Tank Installed: 04/08/1974
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Tank Tag: 207-2
Tank Status: Permanently Closed
Date Tank Installed: 01/01/1974
Tank Age: Not reported
Tank Chemical: Waste Oil
Tank Type: UST

Tank Tag: 207-3
Tank Status: Permanently Closed
Date Tank Installed: 01/01/1990
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

[Click here for COSTIS:](#)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

C16
SSW
1/8-1/4
0.217 mi.
1145 ft.

UNITED PARCEL SERVICE INC
3700 CANAL ST
FORT COLLINS, CO 80521

RCRA-CESQG 1004678732
FINDS CO0000447797
ECHO

Site 2 of 2 in cluster C

Relative:
Lower

RCRA-CESQG:

Date form received by agency: 06/30/1994

Facility name: UNITED PARCEL SERVICE INC

Facility address: 3700 CANAL ST
FORT COLLINS, CO 80521

EPA ID: CO0000447797

Mailing address: IVY ST - PE DEPT
COMMERCE CITY, CO 80022

Contact: KEN TAYLOR

Contact address: IVY ST - PE DEPT
COMMERCE CITY, CO 80022

Contact country: US

Contact telephone: (303) 286-6003

Contact email: Not reported

EPA Region: 08

Classification: Conditionally Exempt Small Quantity Generator

Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name: ELM COURT ASSOCIATES
Owner/operator address: 7585 W ARKANSAS AVE, #C
DENVER, CO 80226

Owner/operator country: Not reported

Owner/operator telephone: (303) 986-4207

Legal status: Private

Owner/Operator Type: Owner

Owner/Op start date: Not reported

Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No

Mixed waste (haz. and radioactive): No

Recycler of hazardous waste: No

Transporter of hazardous waste: No

Treater, storer or disposer of HW: No

Underground injection activity: No

On-site burner exemption: No

Furnace exemption: No

Used oil fuel burner: No

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

UNITED PARCEL SERVICE INC (Continued)

1004678732

Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

Violation Status: No violations found

FINDS:

Registry ID: 110002960083

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

Envid: 1004678732
Registry ID: 110002960083
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110002960083

17
WSW
1/8-1/4
0.230 mi.
1215 ft.

**AUTO COLLISION EXPERTS
3525 E MULBERRY
FORT COLLINS, CO 80524**

**RCRA NonGen / NLR 1000324874
COD982647414**

**Relative:
Higher**

RCRA NonGen / NLR:
Date form received by agency: 10/18/2001
Facility name: AUTO COLLISION EXPERTS
Facility address: 3525 E MULBERRY
FORT COLLINS, CO 80524
EPA ID: COD982647414
Mailing address: E MULBERRY
FORT COLLINS, CO 80524
Contact: GEORGE BRICHER
Contact address: E MULBERRY
FORT COLLINS, CO 80524
Contact country: US
Contact telephone: (970) 568-9248
Contact email: Not reported
EPA Region: 08
Classification: Non-Generator

**Actual:
4929 ft.**

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTO COLLISION EXPERTS (Continued)

1000324874

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: GEORGE BRICHER
Owner/operator address: DATA NOT REQUESTED
DATA NOT REQUESTED, CO 99999
Owner/operator country: Not reported
Owner/operator telephone: (999) 999-9999
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1800
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F003

. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005

. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:

Date form received by agency: 06/29/1988
Site name: AUTO COLLISION EXPERTS
Classification: Small Quantity Generator

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

AUTO COLLISION EXPERTS (Continued)

1000324874

Violation Status: No violations found

18
NNE
1/4-1/2
0.278 mi.
1467 ft.

COLORADO MACHINERY
121 JOHN DEERE DR
FORT COLLINS, CO 80524

LUST 1000858066
UST N/A

Relative:
Higher

LUST:

Facility Id: 4731
Status: Closed
Event ID: 10858
Confirmed Release: 05/28/2009
Log Date: 05/29/2009

Actual:
4938 ft.

Facility Id: 4731
Status: Closed
Event ID: 11385
Confirmed Release: 03/14/2011
Log Date: 03/15/2011

Click here for COSTIS:

CO UST:

Facility ID: 4731

Owner:

Owner Id: 21931
Owner Name: Cm Holdings Ft Collins Llc
Owner Address: 1100 E Cheyenne Rd
Owner City/State/Zip: Colorado Springs, CO 80905
Owner County: El Paso

Tank Tag: 4731-1
Tank Status: Permanently Closed
Date Tank Installed: 02/01/1989
Tank Age: Not reported
Tank Chemical: Diesel
Tank Type: UST

Tank Tag: 4731-2
Tank Status: Permanently Closed
Date Tank Installed: 02/01/1989
Tank Age: Not reported
Tank Chemical: Diesel
Tank Type: UST

Click here for COSTIS:

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance			
Elevation	Site	Database(s)	

19 North 1/4-1/2 0.325 mi. 1718 ft.	RYDER TRUCK RENTAL INC 121 JOHN DEERE DR FORT COLLINS, CO 80524	LUST	S118354784 N/A
--	--	-------------	--------------------------

Relative: Higher	LUST: Facility Id:	13103	
	Status:	Closed	
Actual: 4940 ft.	Event ID: Confirmed Release: Log Date:	3115 04/05/1989 04/05/1989	

[Click here for COSTIS:](#)

D20 South 1/4-1/2 0.329 mi. 1736 ft.	FRITO-LAY 3824 CANAL DR FORT COLLINS, CO 80524 Site 1 of 2 in cluster D	LUST TRUST	S107555427 N/A
---	---	-------------------	--------------------------

Relative: Lower	CO LUST TRUST: Facility ID:	7333	
	Payee Name:	Not reported	
Actual: 4919 ft.	Event ID: RAP ID: Commissioned Date: Cap Status: Eligibility Type Description: Total Percent Reduction: Total Reimbursement for Event: RAP Type Description: RAP Status: RAP Filed Date: Total Reimbursement: Net Reimbursement: FPR Date: Pay Voucher Date: Protest Number: Special Conditions: Fund Analyst: Category: Technical Reviewer: Technical Reviewer Phone: Fund Analyst Phone:	978 323 Not reported Not reported Tank Owner/Operator 0.0 Not reported Original Withdrawn 11/04/1992 \$0.00 \$0.00 Not reported Not reported Not reported Not reported Joy Shulman Commercial/Industrial Eric Gillespie (303) 318-8511 (303) 318-8534	

[Click here for COSTIS:](#)

D21 South 1/4-1/2 0.329 mi. 1736 ft.	FRITO-LAY 3824 CANAL DR FORT COLLINS, CO 80524 Site 2 of 2 in cluster D	LUST UST	U003118865 N/A
---	---	---------------------------	--------------------------

Relative: Lower	LUST: Facility Id:	7333	
	Status:	Closed	
Actual: 4919 ft.	Event ID:	978	

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FRITO-LAY (Continued)

U003118865

Confirmed Release: 09/07/1989
Log Date: 09/07/1989

[Click here for COSTIS:](#)

CO UST:
Facility ID: 7333

Owner:
Owner Id: 17702
Owner Name: Unknown #2
Owner Address: Unknown #2
Owner City/State/Zip: Greeley, CO 80631
Owner County: Weld

Tank Tag: 7333-1
Tank Status: Permanently Closed
Date Tank Installed: 02/17/1982
Tank Age: Not reported
Tank Chemical: Diesel
Tank Type: UST

[Click here for COSTIS:](#)

22
East
1/4-1/2
0.463 mi.
2444 ft.

SUNSTATE EQUIPMENT CO LLC
4228 E MULBERRY ST
FORT COLLINS, CO 80524

LUST U003195501
UST N/A
AST

Relative:
Higher

LUST:
Facility Id: 6762
Status: Closed
Event ID: 6
Confirmed Release: 08/21/1990
Log Date: 08/21/1990

Actual:
4934 ft.

[Click here for COSTIS:](#)

CO UST:
Facility ID: 6762

Owner:
Owner Id: 7754
Owner Name: Sunstate Equipment Co LLC
Owner Address: 5552 E Washington
Owner City/State/Zip: Phoenix, AZ 85034
Owner County: Maricopa

Tank Tag: 6762-1
Tank Status: Permanently Closed
Date Tank Installed: 04/17/1965
Tank Age: Not reported
Tank Chemical: Waste Oil
Tank Type: UST

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNSTATE EQUIPMENT CO LLC (Continued)

U003195501

Tank Tag: 6762-2
Tank Status: Permanently Closed
Date Tank Installed: 04/17/1965
Tank Age: Not reported
Tank Chemical: Diesel
Tank Type: UST

Tank Tag: 6762-3
Tank Status: Permanently Closed
Date Tank Installed: 04/17/1965
Tank Age: Not reported
Tank Chemical: Diesel
Tank Type: UST

Tank Tag: 6762-4
Tank Status: Permanently Closed
Date Tank Installed: 04/17/1965
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Tank Tag: 6762-5
Tank Status: Permanently Closed
Date Tank Installed: 04/17/1965
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Tank Tag: 6762-6
Tank Status: Permanently Closed
Date Tank Installed: 04/17/1965
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Tank Tag: 6762-7
Tank Status: Permanently Closed
Date Tank Installed: 04/18/1971
Tank Age: Not reported
Tank Chemical: Gasoline
Tank Type: UST

Click here for COSTIS:

AST:
Facility ID: 6762
Owner:
Owner Id: 7754
Owner Name: Sunstate Equipment Co LLC
Owner Address: 5552 E Washington
Owner City/State/Zip: Phoenix, AZ 85034

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

SUNSTATE EQUIPMENT CO LLC (Continued)

U003195501

Owner County: Maricopa
Tank Tag: 6762-8
Tank Status: Currently In Use
Date Tank Installed: 06/01/1998
Tank Age: 18.1935209918823
Tank Contents: Diesel/Gasoline (Multi-Comp)
Tank Type: AST

Tank Tag: 6762-9
Tank Status: Currently In Use
Date Tank Installed: 07/01/1993
Tank Age: 23.1140689370878
Tank Contents: LPG
Tank Type: LPG-AG

[Click here for COSTIS:](#)

23
East
1/2-1
0.542 mi.
2860 ft.

**MARATHON METALLIC BUILDING
I-25 & COLO 14
FORT COLLINS, CO 80521**

**CORRACTS 1000149160
RCRA NonGen / NLR COD000112599**

**Relative:
Higher**

CORRACTS:

**Actual:
4934 ft.**

EPA ID: COD000112599
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19931202
Action: CA160 - RFI Supplemental Information Received
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: COD000112599
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19940303
Action: CA155 - RFI Supplemental Information Requested By Agency
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: COD000112599
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19931008
Action: CA155 - RFI Supplemental Information Requested By Agency
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: COD000112599

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARATHON METALLIC BUILDING (Continued)

1000149160

EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19940623
Action: CA999 - Corrective Action Process Terminated
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: COD000112599
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19940623
Action: CA006OU
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: COD000112599
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19940623
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: COD000112599
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19940623
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: COD000112599
EPA Region: 08
Area Name: ENTIRE FACILITY
Actual Date: 19930329
Action: CA100 - RFI Imposition
NAICS Code(s): 332311
Prefabricated Metal Building and Component Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

RCRA NonGen / NLR:

Date form received by agency: 12/02/1993
Facility name: MARATHON METALLIC BUILDING
Facility address: I-25 & COLO 14
FORT COLLINS, CO 80521
EPA ID: COD000112599

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARATHON METALLIC BUILDING (Continued)

1000149160

Mailing address: E 4TH ST
CINCINNATI, OH 45202
Contact: HUGH BRANDT
Contact address: E 4TH ST
CINCINNATI, OH 45202
Contact country: US
Contact telephone: (513) 579-6617
Contact email: Not reported
EPA Region: 08
Land type: Facility is not located on Indian land. Additional information is not known.
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: THE PENN CENTRAL CORPORATION
Owner/operator address: 1 EAST 4TH ST
CINCINNATI, OH 45202
Owner/operator country: Not reported
Owner/operator telephone: (513) 579-6617
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F017

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARATHON METALLIC BUILDING (Continued)

1000149160

. Waste name: Not Defined
. Waste code: F018
. Waste name: Not Defined

Corrective Action Summary:

Event date: 03/29/1993
Event: RFI Imposition

Event date: 10/08/1993
Event: RFI Supplemental Information Requested By Agency

Event date: 12/02/1993
Event: RFI Supplemental Information Received

Event date: 03/03/1994
Event: RFI Supplemental Information Requested By Agency

Event date: 06/23/1994
Event: CA006OU

Event date: 06/23/1994
Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event date: 06/23/1994
Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event date: 06/23/1994
Event: Corrective Action Process Terminated

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 05/06/1994
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/21/1994
Evaluation: FOCUSED COMPLIANCE INSPECTION

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

MARATHON METALLIC BUILDING (Continued)

1000149160

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/27/1993
Evaluation: CORRECTIVE ACTION COMPLIANCE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/20/1993
Evaluation: CORRECTIVE ACTION COMPLIANCE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/17/1993
Evaluation: CORRECTIVE ACTION COMPLIANCE EVALUATION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/25/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Count: 0 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: N/A
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/05/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 09/14/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/04/2016	Telephone: 703-603-8704
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/04/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016	Source: EPA
Date Data Arrived at EDR: 04/05/2016	Telephone: 800-424-9346
Date Made Active in Reports: 04/15/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016	Source: EPA
Date Data Arrived at EDR: 06/30/2016	Telephone: 800-424-9346
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015	Source: Department of the Navy
Date Data Arrived at EDR: 05/29/2015	Telephone: 843-820-7326
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 10/14/2016
Number of Days to Update: 13	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/01/2016	Telephone: 703-603-0695
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 93	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

State- and tribal - equivalent CERCLIS

SHWS: This state does not maintain a SHWS list. See the Federal CERCLIS list and Federal NPL list.

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: Department of Public Health & Environment
Telephone: 303-692-3300
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: N/A

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Sites & Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/04/2014
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/04/2015
Number of Days to Update: 19

Source: Department of Public Health & Environment
Telephone: 303-692-3300
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank List

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 08/01/2016
Number of Days to Update: 38

Source: Department of Labor and Employment, Oil Inspection Section
Telephone: 303-318-8521
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Listing

A listing of leaking aboveground storage tank sites.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 08/01/2016
Number of Days to Update: 38

Source: Department of Labor & Employment
Telephone: 303-318-8525
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016	Source: EPA, Region 5
Date Data Arrived at EDR: 04/27/2016	Telephone: 312-886-7439
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/27/2016	Telephone: 415-972-3372
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015	Source: EPA Region 8
Date Data Arrived at EDR: 10/23/2015	Telephone: 303-312-6271
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 118	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015	Source: EPA Region 7
Date Data Arrived at EDR: 02/12/2016	Telephone: 913-551-7003
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 112	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/19/2016	Telephone: 214-665-6597
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 105	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016	Source: EPA Region 4
Date Data Arrived at EDR: 04/29/2016	Telephone: 404-562-8677
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 10/28/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Varies

TRUST: Lust Trust Sites

Reimbursement application package. The 1989 Colorado General Assembly established Colorado's Petroleum Storage Tank Fund. The Fund reimburses eligible applicants for allowable costs incurred in cleaning up petroleum contamination from underground and aboveground petroleum storage tanks, as well as for third-party liability expenses. Remediation of contamination caused by railroad or aircraft fuel is not eligible for reimbursement. The Fund satisfies federal Environmental Protection Agency financial assurance requirements. Monies in the Fund come from various sources, predominantly the state environmental surcharge imposed on all petroleum products except railroad or aircraft fuel.

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/11/2016
Date Made Active in Reports: 08/01/2016
Number of Days to Update: 21

Source: Department of Labor and Employment, Oil Inspection Section
Telephone: 303-318-8521
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/11/2016
Next Scheduled EDR Contact: 01/23/2017
Data Release Frequency: Varies

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 08/16/2016
Number of Days to Update: 53

Source: Department of Labor and Employment, Oil Inspection Section
Telephone: 303-318-8521
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

AST: Aboveground Tank List

Aboveground storage tank locations.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/24/2016
Date Made Active in Reports: 08/16/2016
Number of Days to Update: 53

Source: Department of Labor and Employment, Oil Inspection Section
Telephone: 303-318-8521
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Semi-Annually

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/05/2016	Source: EPA Region 4
Date Data Arrived at EDR: 04/29/2016	Telephone: 404-562-9424
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 35	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016	Source: EPA Region 9
Date Data Arrived at EDR: 04/27/2016	Telephone: 415-972-3368
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016	Source: EPA Region 8
Date Data Arrived at EDR: 02/05/2016	Telephone: 303-312-6137
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 119	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: 913-551-7003
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 10/28/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015	Source: EPA Region 6
Date Data Arrived at EDR: 02/04/2016	Telephone: 214-665-7591
Date Made Active in Reports: 06/03/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 120	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/20/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 10/29/2015	Telephone: 617-918-1313
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015	Source: EPA Region 5
Date Data Arrived at EDR: 11/13/2015	Telephone: 312-886-6136
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/28/2016
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Environmental Real Covenants List

Senate Bill 01-145 gave authority to the Colorado Department of Public Health and Environment to approve requests to restrict the future use of a property using an enforceable agreement called an environmental covenant. When a contaminated site is not cleaned up completely, land use restrictions may be used to ensure that the selected cleanup remedy is adequately protective of human health and the environment.

Date of Government Version: 08/22/2016	Source: Department of Public Health & Environment
Date Data Arrived at EDR: 08/01/2016	Telephone: 303-692-3331
Date Made Active in Reports: 09/21/2016	Last EDR Contact: 10/31/2016
Number of Days to Update: 51	Next Scheduled EDR Contact: 02/13/2017
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/26/2016
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

VCP: Voluntary Cleanup & Redevelopment Act Application Tracking Report

The Voluntary Cleanup and Redevelopment Act is intended to permit and encourage voluntary cleanups by providing a method to determine clean-up responsibilities in planning the reuse of property. The VCRA was intended for sites which were not covered by existing regulatory programs.

Date of Government Version: 12/16/2015	Source: Department of Public Health and Environmental
Date Data Arrived at EDR: 01/13/2016	Telephone: 303-692-3331
Date Made Active in Reports: 03/04/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 51	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Sites Listing

Brownfields Sites Listing

Date of Government Version: 07/21/2016

Date Data Arrived at EDR: 07/25/2016

Date Made Active in Reports: 08/16/2016

Number of Days to Update: 22

Source: Department of Public Health & Environment

Telephone: 303-692-3331

Last EDR Contact: 10/24/2016

Next Scheduled EDR Contact: 02/06/2017

Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/21/2016

Date Data Arrived at EDR: 06/22/2016

Date Made Active in Reports: 09/02/2016

Number of Days to Update: 72

Source: Environmental Protection Agency

Telephone: 202-566-2777

Last EDR Contact: 09/21/2016

Next Scheduled EDR Contact: 01/02/2017

Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

HISTORICAL LANDFILL: Historical Landfill List

Abandoned/Inactive Landfills.

Date of Government Version: 01/31/1993

Date Data Arrived at EDR: 04/24/1994

Date Made Active in Reports: 05/30/1994

Number of Days to Update: 36

Source: Department of Public Health & Environment

Telephone: 303-692-3300

Last EDR Contact: 09/05/1996

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SWRCY: Registered Recyclers Listing

A listing of registered recycler locations in the state of Colorado.

Date of Government Version: 06/06/2016

Date Data Arrived at EDR: 06/13/2016

Date Made Active in Reports: 08/01/2016

Number of Days to Update: 49

Source: Department of Public Health & Environment

Telephone: 303-692-3337

Last EDR Contact: 09/12/2016

Next Scheduled EDR Contact: 12/26/2016

Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998

Date Data Arrived at EDR: 12/03/2007

Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245

Last EDR Contact: 10/31/2016

Next Scheduled EDR Contact: 02/13/2017

Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 10/24/2016
Number of Days to Update: 137	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 11/04/2016
Number of Days to Update: 176	Next Scheduled EDR Contact: 02/13/2017
	Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 08/31/2016	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/06/2016	Telephone: 202-307-1000
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 10/10/2016
	Data Release Frequency: No Update Planned

CDL: Meth Lab Locations

Meth lab locations that were reported to the Department of Public Health & Environment.

Date of Government Version: 06/30/2016	Source: Department of Public Health and Environment
Date Data Arrived at EDR: 07/05/2016	Telephone: 303-692-3023
Date Made Active in Reports: 08/16/2016	Last EDR Contact: 10/17/2016
Number of Days to Update: 42	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/30/2016	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/06/2016	Telephone: 202-307-1000
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 08/31/2016
Number of Days to Update: 17	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 10/28/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/27/2016	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/28/2016	Telephone: 202-366-4555
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 09/27/2016
Number of Days to Update: 87	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Annually

CO ERNS: Spills Database

State reported spills.

Date of Government Version: 06/30/2016	Source: Department of Public Health and Environmental
Date Data Arrived at EDR: 07/05/2016	Telephone: 303-692-2000
Date Made Active in Reports: 08/16/2016	Last EDR Contact: 10/17/2016
Number of Days to Update: 42	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 10/15/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/06/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 34	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/30/2016	Telephone: 303-312-6149
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/28/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/09/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 09/09/2016
Number of Days to Update: 97	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 339	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: 615-532-8599
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 10/20/2016
Number of Days to Update: 54	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 07/12/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/17/2016	Telephone: 202-566-1917
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 08/17/2016
Number of Days to Update: 65	Next Scheduled EDR Contact: 11/28/2016
	Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 11/08/2016
Next Scheduled EDR Contact: 02/20/2017
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/23/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/24/2016
Next Scheduled EDR Contact: 02/06/2017
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 09/09/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/01/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/26/2016	Telephone: 202-564-8600
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 07/25/2016
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/07/2016
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 11/07/2016
Number of Days to Update: 3	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016	Source: EPA
Date Data Arrived at EDR: 04/28/2016	Telephone: 202-566-0500
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 10/14/2016
Number of Days to Update: 127	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/27/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/05/2016	Telephone: 202-564-5088
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 10/11/2016
Number of Days to Update: 77	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/17/2016
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 11/07/2016
Number of Days to Update: 43	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 09/09/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/06/2016
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/28/2016
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/06/2017
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/03/2016
Date Data Arrived at EDR: 10/05/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 16

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/05/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 11/02/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2016
Date Data Arrived at EDR: 08/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 53

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Biennially

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 12/08/2006	Telephone: 202-208-3710
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 10/14/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 01/23/2017
	Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/21/2016	Source: Department of Energy
Date Data Arrived at EDR: 07/26/2016	Telephone: 202-586-3559
Date Made Active in Reports: 09/23/2016	Last EDR Contact: 11/08/2016
Number of Days to Update: 59	Next Scheduled EDR Contact: 02/20/2017
	Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010	Source: Department of Energy
Date Data Arrived at EDR: 10/07/2011	Telephone: 505-845-0011
Date Made Active in Reports: 03/01/2012	Last EDR Contact: 09/09/2016
Number of Days to Update: 146	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/07/2016	Telephone: 703-603-8787
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 10/20/2016
Number of Days to Update: 148	Next Scheduled EDR Contact: 01/16/2017
	Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001	Source: American Journal of Public Health
Date Data Arrived at EDR: 10/27/2010	Telephone: 703-305-6451
Date Made Active in Reports: 12/02/2010	Last EDR Contact: 12/02/2009
Number of Days to Update: 36	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 88

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 88

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2016
Next Scheduled EDR Contact: 01/09/2017
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/05/2016
Date Data Arrived at EDR: 09/01/2016
Date Made Active in Reports: 09/23/2016
Number of Days to Update: 22

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (303) 312-6312
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 08/24/2016
Number of Days to Update: 91	Next Scheduled EDR Contact: 12/12/2016
	Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015	Source: Department of Defense
Date Data Arrived at EDR: 01/29/2016	Telephone: 571-373-0407
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 10/17/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 01/30/2017
	Data Release Frequency: Varies

AIRS: Permitted Facility & Emissions Listing

A listing of Air Pollution Control Division permits and emissions data.

Date of Government Version: 09/06/2016	Source: Department of Public Health & Environment
Date Data Arrived at EDR: 09/07/2016	Telephone: 303-692-3213
Date Made Active in Reports: 09/22/2016	Last EDR Contact: 09/02/2016
Number of Days to Update: 15	Next Scheduled EDR Contact: 12/19/2016
	Data Release Frequency: Varies

ASBESTOS: Asbestos Abatement & Demolition Projects

Asbestos abatement and demolition projects by the contractor.

Date of Government Version: 03/31/2016	Source: Department of Public Health & Environment
Date Data Arrived at EDR: 08/09/2016	Telephone: 303-692-3100
Date Made Active in Reports: 09/21/2016	Last EDR Contact: 08/09/2016
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/21/2016
	Data Release Frequency: Semi-Annually

METHANE SITE: Methane Site Investigations - Jefferson County 1980

The objectives of the study are to define as closely as possible the boundaries of methane producing solid waste landfills.

Date of Government Version: 12/31/1980	Source: Jefferson County Health Department
Date Data Arrived at EDR: 02/13/1995	Telephone: 303-239-7175
Date Made Active in Reports: 04/04/1995	Last EDR Contact: 01/27/1995
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

METHANE INVESTIGATION: Methane Gas & Swamp Findings

The primary objective of this study was to assess methane gas related hazards at selected landfill sites in Colorado. These sites were selected by the Colorado Department of Health following evaluation of responses received from County and Municipal agencies about completed and existing landfills within their jurisdiction.

Date of Government Version: 03/15/1979	Source: Department of Health
Date Data Arrived at EDR: 02/13/1995	Telephone: 303-640-3335
Date Made Active in Reports: 04/04/1995	Last EDR Contact: 01/27/1995
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

DRYCLEANERS: Drycleaner Facilities

A listing of drycleaning facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/06/2016
Date Data Arrived at EDR: 09/06/2016
Date Made Active in Reports: 09/21/2016
Number of Days to Update: 15

Source: Department of Public Health & Environment
Telephone: 303-692-3213
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 07/19/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 08/16/2016
Number of Days to Update: 22

Source: Department of Public Health & Environment
Telephone: 303-692-3350
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 07/19/2016
Date Data Arrived at EDR: 07/25/2016
Date Made Active in Reports: 08/16/2016
Number of Days to Update: 22

Source: Department of Public Health & Environment
Telephone: 303-392-3350
Last EDR Contact: 09/29/2016
Next Scheduled EDR Contact: 01/16/2017
Data Release Frequency: Varies

MINES: Permitted Mines Listing

This dataset represents permitted mines in the State of Colorado

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 04/19/2016
Date Made Active in Reports: 05/23/2016
Number of Days to Update: 34

Source: Division of Reclamation Mining and safety
Telephone: 303-866-3567
Last EDR Contact: 10/21/2016
Next Scheduled EDR Contact: 01/30/2017
Data Release Frequency: Varies

NPDES: Permitted Facility Listing

A listing of permitted facilities from the Water Quality Control Division.

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 05/23/2016
Number of Days to Update: 20

Source: Department of Public Health & Environment
Telephone: 303-692-3611
Last EDR Contact: 10/31/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

There were nine uranium mill tailings sites in Colorado designated for cleanup under the federal Uranium Mill Tailings Radiation Control Act. These nine sites, know commonly as UMTRA sites, were remediated jointly by the State of Colorado and the U.S. Department of Energy during the late 1980's and early 1990's. Mill tailings were removed from 8 of the mill sites and relocated in engineered disposal cells. A disposal cell is designed to encapsulate the material, reduce radon emanation, and prevent the movement of water through the material. At one site, Maybell, CO, the tailings were stabilized in-place at the mill site. After remediation of the tailings was completed, the State and DOE began to investigate the residual impacts to groundwater at the mill sites. The groundwater phase of the UMTRA program is on-going.

Date of Government Version: 11/23/2004
Date Data Arrived at EDR: 03/21/2007
Date Made Active in Reports: 05/02/2007
Number of Days to Update: 42

Source: Department of Public Health & Environment
Telephone: 970-248-7164
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/22/2016	Source: EPA
Date Data Arrived at EDR: 08/23/2016	Telephone: 800-385-6164
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 08/23/2016
Number of Days to Update: 59	Next Scheduled EDR Contact: 12/05/2016
	Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/20/2016	Telephone: 202-564-2280
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 09/20/2016
Number of Days to Update: 31	Next Scheduled EDR Contact: 01/02/2017
	Data Release Frequency: Quarterly

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 06/09/2016	Source: Department of Interior
Date Data Arrived at EDR: 06/13/2016	Telephone: 202-208-2609
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/12/2016
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/26/2016
	Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A	Source: EDR, Inc.
Date Data Arrived at EDR: N/A	Telephone: N/A
Date Made Active in Reports: N/A	Last EDR Contact: N/A
Number of Days to Update: N/A	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Public Health & Environment in Colorado.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Public Health & Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Labor and Employment, Oil Inspection Section in Colorado.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 185

Source: Department of Labor and Employment, Oil Inspection Section
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ADAMS COUNTY:

Summary Report on Methane Gas Hazards and Surveys Conducted on Domestic and Demolition Landfills in Adams County
As of May 8, 1978, all known landfills or dumping sites in the Adams County area have been surveyed.

Date of Government Version: 05/08/1978
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

ARAPAHOE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

A Survey of Landfills in Arapahoe County

A survey of Arapahoe County was conducted from August through November, 1977, of all open and closed landfills and dumpsites in the county. Each of the sites found was classified as domestic or demolition.

Date of Government Version: 12/31/1978
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

BOULDER COUNTY:

Old Landfill Sites

Landfill sites in Boulder county.

Date of Government Version: 05/01/1986
Date Data Arrived at EDR: 11/14/1995
Date Made Active in Reports: 12/07/1995
Number of Days to Update: 23

Source: Boulder County Health Department
Telephone: 303-441-1182
Last EDR Contact: 01/30/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DENVER COUNTY:

Landfills in Denver County

Landfill sites in the city and county of Denver.

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 05/16/2014
Date Made Active in Reports: 06/13/2014
Number of Days to Update: 28

Source: City and County of Denver
Telephone: 720-913-4839
Last EDR Contact: 09/19/2016
Next Scheduled EDR Contact: 01/02/2017
Data Release Frequency: No Update Planned

Investigation of Methane Gas Hazards

The purpose of this study was to assess the actual and potential generation, migration, explosive and related problem associated with specified old landfills, and to identify existing and potential problems, suggested strategies to prevent, abate, and control such problems and recommend investigative and monitoring functions as may be deemed necessary. Eight sites determined to be priorities due to population density and potential hazards to population and property were selected by the Colorado Department of Health.

Date of Government Version: 01/01/1981
Date Data Arrived at EDR: 01/29/2013
Date Made Active in Reports: 03/08/2013
Number of Days to Update: 38

Source: City and County of Denver Department of Environmental Health
Telephone: 720-865-5522
Last EDR Contact: 01/15/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DOUGLAS COUNTY:

Douglas County Landfill Key

Landfill sites in Douglas county.

Date of Government Version: 06/12/1991
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

PUEBLO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Designated Disposal & Landfill Sites

Only inert materials. Asphalt, cement, dirt & rock unless otherwise specified. These sites are no longer active.

Date of Government Version: 04/30/1990
Date Data Arrived at EDR: 11/16/1995
Date Made Active in Reports: 12/07/1995
Number of Days to Update: 21

Source: Pueblo City-County Health Department
Telephone: 719-583-4300
Last EDR Contact: 11/13/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

TRI COUNTY:

Tri-County Area Solid Waste Facilities List (Adams, Arapahoe and Douglas Counties)

Closed Domestic Landfills in Adams County, Closed Domestic Landfills in Arapahoe County, Closed Demolition Landfills in Arapahoe County, Closed Domestic Landfills in Douglas County.

Date of Government Version: 10/15/1983
Date Data Arrived at EDR: 02/16/1995
Date Made Active in Reports: 04/04/1995
Number of Days to Update: 47

Source: Tri-County Health Department
Telephone: 303-761-1340
Last EDR Contact: 01/27/1995
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

WELD COUNTY:

Solid Waste Facilities in Weld County

Solid Waste Facilities in Weld County.

Date of Government Version: 12/05/2014
Date Data Arrived at EDR: 12/12/2014
Date Made Active in Reports: 01/07/2015
Number of Days to Update: 26

Source: Weld County Department of Public Health
Telephone: 970-304-6415
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: No Update Planned

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 08/01/2016
Date Data Arrived at EDR: 08/03/2016
Date Made Active in Reports: 09/09/2016
Number of Days to Update: 37

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 11/02/2016
Next Scheduled EDR Contact: 02/13/2017
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2014

Date Data Arrived at EDR: 07/24/2015

Date Made Active in Reports: 08/18/2015

Number of Days to Update: 25

Source: Department of Environmental Protection

Telephone: 717-783-8990

Last EDR Contact: 10/14/2016

Next Scheduled EDR Contact: 01/30/2017

Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2015

Date Data Arrived at EDR: 04/14/2016

Date Made Active in Reports: 06/03/2016

Number of Days to Update: 50

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 09/12/2016

Next Scheduled EDR Contact: 12/26/2016

Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Daycare Centers: Daycare Listing
Source: Department of Human Services
Telephone: 303-866-5958

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Riparian Vegetation Data
Source: Division of Wildlife
Telephone: 970-416-3360

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

N I-25 RED LION INN/SLEEP INN
3808 E MULBERRY ST
FORT COLLINS, CO 80524

TARGET PROPERTY COORDINATES

Latitude (North):	40.581757 - 40° 34' 54.33"
Longitude (West):	105.006534 - 105° 0' 23.52"
Universal Transverse Mercator:	Zone 13
UTM X (Meters):	499447.0
UTM Y (Meters):	4492118.5
Elevation:	4928 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5955103 FORT COLLINS, CO
Version Date:	2013
East Map:	5954855 TIMNATH, CO
Version Date:	2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

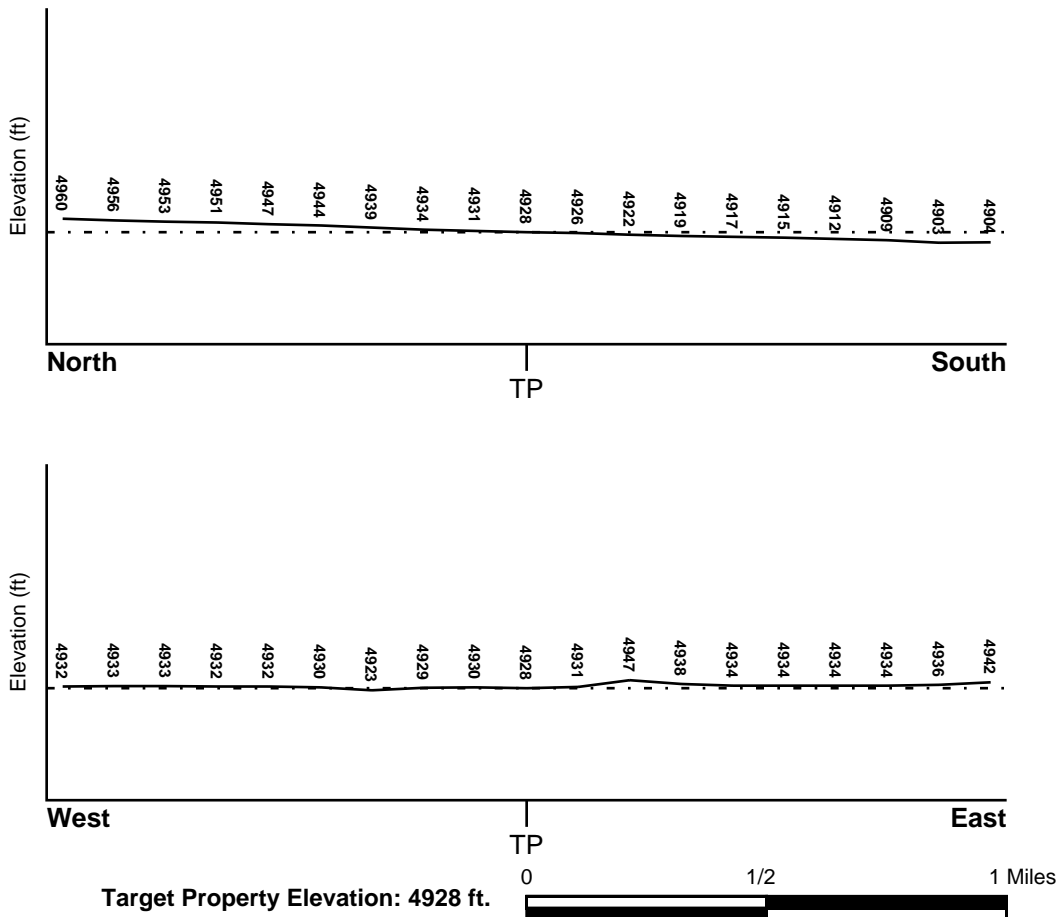
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
08069C0984H	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
08069C0982F	FEMA FIRM Flood data
08069C1001F	FEMA FIRM Flood data
08069C1003G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

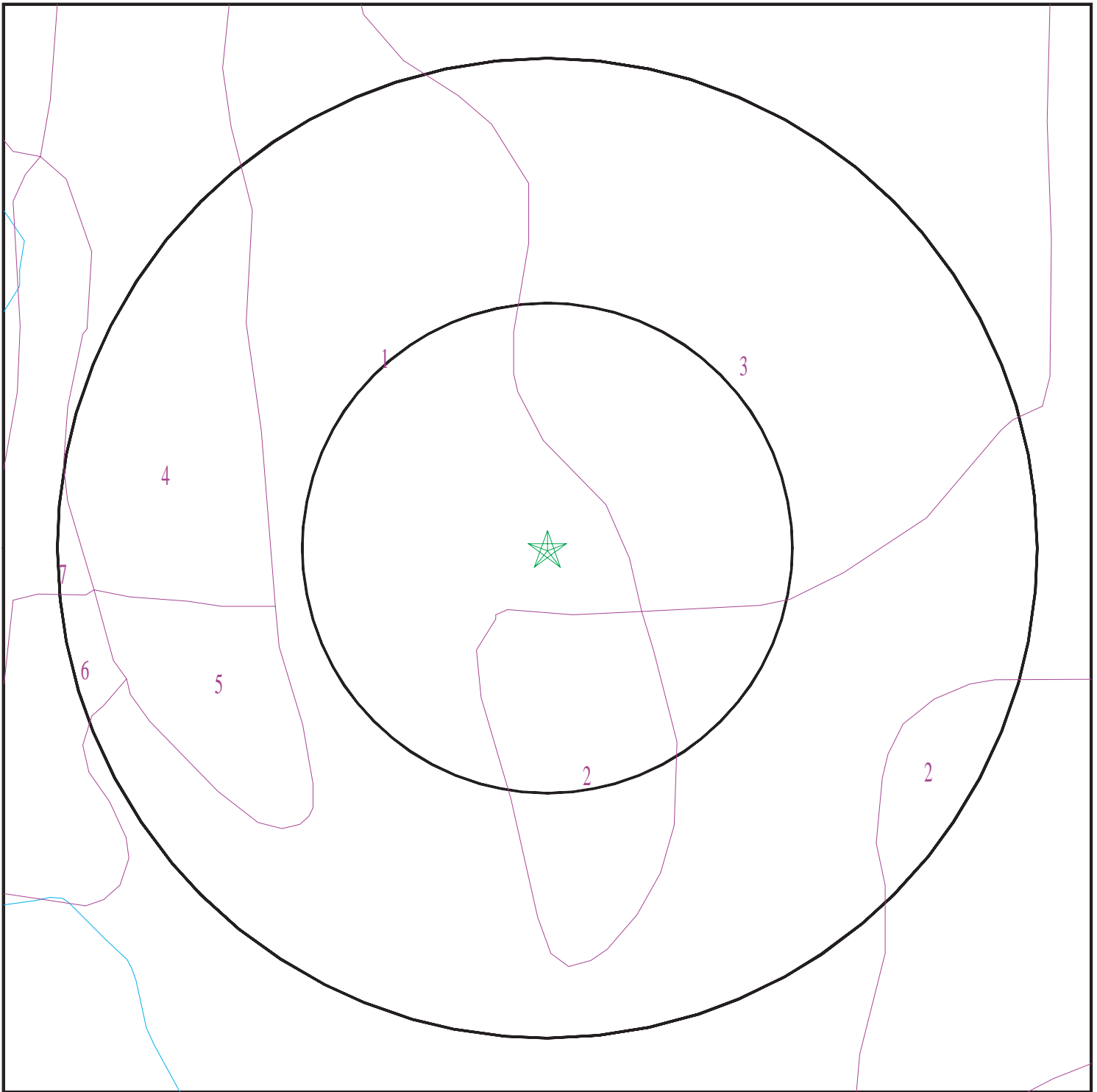
Era:	Mesozoic
System:	Cretaceous
Series:	Taylor Group
Code:	uK3 (<i>decoded above as Era, System & Series</i>)

GEOLOGIC AGE IDENTIFICATION

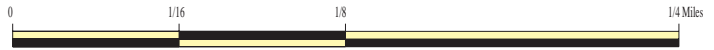
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4779546.6s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: N I-25 Red Lion Inn/Sleep Inn
ADDRESS: 3808 E MULBERRY ST
Fort Collins CO 80524
LAT/LONG: 40.581757 / 105.006534

CLIENT: Felsburg Holt & Ullevig
CONTACT: Ryan Walker
INQUIRY #: 4779546.6s
DATE: November 11, 2016 8:19 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Nunn

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 76 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.6
2	9 inches	46 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 0.42	Max: 8.4 Min: 7.4
3	46 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 8.4 Min: 7.4

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: Nunn

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.1
2	9 inches	59 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 1.41 Min: 0.42	Max: 8.4 Min: 6.1

Soil Map ID: 3

Soil Component Name: Satanta Variant

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.41 Min: 0.42	Max: 8.4 Min: 7.4
2	9 inches	22 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 1.41 Min: 0.42	Max: 8.4 Min: 7.4
3	22 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4.23 Min: 1.41	Max: 7.8 Min: 6.6

Soil Map ID: 4

Soil Component Name: Fort Collins

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42.34 Min: 4.23	Max: 7.8 Min: 6.6
2	7 inches	18 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 7.8 Min: 6.6
3	18 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 9 Min: 7.9

Soil Map ID: 5

Soil Component Name: Paoli

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	29 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42.34 Min: 14.11	Max: 7.8 Min: 6.6
2	29 inches	59 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42.34 Min: 14.11	Max: 9 Min: 7.4

Soil Map ID: 6

Soil Component Name: Loveland

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 4.23 Min: 1.41	Max: 9 Min: 7.9
2	14 inches	31 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay Soils.	Max: 14.11 Min: 4.23	Max: 9 Min: 7.9
3	31 inches	59 inches	very gravelly sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand.	Max: 705 Min: 141.14	Max: 9 Min: 7.9

Soil Map ID: 7

Soil Component Name: Kim

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.4
2	7 inches	59 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14.11 Min: 4.23	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
F47	USGS40000222485	1/4 - 1/2 Mile SW
78	USGS40000222533	1/4 - 1/2 Mile NE
146	USGS40000222540	1/2 - 1 Mile NE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
152	USGS40000222487	1/2 - 1 Mile ESE
U173	USGS40000222493	1/2 - 1 Mile WSW
AE235	USGS40000222454	1/2 - 1 Mile South
AE241	USGS40000222449	1/2 - 1 Mile South
AN268	USGS40000222460	1/2 - 1 Mile SW
AP275	USGS40000222494	1/2 - 1 Mile West
AN277	USGS40000222462	1/2 - 1 Mile SW
AO283	USGS40000222448	1/2 - 1 Mile SE
299	USGS40000222578	1/2 - 1 Mile NNE
AS302	USGS40000222486	1/2 - 1 Mile WSW
304	USGS40000222583	1/2 - 1 Mile NNW
BB326	USGS40000222489	1/2 - 1 Mile West
BJ351	USGS40000222600	1/2 - 1 Mile NNW
BL358	USGS40000222584	1/2 - 1 Mile NNW
361	USGS40000222599	1/2 - 1 Mile NNE
BJ362	USGS40000222602	1/2 - 1 Mile NNW
BL363	USGS40000222581	1/2 - 1 Mile NNW

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CO6000000398459	0 - 1/8 Mile South
A2	CO6000000457870	0 - 1/8 Mile South
A3	CO6000000457876	0 - 1/8 Mile South
A4	CO6000000398458	0 - 1/8 Mile SSW
A5	CO6000000457873	0 - 1/8 Mile SSE
A6	CO6000000457871	0 - 1/8 Mile South
A7	CO6000000398460	0 - 1/8 Mile South
A8	CO6000000457877	0 - 1/8 Mile SSE
A9	CO6000000457875	0 - 1/8 Mile South
A10	CO6000000457874	0 - 1/8 Mile South
A11	CO6000000457878	0 - 1/8 Mile South
A12	CO6000000457872	0 - 1/8 Mile South
A13	CO6000000457881	0 - 1/8 Mile SSE
A14	CO6000000457882	0 - 1/8 Mile SSE
A15	CO6000000398461	0 - 1/8 Mile South
A16	CO6000000457883	0 - 1/8 Mile SSE
A17	CO6000000457886	0 - 1/8 Mile SSE
A18	CO6000000457885	0 - 1/8 Mile SSE
A19	CO6000000457884	0 - 1/8 Mile SSE
A20	CO6000000457887	0 - 1/8 Mile SSE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A21	CO6000000457889	0 - 1/8 Mile SSE
A22	CO6000000457880	0 - 1/8 Mile South
A23	CO6000000457891	0 - 1/8 Mile SSE
A24	CO6000000457892	0 - 1/8 Mile SSE
A25	CO6000000457890	0 - 1/8 Mile SSE
A26	CO6000000398457	0 - 1/8 Mile South
A27	CO6000000457879	0 - 1/8 Mile SSE
A28	CO6000000463092	0 - 1/8 Mile SSE
A29	CO6000000463091	0 - 1/8 Mile SSE
A30	CO6000000463090	0 - 1/8 Mile SSE
31	CO6000000080941	1/8 - 1/4 Mile ENE
B32	CO6000000244751	1/8 - 1/4 Mile SSW
B33	CO6000000245221	1/8 - 1/4 Mile SSW
B34	CO6000000238034	1/8 - 1/4 Mile SSW
B35	CO6000000224815	1/8 - 1/4 Mile SSW
B36	CO6000000240539	1/8 - 1/4 Mile SSW
B37	CO6000000239366	1/8 - 1/4 Mile SSW
38	CO6000000080940	1/8 - 1/4 Mile SE
39	CO6000000082158	1/4 - 1/2 Mile ESE
C40	CO6000000364959	1/4 - 1/2 Mile SSW
D41	CO6000000082321	1/4 - 1/2 Mile South
D42	CO6000000082320	1/4 - 1/2 Mile South
D43	CO6000000224171	1/4 - 1/2 Mile South
D44	CO6000000082323	1/4 - 1/2 Mile South
E45	CO6000000193171	1/4 - 1/2 Mile North
C46	CO6000000364965	1/4 - 1/2 Mile SSW
C48	CO6000000364960	1/4 - 1/2 Mile SSW
49	CO6000000194075	1/4 - 1/2 Mile SE
E50	CO6000000193172	1/4 - 1/2 Mile North
E51	CO6000000193169	1/4 - 1/2 Mile North
F52	CO6000000357983	1/4 - 1/2 Mile WSW
F53	CO6000000370675	1/4 - 1/2 Mile SW
54	CO6000000080469	1/4 - 1/2 Mile NNW
55	CO6000000080545	1/4 - 1/2 Mile WNW
F56	CO6000000360419	1/4 - 1/2 Mile SW
G57	CO6000000333099	1/4 - 1/2 Mile East
G58	CO6000000333102	1/4 - 1/2 Mile East
F59	CO6000000360420	1/4 - 1/2 Mile SW
H60	CO6000000364964	1/4 - 1/2 Mile SSW
I61	CO6000000080610	1/4 - 1/2 Mile NNE
I62	CO6000000081434	1/4 - 1/2 Mile NNE
I63	CO6000000082133	1/4 - 1/2 Mile NNE
G64	CO6000000333103	1/4 - 1/2 Mile East
J65	CO6000000081717	1/4 - 1/2 Mile SW
66	CO6000000364961	1/4 - 1/2 Mile SSW
K67	CO6000000080552	1/4 - 1/2 Mile WSW
K68	CO6000000082324	1/4 - 1/2 Mile WSW
K69	CO6000000082325	1/4 - 1/2 Mile WSW
G70	CO6000000333101	1/4 - 1/2 Mile East
F71	CO6000000422609	1/4 - 1/2 Mile SW
H72	CO6000000364962	1/4 - 1/2 Mile SSW
73	CO6000000084258	1/4 - 1/2 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
H74	CO6000000364963	1/4 - 1/2 Mile SSW
G75	CO6000000333100	1/4 - 1/2 Mile East
G76	CO6000000333104	1/4 - 1/2 Mile East
G77	CO6000000333105	1/4 - 1/2 Mile East
L79	CO6000000360893	1/4 - 1/2 Mile SW
L80	CO6000000361537	1/4 - 1/2 Mile SW
J81	CO6000000361206	1/4 - 1/2 Mile SW
82	CO6000000206652	1/4 - 1/2 Mile ENE
K83	CO6000000220665	1/4 - 1/2 Mile WSW
K84	CO6000000365025	1/4 - 1/2 Mile WSW
H85	CO6000000247045	1/4 - 1/2 Mile SSW
H86	CO6000000419019	1/4 - 1/2 Mile SSW
H87	CO6000000215350	1/4 - 1/2 Mile SSW
J88	CO6000000360892	1/4 - 1/2 Mile SW
89	CO6000000080987	1/4 - 1/2 Mile ESE
M90	CO6000000360081	1/4 - 1/2 Mile SSW
M91	CO6000000235685	1/4 - 1/2 Mile SSW
N92	CO6000000081605	1/4 - 1/2 Mile SSE
N93	CO6000000484556	1/4 - 1/2 Mile SSE
O94	CO6000000010749	1/4 - 1/2 Mile West
P95	CO6000000220667	1/4 - 1/2 Mile WSW
P96	CO6000000365027	1/4 - 1/2 Mile WSW
Q97	CO6000000220670	1/4 - 1/2 Mile SW
Q98	CO6000000365030	1/4 - 1/2 Mile SW
O99	CO6000000421252	1/4 - 1/2 Mile West
M100	CO6000000360971	1/4 - 1/2 Mile SSW
Q101	CO6000000220652	1/4 - 1/2 Mile SW
Q102	CO6000000365012	1/4 - 1/2 Mile SW
M103	CO6000000485044	1/4 - 1/2 Mile SSW
P104	CO6000000220660	1/4 - 1/2 Mile WSW
P105	CO6000000365020	1/4 - 1/2 Mile WSW
M106	CO6000000362339	1/4 - 1/2 Mile SW
P107	CO6000000220655	1/4 - 1/2 Mile WSW
P108	CO6000000365015	1/4 - 1/2 Mile WSW
M109	CO6000000398379	1/4 - 1/2 Mile SSW
P110	CO6000000220657	1/4 - 1/2 Mile WSW
P111	CO6000000365017	1/4 - 1/2 Mile WSW
Q112	CO6000000220664	1/4 - 1/2 Mile WSW
Q113	CO6000000365024	1/4 - 1/2 Mile WSW
P114	CO6000000220663	1/2 - 1 Mile WSW
P115	CO6000000365023	1/2 - 1 Mile WSW
R116	CO6000000238939	1/2 - 1 Mile SW
S117	CO6000000188467	1/2 - 1 Mile NNW
S118	CO6000000212171	1/2 - 1 Mile NNW
Q119	CO6000000220666	1/2 - 1 Mile SW
Q120	CO6000000365026	1/2 - 1 Mile SW
T121	CO6000000080909	1/2 - 1 Mile NE
T122	CO6000000080910	1/2 - 1 Mile NE
123	CO6000000084222	1/2 - 1 Mile East
U124	CO6000000220659	1/2 - 1 Mile WSW
U125	CO6000000365019	1/2 - 1 Mile WSW
Q126	CO6000000220662	1/2 - 1 Mile SW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Q127	CO6000000365022	1/2 - 1 Mile SW
U128	CO6000000284931	1/2 - 1 Mile WSW
V129	CO6000000083484	1/2 - 1 Mile SW
R130	CO6000000081923	1/2 - 1 Mile SW
R131	CO6000000082322	1/2 - 1 Mile SW
R132	CO6000000082354	1/2 - 1 Mile SW
R133	CO6000000080377	1/2 - 1 Mile SW
R134	CO6000000080380	1/2 - 1 Mile SW
R135	CO6000000081748	1/2 - 1 Mile SW
R136	CO6000000082572	1/2 - 1 Mile SW
R137	CO6000000082578	1/2 - 1 Mile SW
R138	CO6000000082686	1/2 - 1 Mile SW
R139	CO6000000082355	1/2 - 1 Mile SW
R140	CO6000000082357	1/2 - 1 Mile SW
R141	CO6000000082358	1/2 - 1 Mile SW
R142	CO6000000220654	1/2 - 1 Mile SW
R143	CO6000000365014	1/2 - 1 Mile SW
W144	CO6000000365029	1/2 - 1 Mile WSW
W145	CO6000000220669	1/2 - 1 Mile WSW
W147	CO6000000418774	1/2 - 1 Mile WSW
W148	CO6000000211890	1/2 - 1 Mile WSW
W149	CO6000000484777	1/2 - 1 Mile WSW
W150	CO6000000484898	1/2 - 1 Mile WSW
W151	CO6000000484888	1/2 - 1 Mile WSW
R153	CO6000000359617	1/2 - 1 Mile SW
R154	CO6000000220656	1/2 - 1 Mile SW
R155	CO6000000365016	1/2 - 1 Mile SW
X156	CO6000000393442	1/2 - 1 Mile NNE
U157	CO6000000220661	1/2 - 1 Mile WSW
U158	CO6000000365021	1/2 - 1 Mile WSW
X159	CO6000000407949	1/2 - 1 Mile NNE
W160	CO6000000220658	1/2 - 1 Mile WSW
W161	CO6000000365018	1/2 - 1 Mile WSW
R162	CO6000000401355	1/2 - 1 Mile SW
V163	CO6000000461516	1/2 - 1 Mile SW
R164	CO6000000215566	1/2 - 1 Mile SW
R165	CO6000000220681	1/2 - 1 Mile SW
R166	CO6000000358627	1/2 - 1 Mile SW
W167	CO6000000220653	1/2 - 1 Mile SW
W168	CO6000000365013	1/2 - 1 Mile SW
W169	CO6000000324482	1/2 - 1 Mile WSW
W170	CO6000000324481	1/2 - 1 Mile WSW
W171	CO6000000220672	1/2 - 1 Mile WSW
W172	CO6000000365032	1/2 - 1 Mile WSW
W174	CO6000000418776	1/2 - 1 Mile WSW
Y175	CO6000000220668	1/2 - 1 Mile SW
Y176	CO6000000365028	1/2 - 1 Mile SW
W177	CO6000000418775	1/2 - 1 Mile WSW
W178	CO6000000418777	1/2 - 1 Mile WSW
W179	CO6000000233738	1/2 - 1 Mile WSW
W180	CO6000000215563	1/2 - 1 Mile WSW
W181	CO6000000220678	1/2 - 1 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
Z182	CO6000000247155	1/2 - 1 Mile West
Z183	CO6000000247249	1/2 - 1 Mile West
Y184	CO6000000220674	1/2 - 1 Mile SW
Y185	CO6000000365034	1/2 - 1 Mile SW
X186	CO6000000381335	1/2 - 1 Mile NNE
X187	CO6000000407369	1/2 - 1 Mile NNE
W188	CO6000000215567	1/2 - 1 Mile WSW
W189	CO6000000220682	1/2 - 1 Mile WSW
X190	CO6000000236278	1/2 - 1 Mile NNE
AA191	CO6000000381325	1/2 - 1 Mile NNE
AA192	CO6000000407359	1/2 - 1 Mile NNE
AB193	CO6000000082136	1/2 - 1 Mile WSW
AB194	CO6000000082137	1/2 - 1 Mile WSW
AB195	CO6000000080673	1/2 - 1 Mile WSW
AB196	CO6000000081487	1/2 - 1 Mile WSW
AB197	CO6000000082142	1/2 - 1 Mile WSW
AB198	CO6000000082567	1/2 - 1 Mile WSW
AB199	CO6000000471707	1/2 - 1 Mile WSW
AB200	CO6000000082175	1/2 - 1 Mile WSW
AB201	CO6000000082253	1/2 - 1 Mile WSW
Y202	CO6000000220671	1/2 - 1 Mile WSW
Y203	CO6000000365031	1/2 - 1 Mile WSW
AA204	CO6000000381326	1/2 - 1 Mile NNE
AA205	CO6000000407360	1/2 - 1 Mile NNE
AC206	CO6000000262356	1/2 - 1 Mile SSW
X207	CO6000000381333	1/2 - 1 Mile NNE
X208	CO6000000407367	1/2 - 1 Mile NNE
AA209	CO6000000381329	1/2 - 1 Mile NNE
AA210	CO6000000407363	1/2 - 1 Mile NNE
X211	CO6000000381336	1/2 - 1 Mile NNE
X212	CO6000000381332	1/2 - 1 Mile NNE
X213	CO6000000407370	1/2 - 1 Mile NNE
X214	CO6000000407366	1/2 - 1 Mile NNE
AA215	CO6000000381328	1/2 - 1 Mile NNE
AA216	CO6000000407362	1/2 - 1 Mile NNE
X217	CO6000000381334	1/2 - 1 Mile NNE
X218	CO6000000407368	1/2 - 1 Mile NNE
AD219	CO6000000215565	1/2 - 1 Mile WSW
AD220	CO6000000220680	1/2 - 1 Mile WSW
AC221	CO6000000083840	1/2 - 1 Mile SSW
AA222	CO6000000381327	1/2 - 1 Mile NNE
AA223	CO6000000407361	1/2 - 1 Mile NNE
AA224	CO6000000381331	1/2 - 1 Mile NNE
AA225	CO6000000407365	1/2 - 1 Mile NNE
Y226	CO6000000220673	1/2 - 1 Mile WSW
Y227	CO6000000365033	1/2 - 1 Mile WSW
AA228	CO6000000381330	1/2 - 1 Mile NNE
AA229	CO6000000407364	1/2 - 1 Mile NNE
Y230	CO6000000220677	1/2 - 1 Mile WSW
Y231	CO6000000365037	1/2 - 1 Mile WSW
AD232	CO6000000220675	1/2 - 1 Mile WSW
AD233	CO6000000365035	1/2 - 1 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
234	CO600000080379	1/2 - 1 Mile SW
236	CO600000080952	1/2 - 1 Mile East
AE237	CO600000081429	1/2 - 1 Mile South
AE238	CO6000000484900	1/2 - 1 Mile South
AD239	CO6000000220676	1/2 - 1 Mile WSW
AD240	CO6000000365036	1/2 - 1 Mile WSW
AF242	CO6000000247248	1/2 - 1 Mile WNW
AF243	CO600000080915	1/2 - 1 Mile WNW
AG244	CO6000000215564	1/2 - 1 Mile WSW
AG245	CO6000000220679	1/2 - 1 Mile WSW
AH246	CO6000000232836	1/2 - 1 Mile WSW
AI247	CO6000000419006	1/2 - 1 Mile SSE
AI248	CO6000000419021	1/2 - 1 Mile SSE
AJ249	CO600000082110	1/2 - 1 Mile West
AH250	CO600000082121	1/2 - 1 Mile WSW
AH251	CO600000082120	1/2 - 1 Mile WSW
AJ252	CO600000082112	1/2 - 1 Mile West
AG253	CO600000082568	1/2 - 1 Mile SW
AG254	CO600000080672	1/2 - 1 Mile SW
AG255	CO600000082602	1/2 - 1 Mile SW
AG256	CO600000082589	1/2 - 1 Mile SW
257	CO600000083522	1/2 - 1 Mile West
AE258	CO6000000232135	1/2 - 1 Mile South
AK259	CO6000000458569	1/2 - 1 Mile SSW
AK260	CO6000000381247	1/2 - 1 Mile SSW
AK261	CO600000081607	1/2 - 1 Mile SSW
AK262	CO600000081701	1/2 - 1 Mile SSW
AK263	CO600000082256	1/2 - 1 Mile SSW
264	CO6000000262357	1/2 - 1 Mile WSW
AL265	CO6000000324605	1/2 - 1 Mile East
AL266	CO6000000262875	1/2 - 1 Mile East
AM267	CO600000082111	1/2 - 1 Mile SSW
269	CO600000080658	1/2 - 1 Mile ESE
AO270	CO6000000419003	1/2 - 1 Mile SSE
AO271	CO600000080542	1/2 - 1 Mile SSE
AO272	CO600000080234	1/2 - 1 Mile SSE
AO273	CO600000081471	1/2 - 1 Mile SSE
AO274	CO600000081470	1/2 - 1 Mile SSE
AQ276	CO600000081242	1/2 - 1 Mile East
AM278	CO600000083709	1/2 - 1 Mile SSW
AR279	CO600000028012	1/2 - 1 Mile SSW
AS280	CO600000082154	1/2 - 1 Mile WSW
AT281	CO600000082274	1/2 - 1 Mile West
AT282	CO6000000351099	1/2 - 1 Mile West
AQ284	CO6000000444830	1/2 - 1 Mile East
285	CO600000083487	1/2 - 1 Mile WSW
286	CO600000080583	1/2 - 1 Mile West
AU287	CO6000000014916	1/2 - 1 Mile SSW
AV288	CO600000080706	1/2 - 1 Mile North
AV289	CO600000081430	1/2 - 1 Mile North
290	CO600000083268	1/2 - 1 Mile SW
AP291	CO600000081377	1/2 - 1 Mile West

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
AP292	CO600000082255	1/2 - 1 Mile West
AP293	CO600000081054	1/2 - 1 Mile West
AP294	CO600000081281	1/2 - 1 Mile West
AP295	CO600000082594	1/2 - 1 Mile West
AP296	CO6000000486208	1/2 - 1 Mile West
AP297	CO600000082343	1/2 - 1 Mile West
AP298	CO600000082347	1/2 - 1 Mile West
AR300	CO6000000274781	1/2 - 1 Mile SW
AW301	CO6000000021981	1/2 - 1 Mile West
AU303	CO600000082766	1/2 - 1 Mile SSW
AX305	CO600000081024	1/2 - 1 Mile SW
AX306	CO600000081236	1/2 - 1 Mile SW
AX307	CO600000080736	1/2 - 1 Mile SW
AX308	CO600000080617	1/2 - 1 Mile SW
AX309	CO600000080620	1/2 - 1 Mile SW
AX310	CO600000081889	1/2 - 1 Mile SW
AX311	CO600000082687	1/2 - 1 Mile SW
AX312	CO600000081870	1/2 - 1 Mile SW
AX313	CO600000081474	1/2 - 1 Mile SW
AX314	CO600000081823	1/2 - 1 Mile SW
AY315	CO6000000247091	1/2 - 1 Mile WNW
AY316	CO6000000247289	1/2 - 1 Mile WNW
AZ317	CO6000000188434	1/2 - 1 Mile ENE
AZ318	CO6000000188454	1/2 - 1 Mile ENE
AZ319	CO6000000188455	1/2 - 1 Mile ENE
320	CO6000000285327	1/2 - 1 Mile WSW
AW321	CO6000000081459	1/2 - 1 Mile West
322	CO600000082407	1/2 - 1 Mile East
323	CO6000000233560	1/2 - 1 Mile SW
BA324	CO6000000080862	1/2 - 1 Mile South
BA325	CO600000080881	1/2 - 1 Mile South
BC327	CO600000082683	1/2 - 1 Mile North
BD328	CO6000000082638	1/2 - 1 Mile WSW
BD329	CO600000082125	1/2 - 1 Mile WSW
BD330	CO600000081596	1/2 - 1 Mile WSW
BD331	CO600000081492	1/2 - 1 Mile WSW
BD332	CO600000082131	1/2 - 1 Mile WSW
BD333	CO600000082726	1/2 - 1 Mile WSW
BD334	CO600000082254	1/2 - 1 Mile WSW
BD335	CO600000082176	1/2 - 1 Mile WSW
BE336	CO600000080429	1/2 - 1 Mile South
BE337	CO600000080457	1/2 - 1 Mile South
BF338	CO6000000454638	1/2 - 1 Mile WSW
BF339	CO6000000454637	1/2 - 1 Mile WSW
BG340	CO600000081053	1/2 - 1 Mile SE
BG341	CO600000081414	1/2 - 1 Mile SE
BB342	CO6000000198218	1/2 - 1 Mile West
BC343	CO600000081431	1/2 - 1 Mile North
BB344	CO600000084279	1/2 - 1 Mile West
BC345	CO600000081432	1/2 - 1 Mile North
BH346	CO6000000188389	1/2 - 1 Mile SE
BH347	CO6000000188433	1/2 - 1 Mile SE

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
BH348	CO6000000188595	1/2 - 1 Mile SE
BI349	CO6000000084142	1/2 - 1 Mile SSW
BI350	CO6000000276020	1/2 - 1 Mile SSW
BK352	CO6000000080607	1/2 - 1 Mile SSW
BK353	CO6000000080544	1/2 - 1 Mile SSW
BK354	CO6000000080543	1/2 - 1 Mile SSW
BK355	CO6000000081601	1/2 - 1 Mile SSW
BK356	CO6000000081595	1/2 - 1 Mile SSW
BK357	CO6000000080843	1/2 - 1 Mile SSW
BJ359	CO6000000081433	1/2 - 1 Mile NNW
BI360	CO6000000336134	1/2 - 1 Mile SSW
BI364	CO6000000207797	1/2 - 1 Mile SSW
365	CO6000000081280	1/2 - 1 Mile East
BI366	CO6000000336135	1/2 - 1 Mile SSW

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A1
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000398459

Fid:	398458	Objectid:	398459
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0411289L		
Receipt:	0411289L	Permit:	203562-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	JF21/MW-3	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1420
Coordewdir:	E	Coordns:	90
Coordnsdir:	N		
Utmx:	499461.7		
Utmy:	4492243.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580977		
Longdecdeg:	-105.00636		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1997-06-19		
Permexpire:	1999-06-19		
Wellconstr:	1996-08-20		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	17
Topperfcas:	7	Botperfcas:	17
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499461.7		
Disputmy:	4492243.2		
Latitude:	40.5809765651		
Longitude:	-105.006360487		
Site id:	CO6000000398459		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A2
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457870

Fid:	457869	Objectid:	457870
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544A		
Receipt:	0502544A	Permit:	246629-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-14	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1485
Coordewdir:	E	Coordns:	100
Coordnsdir:	N		
Utmx:	499441.9		
Utmy:	4492240.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.58095		
Longdecdeg:	-105.006594		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-12-23		
Permexpire:	Not Reported		
Wellconstr:	2002-09-19		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499441.9		
Disputmy:	4492240.2		
Latitude:	40.5809495252		
Longitude:	-105.006594439		
Site id:	CO6000000457870		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A3
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457876

Fid:	457875	Objectid:	457876
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544G		
Receipt:	0502544G	Permit:	247088-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-10	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1440
Coordewdir:	E	Coordns:	100
Coordnsdir:	N		
Utmx:	499455.6		
Utmy:	4492240.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.58095		
Longdecdeg:	-105.006433		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-17		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499455.6		
Disputmy:	4492240.2		
Latitude:	40.5809495351		
Longitude:	-105.006432561		
Site id:	CO6000000457876		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A4
SSW
0 - 1/8 Mile
Lower

CO WELLS CO600000398458

Fid:	398457	Objectid:	398458
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0411289K		
Receipt:	0411289K	Permit:	203564-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	JF21/MW-4	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1560
Coordewdir:	E	Coordns:	90
Coordnsdir:	N		
Utmx:	499419		
Utmx:	4492243.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580981		
Longdecdeg:	-105.006865		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1997-06-19		
Permexpire:	1999-06-19		
Wellconstr:	1996-08-20		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	17
Topperfcas:	7	Botperfcas:	17
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499419		
Disputmy:	4492243.7		
Latitude:	40.580981041		
Longitude:	-105.006865025		
Site id:	CO600000398458		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A5
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457873

Fid:	457872	Objectid:	457873
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544D		
Receipt:	0502544D	Permit:	246632-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-11	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1385
Coordewdir:	E	Coordns:	111
Coordnsdir:	N		
Utmx:	499472.4		
Utmy:	4492236.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580918		
Longdecdeg:	-105.006234		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-12-23		
Permexpire:	Not Reported		
Wellconstr:	2002-09-19		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499472.4		
Disputmy:	4492236.7		
Latitude:	40.5809180148		
Longitude:	-105.006234051		
Site id:	CO6000000457873		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A6
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457871

Fid:	457870	Objectid:	457871
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544B		
Receipt:	0502544B	Permit:	246630-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-13	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1505
Coordewdir:	E	Coordns:	131
Coordnsdir:	N		
Utmx:	499435.9		
Utmy:	4492231.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580868		
Longdecdeg:	-105.006665		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-12-23		
Permexpire:	Not Reported		
Wellconstr:	2002-09-19		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499435.9		
Disputmy:	4492231.2		
Latitude:	40.5808684414		
Longitude:	-105.006665326		
Site id:	CO6000000457871		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A7
South
0 - 1/8 Mile
Higher

CO WELLS CO600000398460

Fid:	398459	Objectid:	398460
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0411289M		
Receipt:	0411289M	Permit:	203563-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	JF21/MW-2	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1460
Coordewdir:	E	Coordns:	140
Coordnsdir:	N		
Utmx:	499449.6		
Utmy:	4492228.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580841		
Longdecdeg:	-105.006503		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1997-06-19		
Permexpire:	1999-06-19		
Wellconstr:	1996-08-20		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	8	Botperfcas:	18
Yield:	0		
Staticwl:	10		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499449.6		
Disputmy:	4492228.2		
Latitude:	40.580841424		
Longitude:	-105.006503446		
Site id:	CO600000398460		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A8
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457877

Fid:	457876	Objectid:	457877
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544H		
Receipt:	0502544H	Permit:	247089-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-9	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1380
Coordewdir:	E	Coordns:	140
Coordnsdir:	N		
Utmx:	499474		
Utmy:	4492227.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580837		
Longdecdeg:	-105.006215		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-17		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499474		
Disputmy:	4492227.7		
Latitude:	40.5808369355		
Longitude:	-105.006215139		
Site id:	CO6000000457877		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A9
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457875

Fid:	457874	Objectid:	457875
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544F		
Receipt:	0502544F	Permit:	247087-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	AS/SVE-1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1425
Coordewdir:	E	Coordns:	171
Coordnsdir:	N		
Utmx:	499460.3		
Utmy:	4492218.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580751		
Longdecdeg:	-105.006377		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-09-19		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	17	Botperfcas:	20
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499460.3		
Disputmy:	4492218.2		
Latitude:	40.5807513425		
Longitude:	-105.006377008		
Site id:	CO6000000457875		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A10
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457874

Fid:	457873	Objectid:	457874
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544E		
Receipt:	0502544E	Permit:	246673-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	AS/SVE-2	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1415
Coordewdir:	E	Coordns:	171
Coordnsdir:	N		
Utmx:	499463.4		
Utmy:	4492218.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580751		
Longdecdeg:	-105.00634		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-12-23		
Permexpire:	Not Reported		
Wellconstr:	2002-09-18		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	17	Botperfcas:	20
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499463.4		
Disputmy:	4492218.2		
Latitude:	40.5807513443		
Longitude:	-105.006340378		
Site id:	CO6000000457874		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A11
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457878

Fid:	457877	Objectid:	457878
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=05025441		
Receipt:	05025441	Permit:	247083-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-8	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1400
Coordewdir:	E	Coordns:	180
Coordnsdir:	N		
Utmx:	499468		
Utmy:	4492215.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580729		
Longdecdeg:	-105.006286		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-16		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499468		
Disputmy:	4492215.7		
Latitude:	40.5807288244		
Longitude:	-105.006286023		
Site id:	CO6000000457878		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A12
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457872

Fid:	457871	Objectid:	457872
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544C		
Receipt:	0502544C	Permit:	246631-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-12	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1465
Coordewdir:	E	Coordns:	191
Coordnsdir:	N		
Utmx:	499448.2		
Utmy:	4492212.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580702		
Longdecdeg:	-105.00652		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-12-23		
Permexpire:	Not Reported		
Wellconstr:	2002-09-19		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499448.2		
Disputmy:	4492212.7		
Latitude:	40.5807017854		
Longitude:	-105.006519975		
Site id:	CO6000000457872		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A13
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457881

Fid:	457880	Objectid:	457881
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544L		
Receipt:	0502544L	Permit:	247092-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-11	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1350
Coordewdir:	E	Coordns:	180
Coordnsdir:	N		
Utmx:	499483.2		
Utmx:	4492215.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580724		
Longdecdeg:	-105.006106		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	2002-12-05		
Wellconstr:	2002-01-10		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499483		
Disputmy:	4492215		
Latitude:	40.5807243296		
Longitude:	-105.006106422		
Site id:	CO6000000457881		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A14
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457882

Fid:	457881	Objectid:	457882
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544M		
Receipt:	0502544M	Permit:	247093-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-11	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1350
Coordewdir:	E	Coordns:	180
Coordnsdir:	N		
Utmx:	499483.2		
Utmx:	4492215.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580724		
Longdecdeg:	-105.006106		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-10		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499493.3		
Disputmy:	4492243.2		
Latitude:	40.5807243296		
Longitude:	-105.006106422		
Site id:	CO6000000457882		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A15
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000398461

Fid:	398460	Objectid:	398461
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0411289N		
Receipt:	0411289N	Permit:	203561-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	JF21/MW-1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1420
Coordewdir:	E	Coordns:	200
Coordnsdir:	N		
Utmx:	499461.9		
Utmy:	4492209.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580675		
Longdecdeg:	-105.006358		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1997-06-19		
Permexpire:	1999-06-19		
Wellconstr:	1996-08-20		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	8	Botperfcas:	18
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499461.9		
Disputmy:	4492209.7		
Latitude:	40.5806747679		
Longitude:	-105.006358095		
Site id:	CO6000000398461		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A16
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457883

Fid:	457882	Objectid:	457883
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544N		
Receipt:	0502544N	Permit:	247094-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-9	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1320
Coordewdir:	E	Coordns:	180
Coordnsdir:	N		
Utmx:	499492.3		
Utmy:	4492215.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580724		
Longdecdeg:	-105.005999		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-10		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499492.3		
Disputmy:	4492215.2		
Latitude:	40.5807243359		
Longitude:	-105.005998899		
Site id:	CO6000000457883		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A17
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457886

Fid:	457885	Objectid:	457886
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544Q		
Receipt:	0502544Q	Permit:	247097-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-6	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1340
Coordewdir:	E	Coordns:	200
Coordnsdir:	N		
Utmx:	499486.3		
Utmy:	4492209.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.58067		
Longdecdeg:	-105.00607		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499486.3		
Disputmy:	4492209.2		
Latitude:	40.5806702785		
Longitude:	-105.006069788		
Site id:	CO6000000457886		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A18
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457885

Fid:	457884	Objectid:	457885
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544P		
Receipt:	0502544P	Permit:	247096-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-7	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1320
Coordewdir:	E	Coordns:	200
Coordnsdir:	N		
Utmx:	499492.4		
Utmy:	4492209.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.58067		
Longdecdeg:	-105.005998		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-10		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499492.4		
Disputmy:	4492209.2		
Latitude:	40.5806702821		
Longitude:	-105.005997712		
Site id:	CO6000000457885		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A19
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457884

Fid:	457883	Objectid:	457884
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544O		
Receipt:	0502544O	Permit:	247095-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-8	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1300
Coordewdir:	E	Coordns:	200
Coordnsdir:	N		
Utmx:	499498.5		
Utmy:	4492208.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580666		
Longdecdeg:	-105.005926		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-10		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499498.5		
Disputmy:	4492208.7		
Latitude:	40.5806657819		
Longitude:	-105.005925635		
Site id:	CO6000000457884		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A20
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457887

Fid:	457886	Objectid:	457887
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544R		
Receipt:	0502544R	Permit:	247098-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-5	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1340
Coordewdir:	E	Coordns:	220
Coordnsdir:	N		
Utmx:	499486.3		
Utmx:	4492203.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580616		
Longdecdeg:	-105.00607		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499486.3		
Disputmy:	4492203.2		
Latitude:	40.5806162248		
Longitude:	-105.006069784		
Site id:	CO6000000457887		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A21
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457889

Fid:	457888	Objectid:	457889
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544S		
Receipt:	0502544S	Permit:	247099-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-4	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1320
Coordewdir:	E	Coordns:	220
Coordnsdir:	N		
Utmx:	499492.4		
Utmy:	4492202.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580612		
Longdecdeg:	-105.005998		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499492.4		
Disputmy:	4492202.7		
Latitude:	40.5806117246		
Longitude:	-105.005997707		
Site id:	CO6000000457889		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A22
South
0 - 1/8 Mile
Higher

CO WELLS CO6000000457880

Fid:	457879	Objectid:	457880
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544K		
Receipt:	0502544K	Permit:	247091-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-6	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1410
Coordewdir:	E	Coordns:	250
Coordnsdir:	N		
Utmx:	499465		
Utmy:	4492194.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580535		
Longdecdeg:	-105.006321		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-16		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499465		
Disputmy:	4492194.2		
Latitude:	40.580535132		
Longitude:	-105.006321453		
Site id:	CO6000000457880		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A23
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457891

Fid:	457890	Objectid:	457891
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544U		
Receipt:	0502544U	Permit:	246633-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-2	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1340
Coordewdir:	E	Coordns:	240
Coordnsdir:	N		
Utmx:	499486.3		
Utmy:	4492196.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580558		
Longdecdeg:	-105.00607		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-12-23		
Permexpire:	Not Reported		
Wellconstr:	2002-01-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499486.3		
Disputmy:	4492196.7		
Latitude:	40.5805576672		
Longitude:	-105.006069779		
Site id:	CO6000000457891		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A24
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457892

Fid:	457891	Objectid:	457892
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544V		
Receipt:	0502544V	Permit:	247101-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1325
Coordewdir:	E	Coordns:	240
Coordnsdir:	N		
Utmx:	499490.9		
Utmy:	4492196.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580558		
Longdecdeg:	-105.006015		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499490.9		
Disputmy:	4492196.7		
Latitude:	40.5805576699		
Longitude:	-105.006015425		
Site id:	CO6000000457892		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A25
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457890

Fid:	457889	Objectid:	457890
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544T		
Receipt:	0502544T	Permit:	247100-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	P-3	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1320
Coordewdir:	E	Coordns:	240
Coordnsdir:	N		
Utmx:	499492.4		
Utmy:	4492196.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580558		
Longdecdeg:	-105.005998		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499492.4		
Disputmy:	4492196.7		
Latitude:	40.5805576708		
Longitude:	-105.005997702		
Site id:	CO6000000457890		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A26
South
0 - 1/8 Mile
Higher

CO WELLS CO600000398457

Fid:	398456	Objectid:	398457
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0411289J		
Receipt:	0411289J	Permit:	203560-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	JF21/MW-5	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1400
Coordewdir:	E	Coordns:	270
Coordnsdir:	N		
Utmx:	499468.1		
Utmy:	4492188.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580481		
Longdecdeg:	-105.006285		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1997-06-19		
Permexpire:	1999-06-19		
Wellconstr:	1996-10-07		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	6		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499468.1		
Disputmy:	4492188.2		
Latitude:	40.58048108		
Longitude:	-105.006284819		
Site id:	CO600000398457		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A27
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000457879

Fid:	457878	Objectid:	457879
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0502544J		
Receipt:	0502544J	Permit:	247090-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-7	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1320
Coordewdir:	E	Coordns:	250
Coordnsdir:	N		
Utmx:	499492.5		
Utmy:	4492193.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580531		
Longdecdeg:	-105.005997		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-01-13		
Permexpire:	Not Reported		
Wellconstr:	2002-01-16		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	5	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499492.5		
Disputmy:	4492193.7		
Latitude:	40.5805306444		
Longitude:	-105.005996518		
Site id:	CO6000000457879		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A28
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000463092

Fid:	463091	Objectid:	463092
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0510686C		
Receipt:	0510686C	Permit:	250684-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-17	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1365
Coordewdir:	E	Coordns:	315
Coordnsdir:	N		
Utmx:	499478.9		
Utmy:	4492174.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580354		
Longdecdeg:	-105.006157		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	UNCONFINED SAN LUIS VALLEY
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-05-29		
Permexpire:	Not Reported		
Wellconstr:	2003-05-07		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	14
Topperfcas:	4	Botperfcas:	14
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO PHILLIPS		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499478.9		
Disputmy:	4492174.1		
Latitude:	40.5803540616		
Longitude:	-105.006157196		
Site id:	CO6000000463092		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A29
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000463091

Fid:	463090	Objectid:	463091
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0510686B		
Receipt:	0510686B	Permit:	250683-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-16	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1330
Coordewdir:	E	Coordns:	315
Coordnsdir:	N		
Utmx:	499489.5		
Utmy:	4492174.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580354		
Longdecdeg:	-105.006032		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	UNCONFINED SAN LUIS VALLEY
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-05-29		
Permexpire:	Not Reported		
Wellconstr:	2003-05-07		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	14
Topperfcas:	4	Botperfcas:	14
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO PHILLIPS		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499489.5		
Disputmy:	4492174.1		
Latitude:	40.5803540679		
Longitude:	-105.00603195		
Site id:	CO6000000463091		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

A30
SSE
0 - 1/8 Mile
Higher

CO WELLS CO6000000463090

Fid:	463089	Objectid:	463090
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0510686A		
Receipt:	0510686A	Permit:	250682-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-15	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1300
Coordewdir:	E	Coordns:	315
Coordnsdir:	N		
Utmx:	499498.7		
Utmy:	4492173.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.58035		
Longdecdeg:	-105.005923		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-05-29		
Permexpire:	Not Reported		
Wellconstr:	2003-05-07		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	14
Topperfcas:	4	Botperfcas:	14
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO PHILLIPS		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499498.7		
Disputmy:	4492173.6		
Latitude:	40.5803495695		
Longitude:	-105.005923244		
Site id:	CO6000000463090		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

31
ENE
1/8 - 1/4 Mile
Higher

CO WELLS CO6000000080941

Fid:	80940	Objectid:	80941
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038686		
Receipt:	9038686	Permit:	10632-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499697.2		
Utmy:	4492467.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.582995		
Longdecdeg:	-105.003578		
Use1:	STOCK	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1962-02-05		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	36
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	10		
Applicantn:	DANIEL DEWEY		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499697.2		
Disputmy:	4492467.2		
Latitude:	40.5829946771		
Longitude:	-105.003577955		
Site id:	CO6000000080941		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B32
SSW
1/8 - 1/4 Mile
Lower

CO WELLS CO6000000244751

Fid:	244750	Objectid:	244751
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0044876A		
Receipt:	0044876A	Permit:	44876-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499298		
Utmy:	4492071		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579425		
Longdecdeg:	-105.008295		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2005-04-19		
Permexpire:	2005-07-17		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	2 wells		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SCHRADER OIL COMPANY		
Complewewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499298		
Disputmy:	4492071		
Latitude:	40.5794251105		
Longitude:	-105.008294554		
Site id:	CO6000000244751		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B33
SSW
1/8 - 1/4 Mile
Lower

CO WELLS CO6000000245221

Fid:	245220	Objectid:	245221
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0045298		
Receipt:	0045298	Permit:	45298-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499298		
Utmy:	4492071		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579425		
Longdecdeg:	-105.008294		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2005-07-19		
Permexpire:	2005-10-13		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	8 wells		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO PHILLIPS		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499308.3		
Disputmy:	4492099.2		
Latitude:	40.5794251105		
Longitude:	-105.008294554		
Site id:	CO6000000245221		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B34
SSW
1/8 - 1/4 Mile
Lower

CO WELLS CO6000000238034

Fid:	238033	Objectid:	238034
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0040401		
Receipt:	0040401	Permit:	40401-MH
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499298		
Utmy:	4492070.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579422		
Longdecdeg:	-105.008295		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-01-03		
Permexpire:	2002-04-02		
Wellconstr:	2002-01-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	16 WELLS ALSO SEE 247083 & 247089-247100		
Elev:	0	Welldepth:	16
Topperfcas:	6	Botperfcas:	16
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499308.3		
Disputmy:	4492098.2		
Latitude:	40.5794215069		
Longitude:	-105.008294554		
Site id:	CO6000000238034		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B35
SSW
1/8 - 1/4 Mile
Lower

CO WELLS CO6000000224815

Fid:	224814	Objectid:	224815
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0029433		
Receipt:	0029433	Permit:	29433-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499298		
Utmy:	4492070.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579422		
Longdecdeg:	-105.008295		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1996-10-07		
Permexpire:	1997-01-10		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499298		
Disputmy:	4492070		
Latitude:	40.5794215069		
Longitude:	-105.008294554		
Site id:	CO6000000224815		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B36
SSW
1/8 - 1/4 Mile
Lower

CO WELLS CO6000000240539

Fid:	240538	Objectid:	240539
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0042074		
Receipt:	0042074	Permit:	42074-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499298		
Utmy:	4492070.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579422		
Longdecdeg:	-105.008295		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2003-04-24		
Permexpire:	2003-07-21		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3 WELLS 250683-84		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499324		
Disputmy:	4492085		
Latitude:	40.5794215069		
Longitude:	-105.008294554		
Site id:	CO6000000240539		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

B37
SSW
1/8 - 1/4 Mile
Lower

CO WELLS CO6000000239366

Fid:	239365	Objectid:	239366
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0041193		
Receipt:	0041193	Permit:	41193-MH
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499298		
Utmy:	4492070.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579422		
Longdecdeg:	-105.008295		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2002-09-06		
Permexpire:	2002-12-04		
Wellconstr:	2002-09-19		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	6 WELLS ALSO SEE 246630-246632 & 246673		
Elev:	0	Welldepth:	20
Topperfcas:	17	Botperfcas:	20
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499317.3		
Disputmy:	4492093		
Latitude:	40.5794215069		
Longitude:	-105.008294554		
Site id:	CO6000000239366		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

38
SE
1/8 - 1/4 Mile
Lower

CO WELLS CO600000080940

Fid:	80939	Objectid:	80940
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038684		
Receipt:	9038684	Permit:	10611-R
Wdid:	0306110	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499696.1		
Utmy:	4492064.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579363		
Longdecdeg:	-105.003591		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1945-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	49
Topperfcas:	0	Botperfcas:	0
Yield:	1500		
Staticwl:	12		
Applicantn:	SMITH LEROY K		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499696.1		
Disputmy:	4492064.1		
Latitude:	40.5793631913		
Longitude:	-105.003590759		
Site id:	CO600000080940		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

39
ESE
1/4 - 1/2 Mile
Higher

CO WELLS CO6000000082158

Fid:	82157	Objectid:	82158
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040027		
Receipt:	9040027	Permit:	39465-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	33
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	150
Coordewdir:	E	Coordns:	70
Coordnsdir:	N		
Utmx:	499848.8		
Utmy:	4492243		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580975		
Longdecdeg:	-105.001787		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-11-11		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	27
Topperfcas:	0	Botperfcas:	0
Yield:	12		
Staticwl:	6		
Applicantn:	GREEN BILL		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499848.8		
Disputmy:	4492243		
Latitude:	40.5809749248		
Longitude:	-105.00178656		
Site id:	CO6000000082158		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

C40
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000364959

Fid:	364958	Objectid:	364959
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364919A		
Receipt:	0364919A	Permit:	176322-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-1 (BH-1)	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	2000
Coordewdir:	E	Coordns:	1250
Coordnsdir:	N		
Utmx:	499286.9		
Utmx:	4491892.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577813		
Longdecdeg:	-105.008426		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1994-02-22		
Permexpire:	1996-02-22		
Wellconstr:	1993-12-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	MH; WELL MW-1(BH-1); NO MH#; WC 12-9-93		
Elev:	0	Welldepth:	15
Topperfcas:	4	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	GOOD ALL ELECTRIC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499286.9		
Disputmy:	4491892.1		
Latitude:	40.5778134094		
Longitude:	-105.008425505		
Site id:	CO6000000364959		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

D41
South
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000082321

Fid:	82320	Objectid:	82321
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040202		
Receipt:	9040202	Permit:	45374-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	127
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499496.5		
Utmy:	4491866.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577579		
Longdecdeg:	-105.005949		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-04-16		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	PARSHEY BERRY		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499515.3		
Disputmy:	4491889		
Latitude:	40.577579332		
Longitude:	-105.005948993		
Site id:	CO6000000082321		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

D42
South
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000082320

Fid:	82319	Objectid:	82320
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040201		
Receipt:	9040201	Permit:	45373-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	108
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499496.5		
Utmy:	4491866.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577579		
Longdecdeg:	-105.005949		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-04-07		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	RUST MYRON		
Complewewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499496		
Disputmy:	4491866		
Latitude:	40.577579332		
Longitude:	-105.005948993		
Site id:	CO6000000082320		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

D43
South
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000224171

Fid:	224170	Objectid:	224171
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0028978		
Receipt:	0028978	Permit:	28978-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499496.5		
Utmy:	4491866.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577579		
Longdecdeg:	-105.005949		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1996-08-08		
Permexpire:	1996-11-08		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	WELL LOG AVAILABLE		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CONOCO INC		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499522		
Disputmy:	4491881		
Latitude:	40.577579332		
Longitude:	-105.005948993		
Site id:	CO6000000224171		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

D44
South
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000082323

Fid:	82322	Objectid:	82323
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040204		
Receipt:	9040204	Permit:	45376-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499496.5		
Utmy:	4491866.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577579		
Longdecdeg:	-105.005949		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-04-11		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	ULLRICH LARRY		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499506.3		
Disputmy:	4491894.2		
Latitude:	40.577579332		
Longitude:	-105.005948993		
Site id:	CO6000000082323		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

E45
North
1/4 - 1/2 Mile
Higher

CO WELLS CO6000000193171

Fid:	193170	Objectid:	193171
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0000320A		
Receipt:	0000320A	Permit:	1995117-AB
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	1585
Coordewdir:	E	Coordns:	1835
Coordnsdir:	S		
Utmx:	499414.9		
Utmx:	4492830.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.586269		
Longdecdeg:	-105.006914		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1995-06-09		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	RYDER TRUCK		
Complewewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499414.9		
Disputmy:	4492830.7		
Latitude:	40.586269257		
Longitude:	-105.006914014		
Site id:	CO6000000193171		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

C46
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000364965

Fid:	364964	Objectid:	364965
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364919G		
Receipt:	0364919G	Permit:	176328-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-7 (BH-7)	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	1860
Coordewdir:	E	Coordns:	1420
Coordnsdir:	N		
Utmx:	499329.9		
Utmy:	4491839.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57734		
Longdecdeg:	-105.007917		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1994-02-22		
Permexpire:	1996-02-22		
Wellconstr:	1993-12-22		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	MH; WELL MW-7 (BH-7); MH-22037 12-20-93; WC 12-22-93		
Elev:	0	Welldepth:	14
Topperfcas:	3	Botperfcas:	14
Yield:	0		
Staticwl:	0		
Applicantn:	GOOD ALL ELECTRIC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499329.9		
Disputmy:	4491839.6		
Latitude:	40.5773404775		
Longitude:	-105.007917391		
Site id:	CO6000000364965		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

F47
SW
1/4 - 1/2 Mile
Lower

FED USGS USGS40000222485

Org. Identifier:	USGS-CO			
Formal name:	USGS Colorado Water Science Center			
Monloc Identifier:	USGS-403443105003701			
Monloc name:	SB00706816AAA1			
Monloc type:	Well			
Monloc desc:	Not Reported			
Huc code:	10190007	Drainagearea value:	Not Reported	
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported	
Contrib drainagearea units:	Not Reported	Latitude:	40.5785936	
Longitude:	-105.0108092	Sourcemap scale:	12500	
Horiz Acc measure:	1	Horiz Acc measure units:	minutes	
Horiz Collection method:	Interpolated from map			
Horiz coord refsys:	NAD83	Vert measure val:	4924.10	
Vert measure units:	feet	Vertacc measure val:	1	
Vert accmeasure units:	feet			
Vertcollection method:	Interpolated from topographic map			
Vert coord refsys:	NGVD29	Countrycode:	US	
Aquifername:	Not Reported			
Formation type:	Not Reported			
Aquifer type:	Not Reported			
Construction date:	Not Reported		Welldepth:	41.9
Welldepth units:	ft	Wellholedepth:	Not Reported	
Wellholedepth units:	Not Reported			

Ground-water levels, Number of Measurements: 1

	Feet below	Feet to
Date	Surface	Sealevel

1959-10-21	8.90	

C48
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO600000364960

Fid:	364959	Objectid:	364960
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364919B		
Receipt:	0364919B	Permit:	176323-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-4 (BH-4)	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported		
Block:	Not Reported		
Parcelsize:	0	Lot:	Not Reported
Pm:	S	Ctparclid:	Not Reported
Range:	68.0 W	Township:	7.0 N
Q160:	NE	Section :	16
Q10:	Not Reported	Q40:	NW
Coordewdir:	E	Coordew:	2200
Coordnsdir:	N	Coordns:	1320
Utmx:	499226.1		
Utmy:	4491871.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577629		
Longdecdeg:	-105.009144		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-02-22		
Permexpire:	1996-02-22		
Wellconstr:	1993-12-21		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	MH; WELL MW-4 (BH-4); NO MH#; WC-12-21-93		
Elev:	0	Welldepth:	15
Topperfcas:	4	Botperfcas:	15
Yield:	0		
Staticwl:	0		
Applicantn:	GOOD ALL ELECTRIC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499226.1		
Disputmy:	4491871.6		
Latitude:	40.5776286724		
Longitude:	-105.009143851		
Site id:	CO6000000364960		

**49
SE
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000194075

Fid:	194074	Objectid:	194075
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0000775A		
Receipt:	0000775A	Permit:	2000030-AB
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	200
Coordewdir:	E	Coordns:	900
Coordnsdir:	N		
Utmx:	499834.9		
Utmy:	4491990.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578697		
Longdecdeg:	-105.001951		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2000-04-24		
Comment :	4 wells		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SECOR		
Completeew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499834.9		
Disputmy:	4491990.1		
Latitude:	40.5786965724		
Longitude:	-105.001950735		
Site id:	CO6000000194075		

**E50
North
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000193172

Fid:	193171	Objectid:	193172
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0000321A		
Receipt:	0000321A	Permit:	1995118-AB
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	JEFFERSON	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	1505
Coordewdir:	E	Coordns:	1900
Coordnsdir:	S		
Utmx:	499439.4		
Utmy:	4492850.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.586445		
Longdecdeg:	-105.006625		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1995-09-09		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	RYDER TRUCK		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499439.4		
Disputmy:	4492850.2		
Latitude:	40.5864449477		
Longitude:	-105.00662452		
Site id:	CO6000000193172		

**E51
North
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000193169

Fid:	193168	Objectid:	193169
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0000319A		
Receipt:	0000319A	Permit:	1995116-AB
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	1670
Coordewdir:	E	Coordns:	1900
Coordnsdir:	S		
Utmx:	499389.1		
Utmy:	4492850.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.586449		
Longdecdeg:	-105.007219		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1995-06-09		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	RYDER TRUCK		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499389.1		
Disputmy:	4492850.7		
Latitude:	40.5864494164		
Longitude:	-105.007218908		
Site id:	CO6000000193169		

F52
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000357983

Fid:	357982	Objectid:	357983
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0354043		
Receipt:	0354043	Permit:	174954-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	22
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	2300
Coordewdir:	W	Coordns:	800
Coordnsdir:	N		
Utmx:	499003.1		
Utmy:	4492034.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579093		
Longdecdeg:	-105.011779		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	12700		
Permitunit:	SQ. FT.		
Annappropr:	1		
Permissued:	1993-12-02		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	LAWN ONLY		
Elev:	0	Welldepth:	33
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	ASCHEBRENER JAMES A		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499003.1		
Disputmy:	4492034.2		
Latitude:	40.5790932804		
Longitude:	-105.011778918		
Site id:	CO6000000357983		

**F53
SW
1/4 - 1/2 Mile
Lower**

CO WELLS CO6000000370675

Fid:	370674	Objectid:	370675
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0372270		
Receipt:	0372270	Permit:	181936-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	13
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	2575
Coordewdir:	W	Coordns:	1175
Coordnsdir:	N		
Utmx:	499085.1		
Utmy:	4491918.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578047		
Longdecdeg:	-105.01081		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	14000		
Permitunit:	SQ. FT.		
Annappropr:	1		
Permissued:	1994-09-20		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1967-12-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1ST USE 1967; 1/3 AC TRACT @ 702 SHERRY DR; 14000 SQFT IRR		
Elev:	0	Welldepth:	15
Topperfcas:	0	Botperfcas:	0
Yield:	30		
Staticwl:	0		
Applicantn:	KOVAR KENNETH L & LINDA L		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499085.1		
Disputmy:	4491918.1		
Latitude:	40.5780474417		
Longitude:	-105.010809875		
Site id:	CO6000000370675		

**54
NNW
1/4 - 1/2 Mile
Higher**

CO WELLS CO600000080469

Fid:	80468	Objectid:	80469
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038170		
Receipt:	9038170	Permit:	2458-F
Wdid:	0305766	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499302.1		
Utmy:	4492875.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.586675		
Longdecdeg:	-105.008247		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-03-21		
Permexpire:	Not Reported		
Wellconstr:	1960-03-31		
Firstbenef:	1960-03-23		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	63
Topperfcas:	15	Botperfcas:	63
Yield:	400		
Staticwl:	10		
Applicantn:	KRUSE LAND COMPANY LLC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499302.1		
Disputmy:	4492875.7		
Latitude:	40.5866745698		
Longitude:	-105.008247		
Site id:	CO6000000080469		

55
WNW
1/4 - 1/2 Mile
Higher

CO WELLS CO6000000080545

Fid:	80544	Objectid:	80545
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038252	Permit:	3814-
Receipt:	9038252	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498902.7		
Utmy:	4492480.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.583116		
Longdecdeg:	-105.012966		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1959-07-09		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	26
Topperfcas:	0	Botperfcas:	0
Yield:	16		
Staticwl:	6		
Applicantn:	WEIDELMAN DONALD B		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498902.7		
Disputmy:	4492480.7		
Latitude:	40.5831156251		
Longitude:	-105.012965975		
Site id:	CO6000000080545		

F56
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000360419

Fid:	360418	Objectid:	360419
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0357610		
Receipt:	0357610	Permit:	174957-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	1
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	14
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.37		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	2518
Coordewdir:	W	Coordns:	1220
Coordnsdir:	N		
Utmx:	499067.6		
Utmy:	4491905.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57793		
Longdecdeg:	-105.011017		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	11000		
Permitunit:	SQ. FT.		
Annappropr:	1		
Permissued:	1993-12-02		
Permexpire:	1995-12-02		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1967 WELL LR; 11,000 SQFT IRRIG ONLY; 0.37 ACRE PARCEL		
Elev:	0	Welldepth:	11
Topperfcas:	0	Botperfcas:	0
Yield:	35		
Staticwl:	0		
Applicantn:	GONZALES THOMAS & CAROLINA G.		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499067.6		
Disputmy:	4491905.1		
Latitude:	40.5779303068		
Longitude:	-105.011016625		
Site id:	CO6000000360419		

**G57
East
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000333099

Fid:	333098	Objectid:	333099
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0309541A		
Receipt:	0309541A	Permit:	36522-M
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	443
Coordewdir:	W	Coordns:	289
Coordnsdir:	S		
Utmx:	500029.9		
Utmy:	4492349.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581931		
Longdecdeg:	-104.999647		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-04-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1996-11-19		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	AMOCO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500029.9		
Disputmy:	4492349.1		
Latitude:	40.5819307818		
Longitude:	-104.9996467		
Site id:	CO6000000333099		

**G58
East
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000333102

Fid:	333101	Objectid:	333102
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0309541D		
Receipt:	0309541D	Permit:	36525-M
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-4	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	446
Coordewdir:	W	Coordns:	223
Coordnsdir:	S		
Utmx:	500030.7		
Utmy:	4492329.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581751		
Longdecdeg:	-104.999637		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-04-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1996-11-19		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	AMOCO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500030.7		
Disputmy:	4492329.1		
Latitude:	40.5817506044		
Longitude:	-104.999637248		
Site id:	CO6000000333102		

F59
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000360420

Fid:	360419	Objectid:	360420
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0357611		
Receipt:	0357611	Permit:	172989-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	15
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2568
Coordewdir:	W	Coordns:	1340
Coordnsdir:	N		
Utmx:	499082.2		
Utmy:	4491868.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577597		
Longdecdeg:	-105.010844		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	1		
Permissued:	1993-09-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1ST USE 4/69; 0.37 AC @716 SHERRY DR; 11,000 SQFT LAWN IRR ONLY		
Elev:	0	Welldepth:	12
Topperfcas:	0	Botperfcas:	0
Yield:	35		
Staticwl:	0		
Applicantn:	MARTINEZ RONALD A & LINDA M & SHANE M		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499082.2		
Disputmy:	4491868.1		
Latitude:	40.5775969938		
Longitude:	-105.010844066		
Site id:	CO6000000360420		

**H60
SSW
1/4 - 1/2 Mile
Lower**

CO WELLS CO6000000364964

Fid:	364963	Objectid:	364964
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364919F		
Receipt:	0364919F	Permit:	176327-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-6 (BH-6)	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	1940
Coordewdir:	E	Coordns:	1700
Coordnsdir:	N		
Utmx:	499306		
Utmy:	4491754.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576575		
Longdecdeg:	-105.0082		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-02-22		
Permexpire:	1996-02-22		
Wellconstr:	1993-12-21		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	MH; WELL MW-6 (BH-6); MH-22037 12-20-93; WC 12-21-93		
Elev:	0	Welldepth:	18
Topperfcas:	4	Botperfcas:	18
Yield:	0		
Staticwl:	0		
Applicantn:	GOOD ALL ELECTRIC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499306		
Disputmy:	4491754.6		
Latitude:	40.5765747012		
Longitude:	-105.008199682		
Site id:	CO6000000364964		

**I61
NNE
1/4 - 1/2 Mile
Higher**

CO WELLS CO600000080610

Fid:	80609	Objectid:	80610
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038322		
Receipt:	9038322	Permit:	5270-F
Wdid:	0307140	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499699.6		
Utmy:	4492868.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.586607		
Longdecdeg:	-105.00355		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1964-04-18		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	62
Topperfcas:	0	Botperfcas:	0
Yield:	400		
Staticwl:	8		
Applicantn:	SMITH LEROY K		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499709.3		
Disputmy:	4492896.2		
Latitude:	40.5866072429		
Longitude:	-105.003549787		
Site id:	CO6000000080610		

**I62
NNE
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000081434

Fid:	81433	Objectid:	81434
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039256	Permit:	19326-R
Receipt:	9039256	Currstatus:	Well Constructed
Wdid:	0305765	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499699.6		
Utmy:	4492868.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.586607		
Longdecdeg:	-105.00355		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1937-06-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	61
Topperfcas:	24	Botperfcas:	61
Yield:	450		
Staticwl:	9		
Applicantn:	KRUSE LAND COMPANY LLC		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499699		
Disputmy:	4492868		
Latitude:	40.5866072429		
Longitude:	-105.003549787		
Site id:	CO6000000081434		

**I63
NNE
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000082133

Fid:	82132	Objectid:	82133
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040002		
Receipt:	9040002	Permit:	38738-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499699.6		
Utmy:	4492868.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.586607		
Longdecdeg:	-105.00355		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-07-24		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	0	Botperfcas:	0
Yield:	50		
Staticwl:	5		
Applicantn:	JOHNSON LEE		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499718.3		
Disputmy:	4492891		
Latitude:	40.5866072429		
Longitude:	-105.003549787		
Site id:	CO6000000082133		

**G64
East
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000333103

Fid:	333102	Objectid:	333103
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0309541E	Permit:	36526-M
Receipt:	0309541E	Currstatus:	Well Abandoned
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	MW-5	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	484
Coordewdir:	W	Coordns:	197
Coordnsdir:	S		
Utmx:	500042.2		
Utmy:	4492320.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581674		
Longdecdeg:	-104.999501		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-04-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1996-11-19		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	AMOCO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500042.2		
Disputmy:	4492320.6		
Latitude:	40.581674028		
Longitude:	-104.999501365		
Site id:	CO6000000333103		

**J65
SW
1/4 - 1/2 Mile
Lower**

CO WELLS CO6000000081717

Fid:	81716	Objectid:	81717
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039558		
Receipt:	9039558	Permit:	25845-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	36
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2600
Coordewdir:	W	Coordns:	1400
Coordnsdir:	N		
Utmx:	499091.7		
Utmy:	4491849.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57743		
Longdecdeg:	-105.010732		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1982-10-12		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	27
Topperfcas:	0	Botperfcas:	0
Yield:	200		
Staticwl:	10		
Applicantn:	ARNETT DUANE R.		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499091.7		
Disputmy:	4491849.6		
Latitude:	40.5774303395		
Longitude:	-105.010731795		
Site id:	CO600000081717		

66
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000364961

Fid:	364960	Objectid:	364961
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364919C		
Receipt:	0364919C	Permit:	176324-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-2 (BH-2)	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	2310
Coordewdir:	E	Coordns:	1600
Coordnsdir:	N		
Utmx:	499193.1		
Utmy:	4491787.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576867		
Longdecdeg:	-105.009534		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-02-22		
Permexpire:	1996-02-22		
Wellconstr:	1993-12-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	MH; WELL MW-2 (BH-2); MH-22037 12-20-93; WC 12-9-93		
Elev:	0	Welldepth:	14
Topperfcas:	4	Botperfcas:	14
Yield:	0		
Staticwl:	0		
Applicantn:	GOOD-ALL ELECTRIC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499193.1		
Disputmy:	4491787.1		
Latitude:	40.5768673882		
Longitude:	-105.009533648		
Site id:	CO6000000364961		

K67
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO600000080552

Fid:	80551	Objectid:	80552
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038260		
Receipt:	9038260	Permit:	4028-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498899.8		
Utmy:	4492077.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579485		
Longdecdeg:	-105.013		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1959-06-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	34
Topperfcas:	0	Botperfcas:	0
Yield:	14		
Staticwl:	11		
Applicantn:	BAKER VERL		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498899		
Disputmy:	4492077		
Latitude:	40.5794850368		
Longitude:	-105.01299954		
Site id:	CO6000000080552		

K68
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000082324

Fid:	82323	Objectid:	82324
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040205		
Receipt:	9040205	Permit:	45377-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	129
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498899.8		
Utmy:	4492077.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579485		
Longdecdeg:	-105.013		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1971-04-13		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-04-12		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	33
Topperfcas:	18	Botperfcas:	33
Yield:	20		
Staticwl:	9		
Applicantn:	DOMINGUEZ BILLY E & DAVEEN		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498909.3		
Disputmy:	4492105.2		
Latitude:	40.5794850368		
Longitude:	-105.01299954		
Site id:	CO6000000082324		

K69
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000082325

Fid:	82324	Objectid:	82325
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040206		
Receipt:	9040206	Permit:	45378-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	130
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498899.8		
Utmy:	4492077.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579485		
Longdecdeg:	-105.013		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1971-04-13		
Permexpire:	Not Reported		
Wellconstr:	1971-04-18		
Firstbenef:	1971-04-18		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	31
Topperfcas:	21	Botperfcas:	31
Yield:	20		
Staticwl:	8		
Applicantn:	HAAS MATTHEW		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498918.3		
Disputmy:	4492100		
Latitude:	40.5794850368		
Longitude:	-105.01299954		
Site id:	CO6000000082325		

**G70
East
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000333101

Fid:	333100	Objectid:	333101
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0309541C	Permit:	36524-M
Receipt:	0309541C	Currstatus:	Not Reported
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	MW-3	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	532
Coordewdir:	W	Coordns:	160
Coordnsdir:	S		
Utmx:	500056.8		
Utmy:	4492309.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.58157		
Longdecdeg:	-104.999329		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-04-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	AMOCO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500056.8		
Disputmy:	4492309.1		
Latitude:	40.5815704243		
Longitude:	-104.999328853		
Site id:	CO6000000333101		

**F71
SW
1/4 - 1/2 Mile
Lower**

CO WELLS CO6000000422609

Fid:	422608	Objectid:	422609
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0446223		
Receipt:	0446223	Permit:	218508-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	24
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	2300
Coordewdir:	W	Coordns:	1200
Coordnsdir:	N		
Utmx:	499001.2		
Utmy:	4491912.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577993		
Longdecdeg:	-105.011801		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	15000		
Permitunit:	SQ.FT.		
Annappropr:	0		
Permissued:	1999-06-24		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-08-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	only use - irrigation of 15,000 sf of lawn		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	SMITH MARY R & LYNN E		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499001.2		
Disputmy:	4491912.1		
Latitude:	40.5779932918		
Longitude:	-105.011801174		
Site id:	CO6000000422609		

H72
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000364962

Fid:	364961	Objectid:	364962
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364919D		
Receipt:	0364919D	Permit:	176325-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-3 (BH-3)	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	2190
Coordewdir:	E	Coordns:	1700
Coordnsdir:	N		
Utmx:	499229.8		
Utmy:	4491756.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576588		
Longdecdeg:	-105.0091		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-02-22		
Permexpire:	1996-02-22		
Wellconstr:	1993-12-09		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	MH; WELL MW-3 (BH-3); MH-22037 12-20-93; WC 12-9-93		
Elev:	0	Welldepth:	14
Topperfcas:	4	Botperfcas:	14
Yield:	0		
Staticwl:	0		
Applicantn:	GOOD ALL ELECTRIC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499229.8		
Disputmy:	4491756.1		
Latitude:	40.5765881478		
Longitude:	-105.009099994		
Site id:	CO6000000364962		

73
WSW
1/4 - 1/2 Mile
Higher

CO WELLS CO6000000084258

Fid:	84257	Objectid:	84258
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9042221		
Receipt:	9042221	Permit:	121920-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1780
Coordewdir:	W	Coordns:	280
Coordnsdir:	N		
Utmx:	498847.1		
Utmy:	4492195.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580544		
Longdecdeg:	-105.013622		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1981-08-15		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	36
Topperfcas:	0	Botperfcas:	0
Yield:	25		
Staticwl:	0		
Applicantn:	MILL JAKE		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498847.1		
Disputmy:	4492195.2		
Latitude:	40.5805435101		
Longitude:	-105.013622437		
Site id:	CO6000000084258		

H74
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000364963

Fid:	364962	Objectid:	364963
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364919E		
Receipt:	0364919E	Permit:	176326-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	MW-5 (BH-5)	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	2090
Coordewdir:	E	Coordns:	1740
Coordnsdir:	N		
Utmx:	499260.4		
Utmy:	4491743.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576471		
Longdecdeg:	-105.008738		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-02-22		
Permexpire:	1996-02-22		
Wellconstr:	1993-12-21		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	MH; WELL MW-5 (BH-5); MH-22037 12-20-93; WC 12-21-93		
Elev:	0	Welldepth:	14
Topperfcas:	4	Botperfcas:	14
Yield:	0		
Staticwl:	0		
Applicantn:	GOOD ALL ELECTRIC		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499260.4		
Disputmy:	4491743.1		
Latitude:	40.5764710597		
Longitude:	-105.008738437		
Site id:	CO6000000364963		

**G75
East
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000333100

Fid:	333099	Objectid:	333100
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0309541B		
Receipt:	0309541B	Permit:	36523-M
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-2	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	570
Coordewdir:	W	Coordns:	287
Coordnsdir:	S		
Utmx:	500068.6		
Utmy:	4492347.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581917		
Longdecdeg:	-104.999189		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-04-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1996-11-19		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	AMOCO		
Completwew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500068.6		
Disputmy:	4492347.6		
Latitude:	40.5819172659		
Longitude:	-104.999189419		
Site id:	CO6000000333100		

**G76
East
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000333104

Fid:	333103	Objectid:	333104
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0309541F		
Receipt:	0309541F	Permit:	36527-M
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-6	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	583
Coordewdir:	W	Coordns:	242
Coordnsdir:	S		
Utmx:	500072.5		
Utmy:	4492334.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581796		
Longdecdeg:	-104.999143		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-04-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1996-11-19		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	AMOCO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500072.5		
Disputmy:	4492334.1		
Latitude:	40.5817956461		
Longitude:	-104.999143339		
Site id:	CO6000000333104		

**G77
East
1/4 - 1/2 Mile
Higher**

CO WELLS CO6000000333105

Fid:	333104	Objectid:	333105
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0309541G		
Receipt:	0309541G	Permit:	36528-M
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-7	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	585
Coordewdir:	W	Coordns:	136
Coordnsdir:	S		
Utmx:	500072.9		
Utmy:	4492301.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581503		
Longdecdeg:	-104.999139		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-04-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	1996-11-19		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	AMOCO		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500072.9		
Disputmy:	4492301.6		
Latitude:	40.5815028565		
Longitude:	-104.999138615		
Site id:	CO6000000333105		

**78
NE
1/4 - 1/2 Mile
Higher**

FED USGS USGS40000222533

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403511105000601		
Monloc name:	SB00706810CAB1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5863713
Longitude:	-105.0021977	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4942.90
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	71
Construction date:	Not Reported	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
-----			-----		
1959-10-22	5.90		1959-10-22	5.90	

**L79
SW
1/4 - 1/2 Mile
Lower**

CO WELLS CO600000360893

Fid:	360892	Objectid:	360893
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0358367		
Receipt:	0358367	Permit:	174961-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	25
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.38		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	2245
Coordewdir:	W	Coordns:	1260
Coordnsdir:	N		
Utmx:	498984.2		
Utmx:	4491894.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577831		
Longdecdeg:	-105.012002		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	9000		
Permitunit:	SQ. FT.		
Annappropr:	1		
Permissued:	1993-12-02		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	LR 4/65 WELL; 9000 SQFT IRRIG; 0.38 A TRACT		
Elev:	0	Welldepth:	25
Topperfcas:	0	Botperfcas:	0
Yield:	30		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	NORDICK LARRY D & JOYCE C		
Completw:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498984.2		
Disputmy:	4491894.1		
Latitude:	40.5778311107		
Longitude:	-105.012002006		
Site id:	CO6000000360893		

**L80
SW
1/4 - 1/2 Mile
Lower**

CO WELLS CO6000000361537

Fid:	361536	Objectid:	361537
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0359307		
Receipt:	0359307	Permit:	172986-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2210
Coordewdir:	W	Coordns:	1350
Coordnsdir:	N		
Utmx:	498973.1		
Utmy:	4491866.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577583		
Longdecdeg:	-105.012133		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	10380		
Permitunit:	SQ. FT.		
Annappropr:	.75		
Permissued:	1993-09-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1970-12-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1ST USE 11/70; 0.33 AC LOT; 10,380 SQFT LAWN IRR ONLY		
Elev:	0	Welldepth:	25
Toppercas:	0	Botpercas:	0
Yield:	12		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BOYES WALTER & ARLINE	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498973.1		
Disputmy:	4491866.6		
Latitude:	40.577583352		
Longitude:	-105.012133111		
Site id:	CO6000000361537		

J81
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000361206

Fid:	361205	Objectid:	361175
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0358761		
Receipt:	0358761	Permit:	172985-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	26
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.38		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2250
Coordewdir:	W	Coordns:	1390
Coordnsdir:	N		
Utmx:	498985.1		
Utmy:	4491854.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577471		
Longdecdeg:	-105.011991		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	14000		
Permitunit:	SQ. FT.		
Annappropr:	1		
Permissued:	1993-09-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1968-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1ST USE 4/68; 0.38 AC @ 717 SHERRY DR; 14,000 SQFT LAWN IRR ONLY		
Elev:	0	Welldepth:	11
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	GATES BASIL	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498985.1		
Disputmy:	4491854.1		
Latitude:	40.577470756		
Longitude:	-105.011991308		
Site id:	CO6000000361206		

82
ENE
1/4 - 1/2 Mile
Higher

CO WELLS CO6000000206652

Fid:	206651	Objectid:	206652
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0015537		
Receipt:	0015537	Permit:	15537-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500098.6		
Utmy:	4492460.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.582931		
Longdecdeg:	-104.998835		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1989-10-19		
Permexpire:	1990-01-17		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	AMOCO	Ogcc api:	Not Reported
Completere:	0		
Ogjobbatch:	0		
Disputmx:	500098.6		
Disputmy:	4492460.1		
Latitude:	40.582930764		
Longitude:	-104.998834921		
Site id:	CO6000000206652		

K83
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO600000020665

Fid:	220664	Objectid:	220665
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998N		
Receipt:	0025998N	Permit:	45140-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	23
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.56		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1820
Coordewdir:	W	Coordns:	880
Coordnsdir:	N		
Utmx:	498856.4		
Utmy:	4492012.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578895		
Longdecdeg:	-105.013512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	PUMP RPT NOT AVAILABLE - SEE NOTE IN FILE.		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	SCHIPPERT STANLEY D & SUSAN L	
Completw:	3	Ogcc api: Not Reported
Ogjobbatch:	0	
Disputmx:	498866.3	
Disputmy:	4492040.2	
Latitude:	40.5788948954	
Longitude:	-105.013512218	
Site id:	CO6000000220665	

K84
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000365025

Fid:	365024	Objectid:	365025
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997N		
Receipt:	0364997N	Permit:	13272-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	23
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1820
Coordewdir:	W	Coordns:	880
Coordnsdir:	N		
Utmx:	498856.4		
Utmy:	4492012.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578895		
Longdecdeg:	-105.013512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	SCHIPPERT STANLEY D & SUSAN L		
Completw:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498856		
Disputmy:	4492012		
Latitude:	40.5788948954		
Longitude:	-105.013512218		
Site id:	CO6000000365025		

H85
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000247045

Fid:	247044	Objectid:	247045
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0046847		
Receipt:	0046847	Permit:	46847-DW
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499297.1		
Utmy:	4491665.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57577		
Longdecdeg:	-105.0083		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	DEWATERING	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-02-21		
Permexpire:	2007-05-15		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Four (4) holes to be constructed.		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	STAGER PATRICIA	Ogcc api:	Not Reported
Completwewe:	2		
Ogjobbatch:	0		
Disputmx:	499316.3		
Disputmy:	4491688		
Latitude:	40.5757720005		
Longitude:	-105.008304737		
Site id:	CO6000000247045		

H86
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000419019

Fid:	419018	Objectid:	419019
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441243		
Receipt:	0441243	Permit:	46833-DW
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499297.1		
Utmy:	4491665.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57577		
Longdecdeg:	-105.0083		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-02-09		
Permexpire:	2007-05-09		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Twenty (20) holes to be constructed. Formerly known as 441243-DW.		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	WESTERN INVESTMENTS LLC		
Completw:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499307.3		
Disputmy:	4491693.2		
Latitude:	40.5757720005		
Longitude:	-105.008304737		
Site id:	CO6000000419019		

H87
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000215350

Fid:	215349	Objectid:	215350
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0022037		
Receipt:	0022037	Permit:	22037-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499297.1		
Utmy:	4491665.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575768		
Longdecdeg:	-105.008305		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1993-12-20		
Permexpire:	1994-03-20		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	X-REF 176324-176328		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	GOODALL ELECTRIC	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	499297		
Disputmy:	4491665		
Latitude:	40.5757683969		
Longitude:	-105.008304736		
Site id:	CO6000000215350		

J88
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000360892

Fid:	360891	Objectid:	360892
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0358366		
Receipt:	0358366	Permit:	174960-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	27
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.38		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2256
Coordewdir:	W	Coordns:	1490
Coordnsdir:	N		
Utmx:	498986.4		
Utmy:	4491824.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.5772		
Longdecdeg:	-105.011976		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1000		
Permitunit:	SQ. FT.		
Annappropr:	1		
Permissued:	1993-12-02		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1968-03-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	LR 3/68 WELL; 1,000 SQFT IRRIG; 0.38 A TRACT		
Elev:	0	Welldepth:	10
Toppercas:	0	Botpercas:	0
Yield:	28		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	CUMMINGS WALTER S	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498986.4		
Disputmy:	4491824.1		
Latitude:	40.5772004908		
Longitude:	-105.0119759		
Site id:	CO6000000360892		

89
ESE
1/4 - 1/2 Mile
Higher

CO WELLS CO6000000080987

Fid:	80986	Objectid:	80987
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038742		
Receipt:	9038742	Permit:	11203-R
Wdid:	0305247	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500098.7		
Utmy:	4492056.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579291		
Longdecdeg:	-104.998834		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-04-12		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	60
Toppercas:	0	Botpercas:	0
Yield:	1600		
Staticwl:	10		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	INTERCHANGE BUSINESS PARK LLC	
Completw:	1	Ogcc api: Not Reported
Ogjobbatch:	0	
Disputmx:	500098.7	
Disputmy:	4492056.1	
Latitude:	40.57929117	
Longitude:	-104.998833802	
Site id:	CO6000000080987	

M90
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO600000360081

Fid:	360080	Objectid:	360081
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0357091		
Receipt:	0357091	Permit:	172988-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	#1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	19
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2615
Coordewdir:	W	Coordns:	1847
Coordnsdir:	N		
Utmx:	499094.2		
Utmy:	4491713.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576201		
Longdecdeg:	-105.010702		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	1		
Permissued:	1993-09-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1966-06-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1ST USE 6/1/66;0.37 AC @808 SHERRY DR;1SF,13,780 SQFT IRR,NO ANIMAL		
Elev:	0	Welldepth:	27
Toppercas:	0	Botpercas:	0
Yield:	12		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BALDWIN THOMAS & JANELLE	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	499094.2		
Disputmy:	4491713.1		
Latitude:	40.5762006273		
Longitude:	-105.010702061		
Site id:	CO6000000360081		

M91
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000235685

Fid:	235684	Objectid:	235685
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0038578		
Receipt:	0038578	Permit:	3416-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	20
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2730
Coordewdir:	E	Coordns:	1800
Coordnsdir:	N		
Utmx:	499065.5		
Utmy:	4491728		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576335		
Longdecdeg:	-105.011041		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-11-10		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	FERGUSON HAROLD J.	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	499065.5		
Disputmy:	4491728		
Latitude:	40.5763348277		
Longitude:	-105.011041174		
Site id:	CO6000000235685		

N92
SSE
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000081605

Fid:	81604	Objectid:	81605
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039437		
Receipt:	9039437	Permit:	23158-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	Not Reported	Lot:	3
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499697.3		
Utmy:	4491657.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575701		
Longdecdeg:	-105.003576		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-05-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Topperfcas:	0	Botperfcas:	0
Yield:	20		
Staticwl:	9		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	HENDERSON CROSSWELL	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	499707.3		
Disputmy:	4491685.2		
Latitude:	40.5757010736		
Longitude:	-105.003576385		
Site id:	CO6000000081605		

**N93
SSE
1/4 - 1/2 Mile
Lower**

CO WELLS CO6000000484556

Fid:	484555	Objectid:	484556
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0902385		
Receipt:	0902385	Permit:	30075-
Wdid:	Not Reported	Currstatus:	Permit Canceled
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BEXELDER ESTATES		
Filing:	Not Reported	Lot:	3
Block:	2	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499697.3		
Utmy:	4491657.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575701		
Longdecdeg:	-105.003576		
Use1:	STOCK	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	HENDERSON CROSWELL	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	499697		
Disputmy:	4491657		
Latitude:	40.5757010736		
Longitude:	-105.003576385		
Site id:	CO6000000484556		

**O94
West
1/4 - 1/2 Mile
Higher**

CO WELLS CO600000010749

Fid:	10748	Objectid:	10749
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=3614275		
Receipt:	3614275	Permit:	218126--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	40.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	1355
Coordewdir:	W	Coordns:	55
Coordnsdir:	S		
Utmx:	498719		
Utmy:	4492299		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.58148		
Longdecdeg:	-105.01514		
Use1:	COMMERCIAL	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	QUATERNARY ALLUVIUM
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-04-02		
Permexpire:	2009-04-02		
Wellconstr:	2007-06-24		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	47
Toppercas:	30	Botpercas:	47
Yield:	0		
Staticwl:	12		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	VALLEY 14, LLC	Ogcc api:	Not Reported
Completwew:	1		
Ogjobbatch:	0		
Disputmx:	498719		
Disputmy:	4492299		
Latitude:	40.5814784453		
Longitude:	-105.015136252		
Site id:	CO6000000010749		

P95
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000220667

Fid:	220666	Objectid:	220667
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998P		
Receipt:	0025998P	Permit:	45142-F
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	21
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1590
Coordewdir:	W	Coordns:	860
Coordnsdir:	N		
Utmx:	498786.4		
Utmy:	4492019.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578958		
Longdecdeg:	-105.014339		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	SCHWEITZER TAMMY	Ogcc api:	Not Reported
Completw:	2		
Ogjobbatch:	0		
Disputmx:	498796.3		
Disputmy:	4492047.2		
Latitude:	40.5789578578		
Longitude:	-105.014339317		
Site id:	CO6000000220667		

P96
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000365027

Fid:	365026	Objectid:	365027
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997P		
Receipt:	0364997P	Permit:	13274-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	21
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1590
Coordewdir:	W	Coordns:	860
Coordnsdir:	N		
Utmx:	498786.4		
Utmy:	4492019.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578958		
Longdecdeg:	-105.014339		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	SCHWEITZER TAMMY	Ogcc api:	Not Reported
Completwew:	0		
Ogjobbatch:	0		
Disputmx:	498786		
Disputmy:	4492019		
Latitude:	40.5789578578		
Longitude:	-105.014339317		
Site id:	CO6000000365027		

Q97
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000220670

Fid:	220669	Objectid:	220670
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998S		
Receipt:	0025998S	Permit:	45145-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	37
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1850
Coordewdir:	W	Coordns:	1300
Coordnsdir:	N		
Utmx:	498863.6		
Utmy:	4491883.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577736		
Longdecdeg:	-105.013427		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	MILLER HERBERT	Ogcc api:	Not Reported
Completwew:	3		
Ogjobbatch:	0		
Disputmx:	498873.3		
Disputmy:	4491911.2		
Latitude:	40.5777363608		
Longitude:	-105.013426915		
Site id:	CO6000000220670		

Q98
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000365030

Fid:	365029	Objectid:	365030
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997S		
Receipt:	0364997S	Permit:	13277-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	37
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1850
Coordewdir:	W	Coordns:	1300
Coordnsdir:	N		
Utmx:	498863.6		
Utmy:	4491883.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577736		
Longdecdeg:	-105.013427		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	TRIPPEL ESTHER	Ogcc api:	Not Reported
Complewew:	0		
Ogjobbatch:	0		
Disputmx:	498863		
Disputmy:	4491883		
Latitude:	40.5777363608		
Longitude:	-105.013426915		
Site id:	CO6000000365030		

O99
West
1/4 - 1/2 Mile
Higher

CO WELLS

CO6000000421252

Fid:	421251	Objectid:	421252
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0444291		
Receipt:	0444291	Permit:	218126-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	40.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	1330
Coordewdir:	W	Coordns:	50
Coordnsdir:	S		
Utmx:	498711.3		
Utmy:	4492297.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581467		
Longdecdeg:	-105.015227		
Use1:	COMMERCIAL	Use2:	Not Reported
Specialuse:	ISSUED UNDER PRESUMPTION	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1999-06-09		
Permexpire:	2001-06-09		
Wellconstr:	1999-07-02		
Firstbenef:	Not Reported		
Pumpinstal:	1999-07-09		
Wellplugge:	2007-07-14		
Comment :	Not Reported		
Elev:	0	Welldepth:	42
Toppercas:	27	Botpercas:	42
Yield:	10		
Staticwl:	7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	NORTHERN COLORADO PROP INC	
Completw:	0	Ogcc api: Not Reported
Ogjobbatch:	0	
Disputmx:	498711.3	
Disputmy:	4492297.7	
Latitude:	40.5814667217	
Longitude:	-105.015227232	
Site id:	CO6000000421252	

M100
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000360971

Fid:	360970	Objectid:	360971
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0358519		
Receipt:	0358519	Permit:	172987-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	20
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2564
Coordewdir:	W	Coordns:	1928
Coordnsdir:	N		
Utmx:	499078.2		
Utmy:	4491689.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.575984		
Longdecdeg:	-105.010891		
Use1:	DOMESTIC	Use2:	STOCK
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	.75		
Permissued:	1993-09-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1968-07-07		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1ST USE 7/7/68;0.60 AC @816 SHERRY DR;21,576 SQFT IRR & ANIMAL ONLY		
Elev:	0	Welldepth:	16
Topperfcas:	0	Botperfcas:	0
Yield:	13		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	MESSERSMITH MILTON J & DONNA M	
Completw:	1	Ogcc api: Not Reported
Ogjobbatch:	0	
Disputmx:	499078.2	
Disputmy:	4491689.1	
Latitude:	40.5759843961	
Longitude:	-105.010891066	
Site id:	CO6000000360971	

Q101
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000220652

Fid:	220651	Objectid:	220652
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998A		
Receipt:	0025998A	Permit:	45127-F
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	93CW158
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	36
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1830
Coordewdir:	W	Coordns:	1380
Coordnsdir:	N		
Utmx:	498857.1		
Utmy:	4491859.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57752		
Longdecdeg:	-105.013504		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	AUGMENTED	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.33000001		
Permitunit:	ACRES		
Annappropr:	1		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BASS JAMES A & ARTA MAE	Ogcc api:	Not Reported
Completwew:	2		
Ogjobbatch:	0		
Disputmx:	498867.3		
Disputmy:	4491887.2		
Latitude:	40.5775201377		
Longitude:	-105.013503671		
Site id:	CO6000000220652		

Q102
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000365012

Fid:	365011	Objectid:	365012
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997A		
Receipt:	0364997A	Permit:	13259-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	36
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1830
Coordewdir:	W	Coordns:	1380
Coordnsdir:	N		
Utmx:	498857.1		
Utmy:	4491859.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57752		
Longdecdeg:	-105.013504		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BASS JAMES A & ARTA MAE		
Completw:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498857		
Disputmy:	4491859		
Latitude:	40.5775201377		
Longitude:	-105.013503671		
Site id:	CO6000000365012		

M103
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000485044

Fid:	485043	Objectid:	485007
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0902883		
Receipt:	0902883	Permit:	34540-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	31
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2490
Coordewdir:	W	Coordns:	1950
Coordnsdir:	N		
Utmx:	499055.6		
Utmy:	4491682.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.575924		
Longdecdeg:	-105.011158		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1968-07-15		
Permexpire:	1969-07-15		
Wellconstr:	1968-12-31		
Firstbenef:	Not Reported		
Pumpinstal:	1969-05-31		
Wellplugge:	Not Reported		
Comment :	Applicant submitted an existing well and inspection form. Construction date fall 1968 which agrees with the year the house wa		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BEITZ MAYNARD L & CALISTA K		
Completw:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499055.6		
Disputmy:	4491682.5		
Latitude:	40.5759249113		
Longitude:	-105.011158075		
Site id:	CO6000000485044		

P104
WSW
1/4 - 1/2 Mile
Lower

CO WELLS

CO6000000220660

Fid:	220659	Objectid:	220660
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=00259981		
Receipt:	00259981	Permit:	45135-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	20
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1510
Coordewdir:	W	Coordns:	920
Coordnsdir:	N		
Utmx:	498761.8		
Utmy:	4492001.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578796		
Longdecdeg:	-105.01463		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-07-05		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	RICKARD PATRICIA A	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498771.3		
Disputmy:	4492029.2		
Latitude:	40.5787956606		
Longitude:	-105.014629944		
Site id:	CO6000000220660		

P105
WSW
1/4 - 1/2 Mile
Lower

CO WELLS

CO6000000365020

Fid:	365019	Objectid:	365020
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=03649971		
Receipt:	03649971	Permit:	13267-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	20
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1510
Coordewdir:	W	Coordns:	920
Coordnsdir:	N		
Utmx:	498761.8		
Utmy:	4492001.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578796		
Longdecdeg:	-105.01463		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	LUDEWIG BOB	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498761		
Disputmy:	4492001		
Latitude:	40.5787956606		
Longitude:	-105.014629944		
Site id:	CO6000000365020		

M106
SW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000362339

Fid:	362338	Objectid:	362339
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0360594		
Receipt:	0360594	Permit:	174959-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	33
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.30000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2270
Coordewdir:	W	Coordns:	1820
Coordnsdir:	N		
Utmx:	498989.1		
Utmy:	4491723.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576291		
Longdecdeg:	-105.011944		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	9000		
Permitunit:	SQ. FT.		
Annappropr:	1		
Permissued:	1993-12-02		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-05-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	LR 5/69 WELL; 9000 SQFT IRRIG; 0.30 A TRACT		
Elev:	0	Welldepth:	15
Toppercas:	0	Botpercas:	0
Yield:	50		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	DEAN JACK & DIANN	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498989.1		
Disputmy:	4491723.1		
Latitude:	40.5762905945		
Longitude:	-105.011943837		
Site id:	CO6000000362339		

P107
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000220655

Fid:	220654	Objectid:	220655
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998D		
Receipt:	0025998D	Permit:	45130-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	93CW158
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	6
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1560
Coordewdir:	W	Coordns:	1070
Coordnsdir:	N		
Utmx:	498776.3		
Utmy:	4491955.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578381		
Longdecdeg:	-105.014459		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.33000001		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-29		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	BERRY ROBERT H	Ogcc api:	Not Reported
Complewew:	3		
Ogjobbatch:	0		
Disputmx:	498786.3		
Disputmy:	4491983.2		
Latitude:	40.5783812728		
Longitude:	-105.014458531		
Site id:	CO6000000220655		

P108
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000365015

Fid:	365014	Objectid:	365015
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997D		
Receipt:	0364997D	Permit:	13262-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	6
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1560
Coordewdir:	W	Coordns:	1070
Coordnsdir:	N		
Utmx:	498776.3		
Utmy:	4491955.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578381		
Longdecdeg:	-105.014459		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	BERRY ROBERT H	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498776		
Disputmy:	4491955		
Latitude:	40.5783812728		
Longitude:	-105.014458531		
Site id:	CO6000000365015		

M109
SSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000398379

Fid:	398378	Objectid:	398379
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0411194		
Receipt:	0411194	Permit:	202065-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	32
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2400
Coordewdir:	W	Coordns:	1950
Coordnsdir:	N		
Utmx:	499028.2		
Utmy:	4491683.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57593		
Longdecdeg:	-105.011482		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1997-04-07		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-06-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	12
Topperfcas:	0	Botperfcas:	0
Yield:	11		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	SLUYTER GEOFFREY & KATHERINE		
Completw:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499028.2		
Disputmy:	4491683.1		
Latitude:	40.5759302857		
Longitude:	-105.011481807		
Site id:	CO6000000398379		

P110
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000220657

Fid:	220656	Objectid:	220657
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998F		
Receipt:	0025998F	Permit:	45132-F
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	Not Reported	Caseno:	93CW158
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1550
Coordewdir:	W	Coordns:	1150
Coordnsdir:	N		
Utmx:	498772.9		
Utmy:	4491931.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578165		
Longdecdeg:	-105.014499		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	AUGMENTED	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.33000001		
Permitunit:	ACRES		
Annappropr:	1		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	PRUETT GLENDA M & FRED R	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498782.3		
Disputmy:	4491959.2		
Latitude:	40.5781650542		
Longitude:	-105.014498656		
Site id:	CO600000220657		

P111
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO600000365017

Fid:	365016	Objectid:	365017
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997F		
Receipt:	0364997F	Permit:	13264-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1550
Coordewdir:	W	Coordns:	1150
Coordnsdir:	N		
Utmx:	498772.9		
Utmy:	4491931.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578165		
Longdecdeg:	-105.014499		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	FOLAND GLEN A	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498772		
Disputmy:	4491931		
Latitude:	40.5781650542		
Longitude:	-105.014498656		
Site id:	CO6000000365017		

Q112
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000220664

Fid:	220663	Objectid:	220664
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998M		
Receipt:	0025998M	Permit:	45139-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	93CW158
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1560
Coordewdir:	W	Coordns:	1270
Coordnsdir:	N		
Utmx:	498775.4		
Utmy:	4491894.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577831		
Longdecdeg:	-105.014469		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.33000001		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1980-06-30		
Firstbenef:	Not Reported		
Pumpinstal:	1980-06-30		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	15
Topperfcas:	8	Botperfcas:	15
Yield:	10		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	RAPPENECKER DON	Ogcc api:	Not Reported
Completwew:	3		
Ogjobbatch:	0		
Disputmx:	498785.3		
Disputmy:	4491922.2		
Latitude:	40.5778308283		
Longitude:	-105.014469045		
Site id:	CO6000000220664		

Q113
WSW
1/4 - 1/2 Mile
Lower

CO WELLS CO6000000365024

Fid:	365023	Objectid:	365024
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997M		
Receipt:	0364997M	Permit:	13271-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NE
Q10:	Not Reported	Coordew:	1560
Coordewdir:	W	Coordns:	1270
Coordnsdir:	N		
Utmx:	498775.4		
Utmy:	4491894.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577831		
Longdecdeg:	-105.014469		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	RAPPENECKER DON	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498775		
Disputmy:	4491894		
Latitude:	40.5778308283		
Longitude:	-105.014469045		
Site id:	CO6000000365024		

P114
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220663

Fid:	220662	Objectid:	220663
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998L		
Receipt:	0025998L	Permit:	45138-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	2
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1280
Coordewdir:	W	Coordns:	780
Coordnsdir:	N		
Utmx:	498692.3		
Utmy:	4492045.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579192		
Longdecdeg:	-105.015451		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	1996-03-23		
Wellplugge:	Not Reported		
Comment :	SAME SIZE REPLACEMENT		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	FELLER RICHARD W & BARBARA C		
Completw:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498702.3		
Disputmy:	4492073.2		
Latitude:	40.579191946		
Longitude:	-105.015451212		
Site id:	CO6000000220663		

P115
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365023

Fid:	365022	Objectid:	365023
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997L		
Receipt:	0364997L	Permit:	13270-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	2
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1280
Coordewdir:	W	Coordns:	780
Coordnsdir:	N		
Utmx:	498692.3		
Utmy:	4492045.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579192		
Longdecdeg:	-105.015451		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	PETERSON ERNEST W	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498692		
Disputmy:	4492045		
Latitude:	40.579191946		
Longitude:	-105.015451212		
Site id:	CO6000000365023		

**R116
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000238939

Fid:	238938	Objectid:	238939
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0040906		
Receipt:	0040906	Permit:	3595-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	82
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1850
Coordewdir:	W	Coordns:	1730
Coordnsdir:	N		
Utmx:	498861.6		
Utmy:	4491753		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57656		
Longdecdeg:	-105.01345		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1973-02-13		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	MC GEE JOSEPH	Ogcc api:	Not Reported
Completwew:	0		
Ogjobbatch:	0		
Disputmx:	498861.6		
Disputmy:	4491753		
Latitude:	40.5765597949		
Longitude:	-105.01345031		
Site id:	CO6000000238939		

**S117
NNW
1/2 - 1 Mile
Higher**

CO WELLS CO6000000188467

Fid:	188466	Objectid:	188467
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=C350090		
Receipt:	C350090	Permit:	90-WCB
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499107		
Utmy:	4493079		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.588506		
Longdecdeg:	-105.010553		
Use1:	Not Reported	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1954-10-06		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	55
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	S & F AGENCY	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	499107		
Disputmy:	4493079		
Latitude:	40.588505888		
Longitude:	-105.010552761		
Site id:	CO6000000188467		

**S118
NNW
1/2 - 1 Mile
Higher**

CO WELLS CO6000000212171

Fid:	212170	Objectid:	212171
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0019452		
Receipt:	0019452	Permit:	19452-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499107		
Utmy:	4493079.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.588508		
Longdecdeg:	-105.010553		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1992-07-27		
Permexpire:	1992-10-25		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	LINCOLN NATIONAL INVEST % ATEC ASSO	
Completere:	2	Ogcc api: Not Reported
Ogjobbatch:	0	
Disputmx:	499117.3	
Disputmy:	4493107.2	
Latitude:	40.5885076903	
Longitude:	-105.010552762	
Site id:	CO6000000212171	

Q119
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220666

Fid:	220665	Objectid:	220666
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=00259980		
Receipt:	00259980	Permit:	45141-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	2
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1520
Coordewdir:	W	Coordns:	1440
Coordnsdir:	N		
Utmx:	498762.4		
Utmy:	4491842.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577367		
Longdecdeg:	-105.014623		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-27		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	SCHROEDER DANIEL I	Ogcc api:	Not Reported
Completwew:	3		
Ogjobbatch:	0		
Disputmx:	498772.3		
Disputmy:	4491870.2		
Latitude:	40.5773668501		
Longitude:	-105.014622543		
Site id:	CO6000000220666		

Q120
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365026

Fid:	365025	Objectid:	365026
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=03649970		
Receipt:	03649970	Permit:	13273-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	2
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1520
Coordewdir:	W	Coordns:	1440
Coordnsdir:	N		
Utmx:	498762.4		
Utmy:	4491842.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577367		
Longdecdeg:	-105.014623		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	SCHROEDER DANIEL I	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498762		
Disputmy:	4491842		
Latitude:	40.5773668501		
Longitude:	-105.014622543		
Site id:	CO6000000365026		

**T121
NE
1/2 - 1 Mile
Higher**

CO WELLS CO600000080909

Fid:	80908	Objectid:	80909
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038647		
Receipt:	9038647	Permit:	10265-R
Wdid:	0305312	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500100.5		
Utmy:	4492860.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.58654		
Longdecdeg:	-104.998812		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1921-11-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	64
Toppercas:	0	Botpercas:	0
Yield:	800		
Staticwl:	11		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	ASPEN HOLDINGS INC	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	500100		
Disputmy:	4492860		
Latitude:	40.5865397245		
Longitude:	-104.998812406		
Site id:	CO6000000080909		

**T122
NE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000080910

Fid:	80909	Objectid:	80910
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038648		
Receipt:	9038648	Permit:	10266-R
Wdid:	0305650	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500100.5		
Utmy:	4492860.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.58654		
Longdecdeg:	-104.998812		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1955-09-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	65
Toppercas:	0	Botpercas:	0
Yield:	1000		
Staticwl:	35		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	ASPEN HOLDINGS INC	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	500110.3		
Disputmy:	4492888.2		
Latitude:	40.5865397245		
Longitude:	-104.998812406		
Site id:	CO6000000080910		

**123
East
1/2 - 1 Mile
Higher**

CO WELLS CO6000000084222

Fid:	84221	Objectid:	84222
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9042183		
Receipt:	9042183	Permit:	117856-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	1290
Coordewdir:	W	Coordns:	400
Coordnsdir:	S		
Utmx:	500288.3		
Utmy:	4492378.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.582196		
Longdecdeg:	-104.996593		
Use1:	DOMESTIC	Use2:	STOCK
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1982-04-03		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	75
Toppercas:	0	Botpercas:	0
Yield:	30		
Staticwl:	24		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	MCPAHON C. B.	Ogcc api:	Not Reported
Completwew:	1		
Ogjobbatch:	0		
Disputmx:	500288.3		
Disputmy:	4492378.6		
Latitude:	40.5821964946		
Longitude:	-104.996593421		
Site id:	CO6000000084222		

U124
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220659

Fid:	220658	Objectid:	220659
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998H		
Receipt:	0025998H	Permit:	45134-F
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	12
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1070
Coordewdir:	W	Coordns:	600
Coordnsdir:	N		
Utmx:	498629.2		
Utmy:	4492101.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579696		
Longdecdeg:	-105.016197		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	HAMBLEN CLIFF	Ogcc api:	Not Reported
Complewew:	2		
Ogjobbatch:	0		
Disputmx:	498639.3		
Disputmy:	4492129.2		
Latitude:	40.5796963415		
Longitude:	-105.016196896		
Site id:	CO6000000220659		

**U125
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365019

Fid:	365018	Objectid:	365019
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997H		
Receipt:	0364997H	Permit:	13266-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	12
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1070
Coordewdir:	W	Coordns:	600
Coordnsdir:	N		
Utmx:	498629.2		
Utmy:	4492101.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579696		
Longdecdeg:	-105.016197		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	HAMBLEN CLIFF	Ogcc api:	Not Reported
Completere:	0		
Ogjobbatch:	0		
Disputmx:	498629		
Disputmy:	4492101		
Latitude:	40.5796963415		
Longitude:	-105.016196896		
Site id:	CO6000000365019		

**Q126
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220662

Fid:	220661	Objectid:	220662
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998K		
Receipt:	0025998K	Permit:	45137-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1555
Coordewdir:	W	Coordns:	1540
Coordnsdir:	N		
Utmx:	498772.6		
Utmy:	4491812.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577092		
Longdecdeg:	-105.014502		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-08-18		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	PENDLETON DICK A	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498782.3		
Disputmy:	4491840.2		
Latitude:	40.5770920937		
Longitude:	-105.014501969		
Site id:	CO6000000220662		

**Q127
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365022

Fid:	365021	Objectid:	365022
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997K		
Receipt:	0364997K	Permit:	13269-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1555
Coordewdir:	W	Coordns:	1540
Coordnsdir:	N		
Utmx:	498772.6		
Utmy:	4491812.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577092		
Longdecdeg:	-105.014502		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	PENDLETON DICK A	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498772		
Disputmy:	4491812		
Latitude:	40.5770920937		
Longitude:	-105.014501969		
Site id:	CO6000000365022		

U128
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000284931

Fid:	284930	Objectid:	284931
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0216607		
Receipt:	0216607	Permit:	120966--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	11
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1195
Coordewdir:	W	Coordns:	950
Coordnsdir:	N		
Utmx:	498665.7		
Utmy:	4491993.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578726		
Longdecdeg:	-105.015765		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1981-07-21		
Permexpire:	Not Reported		
Wellconstr:	1981-07-29		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	33
Toppercas:	13	Botpercas:	33
Yield:	25		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	PTACEK W	Ogcc api:	Not Reported
Completere:	1		
Ogjobbatch:	0		
Disputmx:	498665.7		
Disputmy:	4491993.5		
Latitude:	40.578726143		
Longitude:	-105.015765397		
Site id:	CO6000000284931		

**V129
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000083484

Fid:	83483	Objectid:	83484
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9041361		
Receipt:	9041361	Permit:	82275-
Wdid:	0307358	Currstatus:	Well Constructed
Wellname:	1	Caseno:	W4828
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	35
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2115
Coordewdir:	W	Coordns:	2079
Coordnsdir:	N		
Utmx:	498940.7		
Utmy:	4491645.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.575588		
Longdecdeg:	-105.012516		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1976-01-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-04-15		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	20		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	ERICKSON ALFE F	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498940.7		
Disputmy:	4491645.1		
Latitude:	40.57558784		
Longitude:	-105.012515554		
Site id:	CO600000083484		

**R130
SW
1/2 - 1 Mile
Lower**

CO WELLS CO600000081923

Fid:	81922	Objectid:	81923
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039774		
Receipt:	9039774	Permit:	30394-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	Not Reported	Lot:	5&6
Block:	2	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1967-04-18		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	16	Botpercas:	25
Yield:	20		
Staticwl:	10		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	HILLEN ROBERT H	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498896		
Disputmy:	4491673		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000081923		

**R131
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082322

Fid:	82321	Objectid:	82322
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040203		
Receipt:	9040203	Permit:	45375-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-04-19		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	31
Toppercas:	0	Botpercas:	0
Yield:	20		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BLEHM WILLIAM	Ogcc api:	Not Reported
Complewew:	3		
Ogjobbatch:	0		
Disputmx:	498906.3		
Disputmy:	4491701.2		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082322		

R132
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082354

Fid:	82353	Objectid:	82354
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040235		
Receipt:	9040235	Permit:	46810-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	11
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-06-25		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	LOY ROBERT	Ogcc api:	Not Reported
Complewew:	3		
Ogjobbatch:	0		
Disputmx:	498922		
Disputmy:	4491688		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082354		

**R133
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000080377

Fid:	80376	Objectid:	80377
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038077		
Receipt:	9038077	Permit:	1026-R
Wdid:	0306364	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1959-12-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1970-10-23		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	22
Toppercas:	0	Botpercas:	0
Yield:	350		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	SPITZER R G	Ogcc api:	Not Reported
Complewew:	3		
Ogjobbatch:	0		
Disputmx:	498922		
Disputmy:	4491658		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000080377		

R134
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000080380

Fid:	80379	Objectid:	80380
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038080		
Receipt:	9038080	Permit:	1028-R
Wdid:	0306896	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1959-12-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1978-10-23		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Toppercas:	0	Botpercas:	0
Yield:	300		
Staticwl:	6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	SPITZER R G	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498915.3		
Disputmy:	4491650		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000080380		

**R135
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081748

Fid:	81747	Objectid:	81748
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039594		
Receipt:	9039594	Permit:	26649-
Wdid:	0307270	Currstatus:	Well Constructed
Wellname:	SUBER WELL 1-26649	Caseno:	W4550
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	Not Reported	Lot:	13
Block:	1	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1966-03-23		
Permexpire:	Not Reported		
Wellconstr:	1966-04-09		
Firstbenef:	1966-04-07		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Toppercas:	12	Botpercas:	23
Yield:	75		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	KAMMERZELL JAMES E & JILLANN		
Completw:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498906.3		
Disputmy:	4491644.8		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000081748		

**R136
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082572

Fid:	82571	Objectid:	82572
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040453		
Receipt:	9040453	Permit:	54907-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	10
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-03-31		
Permexpire:	Not Reported		
Wellconstr:	1972-09-11		
Firstbenef:	1972-03-20		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Topperfcas:	12	Botperfcas:	30
Yield:	15		
Staticwl:	12		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	THYFAULT LARRY	Ogcc api:	Not Reported
Completwew:	3		
Ogjobbatch:	0		
Disputmx:	498896		
Disputmy:	4491643		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082572		

**R137
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082578

Fid:	82577	Objectid:	82578
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040459		
Receipt:	9040459	Permit:	55075-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	11
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-04-03		
Permexpire:	Not Reported		
Wellconstr:	1972-09-06		
Firstbenef:	1972-09-06		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	40
Topperfcas:	30	Botperfcas:	40
Yield:	13		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	WARRINGTON LLOYD & GEORGIA		
Completw:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498885.7		
Disputmy:	4491644.8		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082578		

R138
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082686

Fid:	82685	Objectid:	82686
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040567		
Receipt:	9040567	Permit:	59148-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	34
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.34		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	1972-04-28		
Permexpire:	Not Reported		
Wellconstr:	1972-10-16		
Firstbenef:	1973-01-25		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Topperfcas:	15	Botperfcas:	30
Yield:	10		
Staticwl:	12		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	PARK DOUGLAS G & KELLY S		
Completw:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498876.7		
Disputmy:	4491650		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082686		

**R139
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082355

Fid:	82354	Objectid:	82355
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040236		
Receipt:	9040236	Permit:	46811-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	13
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-06-23		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	32
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	10		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	FRIESE AUSTIN T JR	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498915.3		
Disputmy:	4491696		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082355		

**R140
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082357

Fid:	82356	Objectid:	82357
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040238		
Receipt:	9040238	Permit:	46852-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-06-27		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	29
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	DAVIS CLYDE R	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498925.5		
Disputmy:	4491667.8		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082357		

**R141
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082358

Fid:	82357	Objectid:	82358
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040239		
Receipt:	9040239	Permit:	46853-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	3
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498896.8		
Utmy:	4491673.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57584		
Longdecdeg:	-105.013034		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-06-26		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	HANSON TIMOTHY	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498925.5		
Disputmy:	4491678.2		
Latitude:	40.5758400315		
Longitude:	-105.013034279		
Site id:	CO6000000082358		

**R142
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220654

Fid:	220653	Objectid:	220654
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998C		
Receipt:	0025998C	Permit:	45129-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	93CW158
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	30
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1600
Coordewdir:	W	Coordns:	1635
Coordnsdir:	N		
Utmx:	498785.8		
Utmy:	4491783.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576831		
Longdecdeg:	-105.014346		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.25		
Permitunit:	ACRES		
Annappropr:	.75		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-07-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	BENNET THOMAS R JR	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498795.3		
Disputmy:	4491811.2		
Latitude:	40.5768308551		
Longitude:	-105.014345953		
Site id:	CO6000000220654		

**R143
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365014

Fid:	365013	Objectid:	365014
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997C		
Receipt:	0364997C	Permit:	13261-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	30
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1600
Coordewdir:	W	Coordns:	1635
Coordnsdir:	N		
Utmx:	498785.8		
Utmy:	4491783.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576831		
Longdecdeg:	-105.014346		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BENNETT JR THOMAS R	Ogcc api:	Not Reported
Completwew:	0		
Ogjobbatch:	0		
Disputmx:	498785		
Disputmy:	4491783		
Latitude:	40.5768308551		
Longitude:	-105.014345953		
Site id:	CO6000000365014		

W144
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365029

Fid:	365028	Objectid:	365029
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997R		
Receipt:	0364997R	Permit:	13276-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1270
Coordewdir:	W	Coordns:	1160
Coordnsdir:	N		
Utmx:	498687.5		
Utmy:	4491929.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578147		
Longdecdeg:	-105.015508		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	TRIPPEL ALICE	Ogcc api:	Not Reported
Completwew:	0		
Ogjobbatch:	0		
Disputmx:	498687		
Disputmy:	4491929		
Latitude:	40.5781469059		
Longitude:	-105.015507685		
Site id:	CO6000000365029		

**W145
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220669

Fid:	220668	Objectid:	220669
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998R		
Receipt:	0025998R	Permit:	45144-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1270
Coordewdir:	W	Coordns:	1160
Coordnsdir:	N		
Utmx:	498687.5		
Utmy:	4491929		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578147		
Longdecdeg:	-105.015508		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	MOLL WILLIAM T	Ogcc api:	Not Reported
Complewew:	3		
Ogjobbatch:	0		
Disputmx:	498697.3		
Disputmy:	4491957.2		
Latitude:	40.5781451036		
Longitude:	-105.015507685		
Site id:	CO6000000220669		

**146
NE
1/2 - 1 Mile
Higher**

FED USGS USGS40000222540

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403517105000001		
Monloc name:	SB00706810CBB1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	Not Reported	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.588038
Longitude:	-105.000531	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Alluvium and Terrace Deposits		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

**W147
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000418774

Fid:	418773	Objectid:	418774
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441036A		
Receipt:	0441036A	Permit:	14309-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	2

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498698		
Utmy:	4491880.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577709		
Longdecdeg:	-105.015384		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1999-03-11		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	ALSO SEE # 054388-F		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	ORTIVEZ LARRY JAMES		
Completwew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498727.5		
Disputmy:	4491885.2		
Latitude:	40.5777090898		
Longitude:	-105.015383524		
Site id:	CO6000000418774		

**W148
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000211890

Fid:	211889	Objectid:	211890
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0019268		
Receipt:	0019268	Permit:	19268-MH
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498698		
Utmy:	4491880.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577709		
Longdecdeg:	-105.015384		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1992-06-06		
Permexpire:	1992-09-14		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CHASE MANHATTAN BANK % CHEN NORTHER		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498724		
Disputmy:	4491895		
Latitude:	40.5777090898		
Longitude:	-105.015383524		
Site id:	CO6000000211890		

**W149
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000484777

Fid:	484776	Objectid:	484777
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0902638		
Receipt:	0902638	Permit:	32645-
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtndist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498698		
Utmy:	4491880.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577709		
Longdecdeg:	-105.015384		
Use1:	DOMESTIC	Use2:	IRRIGATION
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	LUSK ROGER J & SANDRA K		
Completewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498698		
Disputmy:	4491880		
Latitude:	40.5777090898		
Longitude:	-105.015383524		
Site id:	CO6000000484777		

**W150
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000484898

Fid:	484897	Objectid:	484898
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0902771		
Receipt:	0902771	Permit:	33658-
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtndist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	18

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	Not Reported	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498698		
Utmy:	4491880.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577709		
Longdecdeg:	-105.015384		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	1968-05-03		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	MOSS A W		
Completewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498717.3		
Disputmy:	4491903		
Latitude:	40.5777090898		
Longitude:	-105.015383524		
Site id:	CO6000000484898		

**W151
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000484888

Fid:	484887	Objectid:	484888
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0902761		
Receipt:	0902761	Permit:	33612-
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtndist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	19

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498698		
Utmy:	4491880.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.577709		
Longdecdeg:	-105.015384		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1968-04-24		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	DAVIS RITA R & CLYDE R		
Completewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498708.3		
Disputmy:	4491908.2		
Latitude:	40.5777090898		
Longitude:	-105.015383524		
Site id:	CO6000000484888		

**152
ESE
1/2 - 1 Mile
Lower**

FED USGS USGS40000222487

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403444104594701		
Monloc name:	SB00706815ABB1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5788713
Longitude:	-104.9969198	Sourcemap scale:	12500

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4934.60
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	63.4
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
-----			-----		
1959-10-21	20.30		1959-10-21	20.30	

**R153
SW
1/2 - 1 Mile
Lower**

CO WELLS CO600000359617

Fid:	359616	Objectid:	359617
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0356379		
Receipt:	0356379	Permit:	172990-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	41
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1680
Coordewdir:	W	Coordns:	1810
Coordnsdir:	N		
Utmx:	498809.4		
Utmy:	4491729.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576344		
Longdecdeg:	-105.014067		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	1		
Permissued:	1993-09-21		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-06-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	1ST USE 6/1/65; 0.29 AC LOT; 1SF, 15,600 SQFT IRR, NO ANIMALS		
Elev:	0	Welldepth:	8
Toppercas:	0	Botpercas:	0
Yield:	12		
Staticwl:	0		
Applicantr:	PFANDER HORACE D & BETTY A		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498809.4		
Disputmy:	4491729.1		
Latitude:	40.5763444091		
Longitude:	-105.014067013		
Site id:	CO6000000359617		

**R154
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220656

Fid:	220655	Objectid:	220656
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998E		
Receipt:	0025998E	Permit:	45131-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	31
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1570
Coordewdir:	W	Coordns:	1710
Coordnsdir:	N		
Utmx:	498776.3		
Utmy:	4491760.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576624		
Longdecdeg:	-105.014458		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	DANIELSON SCOTT		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498786.3		
Disputmy:	4491788.2		
Latitude:	40.5766236369		
Longitude:	-105.014458152		
Site id:	CO6000000220656		

**R155
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365016

Fid:	365015	Objectid:	365016
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997E		
Receipt:	0364997E	Permit:	13263-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	31
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1570
Coordewdir:	W	Coordns:	1710
Coordnsdir:	N		
Utmx:	498776.3		
Utmy:	4491760.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576624		
Longdecdeg:	-105.014458		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	DANIELSON SCOTT		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498776		
Disputmy:	4491760		
Latitude:	40.5766236369		
Longitude:	-105.014458152		
Site id:	CO6000000365016		

**X156
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000393442

Fid:	393441	Objectid:	393442
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0403812		
Receipt:	0403812	Permit:	47993-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	RW1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	600
Coordewdir:	E	Coordns:	2300
Coordnsdir:	N		
Utmx:	499717.3		
Utmy:	4493169.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589319		
Longdecdeg:	-105.003341		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1997-03-19		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1998-03-19		
Wellconstr:	1996-07-24		
Firstbenef:	1999-03-17		
Pumpinstal:	1996-08-13		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	10	Botpercas:	30
Yield:	40		
Staticwl:	6		
Applicantr:	POUDRE VALLEY COOPERATIVE ASSOC		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499717.3		
Disputmy:	4493169.2		
Latitude:	40.5893189237		
Longitude:	-105.003340763		
Site id:	CO6000000393442		

**U157
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220661

Fid:	220660	Objectid:	220661
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998J		
Receipt:	0025998J	Permit:	45136-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	11
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	980
Coordewdir:	W	Coordns:	680
Coordnsdir:	N		
Utmx:	498601.4	Use2:	Not Reported
Utmy:	4492077.2	Aquifer1:	ALL UNNAMED AQUIFERS
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57948		
Longdecdeg:	-105.016525		
Use1:	DOMESTIC		
Specialuse:	Not Reported		
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	NEWTON DELBERT B		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498611.3		
Disputmy:	4492105.2		
Latitude:	40.5794800815		
Longitude:	-105.016525317		
Site id:	CO6000000220661		

**U158
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365021

Fid:	365020	Objectid:	365021
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997J		
Receipt:	0364997J	Permit:	13268-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	11
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	980
Coordewdir:	W	Coordns:	680
Coordnsdir:	N		
Utmx:	498601.4		
Utmy:	4492077.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57948		
Longdecdeg:	-105.016525		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	NEWTON DELBERT B		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498601		
Disputmy:	4492077		
Latitude:	40.5794800815		
Longitude:	-105.016525317		
Site id:	CO6000000365021		

**X159
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000407949

Fid:	407948	Objectid:	407949
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0425633		
Receipt:	0425633	Permit:	47993-F-R
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	590
Coordewdir:	E	Coordns:	2300
Coordnsdir:	N		
Utmx:	499720.3		
Utmy:	4493169.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589319		
Longdecdeg:	-105.003305		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-02-20		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1999-02-20		
Wellconstr:	1998-02-22		
Firstbenef:	1998-02-22		
Pumpinstal:	1998-02-22		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	10	Botpercas:	25
Yield:	50		
Staticwl:	7		
Applicantr:	POUDRE VALLEY COOPERATIVE ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499720.3		
Disputmy:	4493169.2		
Latitude:	40.5893189246		
Longitude:	-105.003305311		
Site id:	CO6000000407949		

**W160
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220658

Fid:	220657	Objectid:	220658
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998G		
Receipt:	0025998G	Permit:	45133-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	8
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1280
Coordewdir:	W	Coordns:	1455
Coordnsdir:	N		
Utmx:	498689.2		
Utmy:	4491839.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577335		
Longdecdeg:	-105.015487		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-27		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	ROACH JANICE A & STANLEY D		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498699.3		
Disputmy:	4491867.2		
Latitude:	40.5773352066		
Longitude:	-105.015487413		
Site id:	CO6000000220658		

**W161
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365018

Fid:	365017	Objectid:	365018
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997G		
Receipt:	0364997G	Permit:	13265-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	8
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1280
Coordewdir:	W	Coordns:	1455
Coordnsdir:	N		
Utmx:	498689.2		
Utmy:	4491839.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577335		
Longdecdeg:	-105.015487		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	GEIST ROBERT & LAURIE		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498689		
Disputmy:	4491839		
Latitude:	40.5773352066		
Longitude:	-105.015487413		
Site id:	CO6000000365018		

R162
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000401355

Fid:	401354	Objectid:	401355
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0415556		
Receipt:	0415556	Permit:	45156-F-R
Wdid:	0305096	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	93CW0158
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1660
Coordewdir:	W	Coordns:	1930
Coordnsdir:	N		
Utmx:	498802.7		
Utmy:	4491692.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576016		
Longdecdeg:	-105.014146		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1997-06-06		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1998-06-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SHERRILL RODNEY F		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498802.7		
Disputmy:	4491692.6		
Latitude:	40.5760155747		
Longitude:	-105.014146105		
Site id:	CO6000000401355		

**V163
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000461516

Fid:	461515	Objectid:	461516
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0507360		
Receipt:	0507360	Permit:	249647-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	2100
Coordewdir:	W	Coordns:	2300
Coordnsdir:	N		
Utmx:	498935.1		
Utmy:	4491577.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57498		
Longdecdeg:	-105.012582		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.25		
Permitunit:	ACRES		
Annappropr:	.5		
Permissued:	2003-04-22		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-12-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Toppercas:	0	Botpercas:	0
Yield:	30		
Staticwl:	0		
Applicantn:	STREIT C J		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498935.1		
Disputmy:	4491577.6		
Latitude:	40.574979731		
Longitude:	-105.012581604		
Site id:	CO6000000461516		

**R164
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000215566

Fid:	215565	Objectid:	215566
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0022226D		
Receipt:	0022226D	Permit:	13288-AD
Wdid:	0305096	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	40
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1660
Coordewdir:	W	Coordns:	1950
Coordnsdir:	N		
Utmx:	498802.6		
Utmy:	4491686.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.575962		
Longdecdeg:	-105.014147		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SHERRILL RODNEY F		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498802		
Disputmy:	4491686		
Latitude:	40.5759615209		
Longitude:	-105.014147275		
Site id:	CO6000000215566		

**R165
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220681

Fid:	220680	Objectid:	220681
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025999D		
Receipt:	0025999D	Permit:	45156-F
Wdid:	0305096	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	40
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1660
Coordewdir:	W	Coordns:	1950
Coordnsdir:	N		
Utmx:	498802.6		
Utmy:	4491686.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.575962		
Longdecdeg:	-105.014147		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.25		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	1995-06-27		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1996-06-23		
Pumpinstal:	1996-06-23		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	7		
Staticwl:	0		
Applicantr:	ROBERTSON STEVE & MONICA		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498812.3		
Disputmy:	4491714.2		
Latitude:	40.5759615209		
Longitude:	-105.014147275		
Site id:	CO6000000220681		

**R166
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000358627

Fid:	358626	Objectid:	358627
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0354955		
Receipt:	0354955	Permit:	174958-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	10
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	1480
Coordewdir:	W	Coordns:	1800
Coordnsdir:	N		
Utmx:	498748.5		
Utmy:	4491733.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57638		
Longdecdeg:	-105.014787		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	1		
Permissued:	1993-12-02		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1972-02-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	LR 1972 WELL;0.30 ACRES @3327 E LOCUST,FT COLLINS;11,488 SQFT IRRIG		
Elev:	0	Welldepth:	16
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	0		
Applicantr:	SHIPMAN PAUL L & LOIS J		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498748.5		
Disputmy:	4491733.1		
Latitude:	40.576380355		
Longitude:	-105.014786558		
Site id:	CO6000000358627		

**W167
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220653

Fid:	220652	Objectid:	220653
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998B		
Receipt:	0025998B	Permit:	45128-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	9
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1260
Coordewdir:	W	Coordns:	1540
Coordnsdir:	N		
Utmx:	498682.7		
Utmy:	4491813.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577105		
Longdecdeg:	-105.015564		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-06-27		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	BATES HAROLD M		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498692.3		
Disputmy:	4491841.2		
Latitude:	40.5771054693		
Longitude:	-105.015564158		
Site id:	CO6000000220653		

**W168
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365013

Fid:	365012	Objectid:	365013
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997B		
Receipt:	0364997B	Permit:	13260-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	9
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1260
Coordewdir:	W	Coordns:	1540
Coordnsdir:	N		
Utmx:	498682.7		
Utmy:	4491813.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577105		
Longdecdeg:	-105.015564		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	BATES HAROLD M		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498682		
Disputmy:	4491813		
Latitude:	40.5771054693		
Longitude:	-105.015564158		
Site id:	CO6000000365013		

**W169
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000324482

Fid:	324481	Objectid:	324482
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0290791B		
Receipt:	0290791B	Permit:	152002--A
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	REPLACE LR	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	26
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	2.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1100
Coordewdir:	W	Coordns:	1300
Coordnsdir:	N		
Utmx:	498635		
Utmy:	4491887.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577773		
Longdecdeg:	-105.016128		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	10000		
Permitunit:	SQ. FT.		
Annappropr:	0		
Permissued:	1988-08-09		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1990-08-09		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	FULLER ORESS & BETTY		
Complewee:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498635		
Disputmy:	4491887		
Latitude:	40.5777729516		
Longitude:	-105.016127903		
Site id:	CO6000000324482		

**W170
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000324481

Fid:	324480	Objectid:	324481
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0290791A		
Receipt:	0290791A	Permit:	152002-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	5	Lot:	26
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	1100
Coordewdir:	W	Coordns:	1300
Coordnsdir:	N		
Utmx:	498635		
Utmy:	4491887.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577771		
Longdecdeg:	-105.016128		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	10000		
Permitunit:	SQ. FT.		
Annappropr:	1.5		
Permissued:	1998-08-09		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1970-01-10		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	FULLER ORESS		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498645.3		
Disputmy:	4491915.2		
Latitude:	40.5777711493		
Longitude:	-105.016127902		
Site id:	CO6000000324481		

**W171
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000220672

Fid:	220671	Objectid:	220672
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998U		
Receipt:	0025998U	Permit:	45147-F
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1050
Coordnsdir:	N		
Utmx:	498596.6		
Utmy:	4491964.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578462		
Longdecdeg:	-105.016582		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	CLARY J K		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498606.3		
Disputmy:	4491992.2		
Latitude:	40.5784620679		
Longitude:	-105.016581781		
Site id:	CO6000000220672		

**W172
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365032

Fid:	365031	Objectid:	365032
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997U		
Receipt:	0364997U	Permit:	13279-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1050
Coordnsdir:	N		
Utmx:	498596.6		
Utmy:	4491964.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578462		
Longdecdeg:	-105.016582		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	CLARY J K	Ogcc api:	Not Reported
Complewe:	0		
Ogjobbatch:	0		
Disputmx:	498596		
Disputmy:	4491964		
Latitude:	40.5784620679		
Longitude:	-105.016581781		
Site id:	CO6000000365032		

U173
WSW
1/2 - 1 Mile
Lower

FED USGS USGS40000222493

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403447105010001		
Monloc name:	SB00706816ABB1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5797047
Longitude:	-105.0171983	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4296.60
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	44.1
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-10-21	9.00	

W174
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000418776

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	418775	Objectid:	418776
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441036C		
Receipt:	0441036C	Permit:	54388-F
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	2
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1100
Coordnsdir:	N		
Utmx:	498596.3		
Utmy:	4491949.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578327		
Longdecdeg:	-105.016585		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2000-08-24		
Permexpire:	2001-08-24		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	ORTIVEZ LARRY JAMES		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498596.3		
Disputmy:	4491949.2		
Latitude:	40.5783269339		
Longitude:	-105.016585292		
Site id:	CO6000000418776		

Y175
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220668

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220667	Objectid:	220668
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998Q		
Receipt:	0025998Q	Permit:	45143-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	93CW158
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	7
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1265
Coordewdir:	W	Coordns:	1620
Coordnsdir:	N		
Utmx:	498683.8		
Utmy:	4491789.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576885		
Longdecdeg:	-105.015551		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	AUGMENTED	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.5		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	1995-08-15		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HOLT STEVE W & HARMONY J		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498693.3		
Disputmy:	4491817.2		
Latitude:	40.5768847532		
Longitude:	-105.0155111		
Site id:	CO6000000220668		

Y176
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365028

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	365027	Objectid:	365028
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997Q		
Receipt:	0364997Q	Permit:	13275-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	7
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1265
Coordewdir:	W	Coordns:	1620
Coordnsdir:	N		
Utmx:	498683.8		
Utmy:	4491789.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576885		
Longdecdeg:	-105.015551		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SIPES DOUGLAS		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498683		
Disputmy:	4491789		
Latitude:	40.5768847532		
Longitude:	-105.01555111		
Site id:	CO6000000365028		

W177
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000418775

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	418774	Objectid:	418775
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441036B		
Receipt:	0441036B	Permit:	14310-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	17
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1150
Coordnsdir:	N		
Utmx:	498596.1		
Utmy:	4491933.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578187		
Longdecdeg:	-105.016588		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	2000-08-24		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	ORTIVEZ LOUIE M		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498596		
Disputmy:	4491933		
Latitude:	40.5781872953		
Longitude:	-105.016587621		
Site id:	CO6000000418775		

W178
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000418777

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	418776	Objectid:	418777
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441036D		
Receipt:	0441036D	Permit:	54387-F
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	17
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1150
Coordnsdir:	N		
Utmx:	498596.1		
Utmy:	4491933.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578187		
Longdecdeg:	-105.016588		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2000-08-24		
Permexpire:	2001-08-24		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	ORTIVEZ LOUIE M		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498606.3		
Disputmy:	4491961.2		
Latitude:	40.5781872953		
Longitude:	-105.016587621		
Site id:	CO6000000418777		

W179
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000233738

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	233737	Objectid:	233738
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0037051	Permit:	3342-AD
Receipt:	0037051	Currstatus:	Application Denied
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtldist:	Not Reported
County:	LARIMER	Lot:	Not Reported
Desigbasin:	Not Reported	Ctyparclid:	Not Reported
Subdivname:	Not Reported	Township:	7.0 N
Filing:	Not Reported	Section :	16
Block:	Not Reported	Q40:	NW
Parcelsize:	0	Coordew:	1020
Pm:	S	Coordns:	1300
Range:	68.0 W	Use2:	Not Reported
Q160:	NW	Aquifer1:	ALL UNNAMED AQUIFERS
Q10:	Not Reported		
Coordewdir:	W		
Coordnsdir:	N		
Utmx:	498610.7		
Utmy:	4491888		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577776		
Longdecdeg:	-105.016415		
Use1:	OTHER		
Specialuse:	Not Reported		
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-10-27		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	STRAAYER JOHN A.	Ogcc api:	Not Reported
Complewe:	0		
Ogjobbatch:	0		
Disputmx:	498610.7		
Disputmy:	4491888		
Latitude:	40.5777756136		
Longitude:	-105.016415016		
Site id:	CO6000000233738		

W180
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000215563

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	215562	Objectid:	215563
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0022226A		
Receipt:	0022226A	Permit:	13285-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	3
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1250
Coordnsdir:	N		
Utmx:	498595.6		
Utmy:	4491903.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577913		
Longdecdeg:	-105.016593		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	NAUTA DOROTHY		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498595		
Disputmy:	4491903		
Latitude:	40.5779125236		
Longitude:	-105.016593461		
Site id:	CO6000000215563		

W181
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220678

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220677	Objectid:	220678
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025999A		
Receipt:	0025999A	Permit:	45153-F
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	3
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1250
Coordnsdir:	N		
Utmx:	498595.6		
Utmy:	4491903.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577913		
Longdecdeg:	-105.016593		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	NAUTA DOROTHY		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498605.3		
Disputmy:	4491931.2		
Latitude:	40.5779125236		
Longitude:	-105.016593461		
Site id:	CO6000000220678		

**Z182
West
1/2 - 1 Mile
Higher**

CO WELLS CO6000000247155

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	247154	Objectid:	247155
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0046953		
Receipt:	0046953	Permit:	46953-DW
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498505.5		
Utmy:	4492487.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.58318		
Longdecdeg:	-105.01766		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	DEWATERING	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-03-28		
Permexpire:	2007-06-25		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Twenty (20) holes to be constructed.		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	JEANJOYLYN LLC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498505		
Disputmy:	4492487		
Latitude:	40.5831762637		
Longitude:	-105.017659407		
Site id:	CO6000000247155		

**Z183
West
1/2 - 1 Mile
Higher**

CO WELLS CO6000000247249

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	247248	Objectid:	247249
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0047033		
Receipt:	0047033	Permit:	47033-DW
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498505.5		
Utmy:	4492487.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.58318		
Longdecdeg:	-105.01766		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	DEWATERING	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-05-11		
Permexpire:	2007-08-09		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Twenty five (25) wells to be constructed.		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SPRINGER FISHER INC		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498515.3		
Disputmy:	4492515.2		
Latitude:	40.5831762637		
Longitude:	-105.017659407		
Site id:	CO6000000247249		

Y184
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220674

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220673	Objectid:	220674
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998W		
Receipt:	0025998W	Permit:	45149-F
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	8
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.5		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1270
Coordewdir:	W	Coordns:	1755
Coordnsdir:	N		
Utmx:	498684.7		
Utmy:	4491748.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576515		
Longdecdeg:	-105.01554		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent. Per phone conversation on 03/16/10 with owner, well not constructed. BDH 03/16/2010		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	FLORES FRANCISCO T		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498694.3		
Disputmy:	4491776.2		
Latitude:	40.5765153891		
Longitude:	-105.015540391		
Site id:	CO6000000220674		

Y185
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365034

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	365033	Objectid:	365034
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997W		
Receipt:	0364997W	Permit:	13281-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	6	Lot:	8
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1270
Coordewdir:	W	Coordns:	1755
Coordnsdir:	N		
Utmx:	498684.7		
Utmy:	4491748.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576515		
Longdecdeg:	-105.01554		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	FLORES FRANCISCO T		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498684		
Disputmy:	4491748		
Latitude:	40.5765153891		
Longitude:	-105.015540391		
Site id:	CO6000000365034		

**X186
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000381335

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381334	Objectid:	381335
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315K		
Receipt:	0387315K	Permit:	189742-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-11	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtid:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499748.3		
Utmy:	4493244.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589999		
Longdecdeg:	-105.002974		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499748		
Disputmy:	4493244		
Latitude:	40.5899991035		
Longitude:	-105.002974456		
Site id:	CO6000000381335		

**X187
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000407369

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407368	Objectid:	407369
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620K		
Receipt:	0424620K	Permit:	207892-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-11	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499748.3		
Utmy:	4493244.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589999		
Longdecdeg:	-105.002974		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499758.3		
Disputmy:	4493272.2		
Latitude:	40.5899991035		
Longitude:	-105.002974456		
Site id:	CO6000000407369		

W188
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000215567

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	215566	Objectid:	215567
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0022226E		
Receipt:	0022226E	Permit:	13289-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1350
Coordnsdir:	N		
Utmx:	498595.2		
Utmy:	4491872.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577638		
Longdecdeg:	-105.016598		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	WARREN GREG		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498595		
Disputmy:	4491872		
Latitude:	40.5776377511		
Longitude:	-105.016598119		
Site id:	CO6000000215567		

W189
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220682

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220681	Objectid:	220682
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025999E		
Receipt:	0025999E	Permit:	45157-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1350
Coordnsdir:	N		
Utmx:	498595.2		
Utmy:	4491872.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577638		
Longdecdeg:	-105.016598		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1996-01-10		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Topperfcas:	20	Botperfcas:	30
Yield:	25		
Staticwl:	7		
Applicantn:	WARREN GREG		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498605.3		
Disputmy:	4491900.2		
Latitude:	40.5776377511		
Longitude:	-105.016598119		
Site id:	CO6000000220682		

**X190
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000236278

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	236277	Objectid:	236278
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0039061		
Receipt:	0039061	Permit:	39061-MH
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499702		
Utmy:	4493269.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.59022		
Longdecdeg:	-105.003522		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2000-11-28		
Permexpire:	2001-02-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	5 WELLS. Five AB reports received.		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOPERATIVE ASSOC		
Completwew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499702		
Disputmy:	4493269.2		
Latitude:	40.5902198061		
Longitude:	-105.003521616		
Site id:	CO6000000236278		

AA191
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000381325

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381324	Objectid:	381325
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315A		
Receipt:	0387315A	Permit:	189732-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtid:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	2100
Coordnsdir:	N		
Utmx:	499824.3		
Utmy:	4493227.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589846		
Longdecdeg:	-105.002076		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499824		
Disputmy:	4493227		
Latitude:	40.5898459723		
Longitude:	-105.002076324		
Site id:	CO6000000381325		

AA192
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000407359

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407358	Objectid:	407359
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620A		
Receipt:	0424620A	Permit:	207882-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-1	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	2100
Coordnsdir:	N		
Utmx:	499824.3		
Utmy:	4493227.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589846		
Longdecdeg:	-105.002076		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499834.3		
Disputmy:	4493255.2		
Latitude:	40.5898459723		
Longitude:	-105.002076324		
Site id:	CO6000000407359		

**AB193
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082136

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82135	Objectid:	82136
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040005		
Receipt:	9040005	Permit:	38809-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	29
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-11-12		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	22
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	5		
Applicantn:	HAMBLÉN SAM		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498511.3		
Disputmy:	4492112.2		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000082136		

AB194
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082137

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82136	Objectid:	82137
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040006		
Receipt:	9040006	Permit:	38810-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	25
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-11-10		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	28
Toppercas:	0	Botpercas:	0
Yield:	12		
Staticwl:	5		
Applicantn:	ERWIN J E		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498501		
Disputmy:	4492084		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000082137		

AB195
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000080673

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	80672	Objectid:	80673
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038395		
Receipt:	9038395	Permit:	6446-R
Wdid:	0306710	Currstatus:	Well Constructed
Wellname:	#4	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	7
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1958-12-11		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1955-03-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	0	Botpercas:	0
Yield:	700		
Staticwl:	5		
Applicantn:	SWEET ROBERT F & ELAINE M		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498527		
Disputmy:	4492099		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000080673		

AB196
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081487

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81486	Objectid:	81487
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039312		
Receipt:	9039312	Permit:	20138-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1964-06-05		
Permexpire:	Not Reported		
Wellconstr:	1964-06-09		
Firstbenef:	1964-06-09		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	31
Toppercas:	13	Botpercas:	31
Yield:	20		
Staticwl:	5		
Applicantn:	BAKER VERL		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498530.5		
Disputmy:	4492089.2		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000081487		

AB197
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082142

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82141	Objectid:	82142
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040011		
Receipt:	9040011	Permit:	38866-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	2	Lot:	39
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1969-08-01		
Permexpire:	Not Reported		
Wellconstr:	1969-11-12		
Firstbenef:	1969-11-12		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	22
Toppercas:	12	Botpercas:	22
Yield:	12		
Staticwl:	7		
Applicantn:	FORSTER ZACHARY R		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498527		
Disputmy:	4492069		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000082142		

AB198
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082567

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82566	Objectid:	82567
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040448		
Receipt:	9040448	Permit:	54793-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	23
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-03-31		
Permexpire:	Not Reported		
Wellconstr:	1972-06-08		
Firstbenef:	1972-06-15		
Pumpinstal:	1972-06-10		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	21	Botpercas:	36
Yield:	15		
Staticwl:	6		
Applicantn:	FRISCH MATTHEW M & KATIE R		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498511.3		
Disputmy:	4492055.8		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000082567		

AB199
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000471707

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	471706	Objectid:	471707
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0902557		
Receipt:	0902557	Permit:	31617-
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1967-07-25		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	FRAZIER L L		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498530.5		
Disputmy:	4492078.8		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000471707		

**AB200
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082175

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82174	Objectid:	82175
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040045		
Receipt:	9040045	Permit:	39772-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	3	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-11-20		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	ALSO LOT 2		
Elev:	0	Welldepth:	21
Toppercas:	0	Botpercas:	0
Yield:	20		
Staticwl:	7		
Applicantn:	BAKER VERL		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498520.3		
Disputmy:	4492107		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000082175		

AB201
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082253

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82252	Objectid:	82253
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040128		
Receipt:	9040128	Permit:	42503-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	3	Lot:	6
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498501.7		
Utmy:	4492084.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.579547		
Longdecdeg:	-105.017703		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1970-08-11		
Permexpire:	Not Reported		
Wellconstr:	1970-08-20		
Firstbenef:	1970-08-20		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	ALSO LOT 7		
Elev:	0	Welldepth:	24
Topperfcas:	14	Botperfcas:	24
Yield:	18		
Staticwl:	6		
Applicantn:	BAKER VERL		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498520.3		
Disputmy:	4492061		
Latitude:	40.579547474		
Longitude:	-105.017703352		
Site id:	CO6000000082253		

Y202
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220671

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220670	Objectid:	220671
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998T		
Receipt:	0025998T	Permit:	45146-F
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.34999999		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1440
Coordnsdir:	N		
Utmx:	498594.8		
Utmy:	4491845.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577394		
Longdecdeg:	-105.016603		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	3-C Letter Sent		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	BROSE RICHARD & FRANCES		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498604.3		
Disputmy:	4491873.2		
Latitude:	40.5773936094		
Longitude:	-105.016602785		
Site id:	CO6000000220671		

Y203
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365031

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	365030	Objectid:	365031
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997T		
Receipt:	0364997T	Permit:	13278-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1440
Coordnsdir:	N		
Utmx:	498594.8		
Utmy:	4491845.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577394		
Longdecdeg:	-105.016603		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	BROSE RICHARD & FRANCES		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498594		
Disputmy:	4491845		
Latitude:	40.5773936094		
Longitude:	-105.016602785		
Site id:	CO6000000365031		

AA204
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000381326

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381325	Objectid:	381326
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315B		
Receipt:	0387315B	Permit:	189733-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-2	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	300
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499809.2		
Utmy:	4493243.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589986		
Longdecdeg:	-105.002255		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499809		
Disputmy:	4493243		
Latitude:	40.5899856065		
Longitude:	-105.002254772		
Site id:	CO6000000381326		

AA205
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000407360

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407359	Objectid:	407360
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620B		
Receipt:	0424620B	Permit:	207883-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-2	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	300
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499809.2		
Utmy:	4493243.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589986		
Longdecdeg:	-105.002255		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499819.3		
Disputmy:	4493271.2		
Latitude:	40.5899856065		
Longitude:	-105.002254772		
Site id:	CO6000000407360		

AC206
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000262356

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	262355	Objectid:	262356
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0084648		
Receipt:	0084648	Permit:	92986--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	1		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	2487
Coordewdir:	W	Coordns:	2520
Coordnsdir:	S		
Utmx:	499050.7		
Utmy:	4491425.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57361		
Longdecdeg:	-105.01122		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1977-08-30		
Permexpire:	1979-08-30		
Wellconstr:	1977-12-13		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	15	Botpercas:	30
Yield:	15		
Staticwl:	9		
Applicantn:	MAIER KATHLEEN & SCOTT L &		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499050.7		
Disputmy:	4491425.5		
Latitude:	40.5736096175		
Longitude:	-105.011215582		
Site id:	CO6000000262356		

**X207
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000381333

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381332	Objectid:	381333
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=03873151		
Receipt:	03873151	Permit:	189740-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-9	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	550
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499733.2		
Utmy:	4493275.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590274		
Longdecdeg:	-105.003153		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499733		
Disputmy:	4493275		
Latitude:	40.5902738697		
Longitude:	-105.003152913		
Site id:	CO6000000381333		

**X208
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000407367

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407366	Objectid:	407367
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=04246201		
Receipt:	04246201	Permit:	207890-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-9	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	550
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499733.2		
Utmy:	4493275.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590274		
Longdecdeg:	-105.003153		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499743.3		
Disputmy:	4493303.2		
Latitude:	40.5902738697		
Longitude:	-105.003152913		
Site id:	CO6000000407367		

AA209
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000381329

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381328	Objectid:	381329
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315E		
Receipt:	0387315E	Permit:	189736-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-5	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499824.4		
Utmy:	4493242.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589981		
Longdecdeg:	-105.002075		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499824		
Disputmy:	4493242		
Latitude:	40.5899811053		
Longitude:	-105.002075147		
Site id:	CO6000000381329		

AA210
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000407363

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407362	Objectid:	407363
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620E		
Receipt:	0424620E	Permit:	207886-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-5	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499824.4		
Utmy:	4493242.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589981		
Longdecdeg:	-105.002075		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499834.3		
Disputmy:	4493270.2		
Latitude:	40.5899811053		
Longitude:	-105.002075147		
Site id:	CO6000000407363		

**X211
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000381336

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381335	Objectid:	381336
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315L		
Receipt:	0387315L	Permit:	189743-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-12	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499748.5		
Utmy:	4493275.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590274		
Longdecdeg:	-105.002972		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Completwewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499758.3		
Disputmy:	4493303.2		
Latitude:	40.5902738751		
Longitude:	-105.002972104		
Site id:	CO6000000381336		

**X212
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000381332

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381331	Objectid:	381332
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315H		
Receipt:	0387315H	Permit:	189739-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-8	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499748.5		
Utmy:	4493275.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590274		
Longdecdeg:	-105.002972		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499748		
Disputmy:	4493275		
Latitude:	40.5902738751		
Longitude:	-105.002972104		
Site id:	CO6000000381332		

**X213
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000407370

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407369	Objectid:	407370
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620L		
Receipt:	0424620L	Permit:	207893-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-12	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499748.5		
Utmy:	4493275.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590274		
Longdecdeg:	-105.002972		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499774		
Disputmy:	4493290		
Latitude:	40.5902738751		
Longitude:	-105.002972104		
Site id:	CO6000000407370		

**X214
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000407366

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407365	Objectid:	407366
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620H		
Receipt:	0424620H	Permit:	207889-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-8	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499748.5		
Utmy:	4493275.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590274		
Longdecdeg:	-105.002972		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499767.3		
Disputmy:	4493298		
Latitude:	40.5902738751		
Longitude:	-105.002972104		
Site id:	CO6000000407366		

AA215
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000381328

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381327	Objectid:	381328
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315D		
Receipt:	0387315D	Permit:	189735-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-4	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	200
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499839.7		
Utmy:	4493242.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589977		
Longdecdeg:	-105.001894		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499839		
Disputmy:	4493242		
Latitude:	40.5899766042		
Longitude:	-105.001894339		
Site id:	CO6000000381328		

AA216
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000407362

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407361	Objectid:	407362
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620D		
Receipt:	0424620D	Permit:	207885-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-4	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	200
Coordewdir:	E	Coordns:	2050
Coordnsdir:	N		
Utmx:	499839.7		
Utmy:	4493242.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.589977		
Longdecdeg:	-105.001894		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499849.3		
Disputmy:	4493270.2		
Latitude:	40.5899766042		
Longitude:	-105.001894339		
Site id:	CO6000000407362		

**X217
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000381334

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381333	Objectid:	381334
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315J		
Receipt:	0387315J	Permit:	189741-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-10	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtid:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	450
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499763.7		
Utmy:	4493274.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590269		
Longdecdeg:	-105.002792		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499763		
Disputmy:	4493274		
Latitude:	40.5902693749		
Longitude:	-105.002792478		
Site id:	CO6000000381334		

**X218
NNE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000407368

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407367	Objectid:	407368
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620J		
Receipt:	0424620J	Permit:	207891-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW10	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	450
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499763.7		
Utmy:	4493274.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590269		
Longdecdeg:	-105.002792		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499773.3		
Disputmy:	4493302.2		
Latitude:	40.5902693749		
Longitude:	-105.002792478		
Site id:	CO6000000407368		

AD219
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000215565

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	215564	Objectid:	215565
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0022226C		
Receipt:	0022226C	Permit:	13287-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	10	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	840
Coordewdir:	W	Coordns:	1350
Coordnsdir:	N		
Utmx:	498555.6		
Utmy:	4491873.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577647		
Longdecdeg:	-105.017066		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	RAINEY BILL		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498555		
Disputmy:	4491873		
Latitude:	40.5776466921		
Longitude:	-105.017066007		
Site id:	CO6000000215565		

AD220
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220680

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220679	Objectid:	220680
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025999C		
Receipt:	0025999C	Permit:	45155-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	10	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	840
Coordewdir:	W	Coordns:	1350
Coordnsdir:	N		
Utmx:	498555.6		
Utmy:	4491873.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577647		
Longdecdeg:	-105.017066		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1996-01-12		
Firstbenef:	Not Reported		
Pumpinstal:	1996-06-04		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Toppercas:	14	Botpercas:	24
Yield:	15		
Staticwl:	7		
Applicantn:	RAINEY BILL		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498565.3		
Disputmy:	4491901.2		
Latitude:	40.5776466921		
Longitude:	-105.017066007		
Site id:	CO6000000220680		

AC221
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000083840

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	83839	Objectid:	83840
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9041742		
Receipt:	9041742	Permit:	92986-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	2324
Coordewdir:	W	Coordns:	2540
Coordnsdir:	S		
Utmx:	499001.1		
Utmy:	4491432.5		
Locaccurac:	Not Reported		
Latdecdeg:	40.573672		
Longdecdeg:	-105.011801		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1977-08-30		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1977-12-13		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	9		
Applicantn:	SCHMIDT BOB		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499001.1		
Disputmy:	4491432.5		
Latitude:	40.5736726213		
Longitude:	-105.011801596		
Site id:	CO6000000083840		

AA222
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000381327

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381326	Objectid:	381327
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315C		
Receipt:	0387315C	Permit:	189734-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-3	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	2000
Coordnsdir:	N		
Utmx:	499824.5		
Utmy:	4493258.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590121		
Longdecdeg:	-105.002074		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499824		
Disputmy:	4493258		
Latitude:	40.5901207431		
Longitude:	-105.002073969		
Site id:	CO6000000381327		

AA223
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000407361

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407360	Objectid:	407361
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620C		
Receipt:	0424620C	Permit:	207884-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-3	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	2000
Coordnsdir:	N		
Utmx:	499824.5		
Utmy:	4493258.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590121		
Longdecdeg:	-105.002074		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499834.3		
Disputmy:	4493286.2		
Latitude:	40.5901207431		
Longitude:	-105.002073969		
Site id:	CO6000000407361		

AA224
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000381331

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381330	Objectid:	381331
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315G		
Receipt:	0387315G	Permit:	189738-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-7	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	1900
Coordnsdir:	N		
Utmx:	499748.6		
Utmy:	4493290.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590409		
Longdecdeg:	-105.002971		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499748		
Disputmy:	4493290		
Latitude:	40.5904090082		
Longitude:	-105.002970929		
Site id:	CO6000000381331		

AA225
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000407365

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407364	Objectid:	407365
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620G		
Receipt:	0424620G	Permit:	207888-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-7	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	500
Coordewdir:	E	Coordns:	1900
Coordnsdir:	N		
Utmx:	499748.6		
Utmy:	4493290.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590409		
Longdecdeg:	-105.002971		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499758.3		
Disputmy:	4493318.2		
Latitude:	40.5904090082		
Longitude:	-105.002970929		
Site id:	CO6000000407365		

Y226
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220673

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220672	Objectid:	220673
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998V		
Receipt:	0025998V	Permit:	45148-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	7
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1610
Coordnsdir:	N		
Utmx:	498593.9		
Utmy:	4491793.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576925		
Longdecdeg:	-105.016613		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1996-01-02		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	15	Botpercas:	25
Yield:	25		
Staticwl:	7		
Applicantn:	CULLEN JOHN G & SUZAN J GILLESPIE		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498603.3		
Disputmy:	4491821.2		
Latitude:	40.5769251454		
Longitude:	-105.016613303		
Site id:	CO6000000220673		

Y227
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365033

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	365032	Objectid:	365033
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997V		
Receipt:	0364997V	Permit:	13280-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	7	Lot:	7
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1610
Coordnsdir:	N		
Utmx:	498593.9		
Utmy:	4491793.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576925		
Longdecdeg:	-105.016613		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	ELKINS MAL & PEGGY		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498593		
Disputmy:	4491793		
Latitude:	40.5769251454		
Longitude:	-105.016613303		
Site id:	CO6000000365033		

AA228
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000381330

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	381329	Objectid:	381330
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387315F		
Receipt:	0387315F	Permit:	189737-
Wdid:	Not Reported	Currstatus:	Not Reported
Wellname:	MW-6	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	10		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499824.6		
Utmy:	4493273.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590256		
Longdecdeg:	-105.002073		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-09-06		
Permexpire:	1997-09-06		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOC		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499824		
Disputmy:	4493273		
Latitude:	40.590255877		
Longitude:	-105.002072791		
Site id:	CO6000000381330		

AA229
NNE
1/2 - 1 Mile
Higher

CO WELLS CO6000000407364

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	407363	Objectid:	407364
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0424620F		
Receipt:	0424620F	Permit:	207887-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	MW-6	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	1950
Coordnsdir:	N		
Utmx:	499824.6		
Utmy:	4493273.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.590256		
Longdecdeg:	-105.002073		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1998-01-28		
Permexpire:	2000-01-28		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	2014-05-15		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	POUDRE VALLEY COOP ASSOCIATION		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499834.3		
Disputmy:	4493301.2		
Latitude:	40.590255877		
Longitude:	-105.002072791		
Site id:	CO6000000407364		

Y230
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220677

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220676	Objectid:	220677
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998Z	Permit:	45152-F
Receipt:	0025998Z	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	W0730
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtldist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	8
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.33000001		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1700
Coordnsdir:	N		
Utmx:	498593.5		
Utmy:	4491766.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576677		
Longdecdeg:	-105.016618		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1996-05-07		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	29
Topperfcas:	11	Botperfcas:	29
Yield:	25		
Staticwl:	8		
Applicantn:	JOHNSON STANLEY		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498603.3		
Disputmy:	4491794.2		
Latitude:	40.5766773992		
Longitude:	-105.016617967		
Site id:	CO6000000220677		

Y231
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365037

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	365036	Objectid:	365037
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997Z		
Receipt:	0364997Z	Permit:	13284-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	11	Lot:	8
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	970
Coordewdir:	W	Coordns:	1700
Coordnsdir:	N		
Utmx:	498593.5		
Utmy:	4491766.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576677		
Longdecdeg:	-105.016618		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	JOHNSON STANLEY L		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498593		
Disputmy:	4491766		
Latitude:	40.5766773992		
Longitude:	-105.016617967		
Site id:	CO6000000365037		

AD232
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220675

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	220674	Objectid:	220675
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998X		
Receipt:	0025998X	Permit:	45150-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	660
Coordewdir:	W	Coordns:	1330
Coordnsdir:	N		
Utmx:	498500.8		
Utmy:	4491880.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57771		
Longdecdeg:	-105.017714		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1995-12-28		
Firstbenef:	1996-06-02		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	10	Botpercas:	25
Yield:	25		
Staticwl:	6		
Applicantn:	HORAK DONALD & RUTH		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498510.3		
Disputmy:	4491908.2		
Latitude:	40.5777096573		
Longitude:	-105.017713502		
Site id:	CO6000000220675		

AD233
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000365035

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	365034	Objectid:	365035
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997X		
Receipt:	0364997X	Permit:	13282-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	660
Coordewdir:	W	Coordns:	1330
Coordnsdir:	N		
Utmx:	498500.8		
Utmy:	4491880.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57771		
Longdecdeg:	-105.017714		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HORAK DONALD & RUTH		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498500		
Disputmy:	4491880		
Latitude:	40.5777096573		
Longitude:	-105.017713502		
Site id:	CO6000000365035		

234
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000080379

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	80378	Objectid:	80379
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038079		
Receipt:	9038079	Permit:	1027-R
Wdid:	0307835	Currstatus:	Well Constructed
Wellname:	#6	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	1	Lot:	13
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	1373
Coordewdir:	W	Coordns:	2324
Coordnsdir:	N		
Utmx:	498713.4		
Utmy:	4491574.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.574948		
Longdecdeg:	-105.015201		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1959-12-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1970-10-23		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	0	Botpercas:	0
Yield:	750		
Staticwl:	8		
Applicantn:	BAKER JANICE & JAMES A		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498713.4		
Disputmy:	4491574.1		
Latitude:	40.5749478851		
Longitude:	-105.015200943		
Site id:	CO6000000080379		

AE235
South
1/2 - 1 Mile
Lower

FED USGS USGS40000222454

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403420105002401		
Monloc name:	SB00706815CBB1 USGS 403420105002401		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5722047
Longitude:	-105.007198	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4918.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported		
Welldepth units:	ft	Welldepth:	35
Wellholedepth units:	Not Reported	Wellholedepth:	Not Reported

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-07-14	20.00	

236
East
1/2 - 1 Mile
Higher

CO WELLS CO600000080952

Fid:	80951	Objectid:	80952
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038701		
Receipt:	9038701	Permit:	10876-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500504.4		
Utmy:	4492453.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.582868		
Longdecdeg:	-104.99404		
Use1:	COMMERCIAL	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1966-05-03		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	62
Topperfcas:	0	Botperfcas:	0
Yield:	63		
Staticwl:	10		
Applicantn:	BOXBERGER E C		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500504.4		
Disputmy:	4492453.1		
Latitude:	40.5828675534		
Longitude:	-104.994039904		
Site id:	CO6000000080952		

AE237
South
1/2 - 1 Mile
Lower

CO WELLS CO6000000081429

Fid:	81428	Objectid:	81429
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039251	Permit:	19308-
Receipt:	9039251	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	BOXELDER		
Filing:	Not Reported	Lot:	4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499296.1		
Utmy:	4491259.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572115		
Longdecdeg:	-105.008316		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1964-05-02		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	19
Topperfcas:	0	Botperfcas:	0
Yield:	20		
Staticwl:	9		
Applicantn:	CHAVEZ BEN		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499296		
Disputmy:	4491259		
Latitude:	40.5721152851		
Longitude:	-105.008316099		
Site id:	CO6000000081429		

AE238
South
1/2 - 1 Mile
Lower

CO WELLS CO6000000484900

Fid:	484899	Objectid:	484900
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0902773		
Receipt:	0902773	Permit:	33676-
Wdid:	Not Reported	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	Not Reported	Lot:	20
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499296.1		
Utmy:	4491259.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572115		
Longdecdeg:	-105.008316		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1968-05-06		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SHELTON J T		
Complewew:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499306.3		
Disputmy:	4491287.2		
Latitude:	40.5721152851		
Longitude:	-105.008316099		
Site id:	CO6000000484900		

AD239
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220676

Fid:	220675	Objectid:	220676
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025998Y		
Receipt:	0025998Y	Permit:	45151-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	2
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	660
Coordewdir:	W	Coordns:	1600
Coordnsdir:	N		
Utmx:	498499.5		
Utmy:	4491798.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576966		
Longdecdeg:	-105.017729		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1996-01-02		
Firstbenef:	1996-06-02		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	28
Topperfcas:	18	Botperfcas:	28
Yield:	25		
Staticwl:	6		
Applicantn:	HORAK DONALD & RUTH		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498509.3		
Disputmy:	4491826.2		
Latitude:	40.5769655195		
Longitude:	-105.017728665		
Site id:	CO6000000220676		

**AD240
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000365036

Fid:	365035	Objectid:	365036
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0364997Y		
Receipt:	0364997Y	Permit:	13283-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	2
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	660
Coordewdir:	W	Coordns:	1600
Coordnsdir:	N		
Utmx:	498499.5		
Utmy:	4491798.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576966		
Longdecdeg:	-105.017729		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HORAK DONALD & RUTH		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498499		
Disputmy:	4491798		
Latitude:	40.5769655195		
Longitude:	-105.017728665		
Site id:	CO6000000365036		

**AE241
South
1/2 - 1 Mile
Lower**

FED USGS USGS40000222449

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403419105002301		
Monloc name:	SB00706815CBB2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5719269
Longitude:	-105.0069203	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4909.20
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	25.3
Construction date:	Not Reported	Wellholedepth:	Not Reported
Welldepth units:	ft		
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-10-21	2.90	

AF242
WNW
1/2 - 1 Mile
Higher

CO WELLS CO6000000247248

Fid:	247247	Objectid:	247248
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0047032		
Receipt:	0047032	Permit:	47032-DW
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498507		
Utmx:	4492890.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.58681		
Longdecdeg:	-105.01764		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	DEWATERING	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-05-11		
Permexpire:	2007-08-09		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Six (6) wells to be constructed.		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	BAKER EH & PATRICIA	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498507		
Disputmy:	4492890.5		
Latitude:	40.5868068484		
Longitude:	-105.017642637		
Site id:	CO6000000247248		

**AF243
WNW
1/2 - 1 Mile
Higher**

CO WELLS CO600000080915

Fid:	80914	Objectid:	80915
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038655		
Receipt:	9038655	Permit:	10360-R
Wdid:	0306670	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498506.9		
Utmy:	4492890.7		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.586809		
Longdecdeg:	-105.017644		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1954-10-18		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	55
Topperfcas:	0	Botperfcas:	0
Yield:	1000		
Staticwl:	15		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	S&F AGENCY CO	Ogcc api:	Not Reported
Complewe:	1		
Ogjobbatch:	0		
Disputmx:	498506.9		
Disputmy:	4492890.7		
Latitude:	40.5868086497		
Longitude:	-105.017643819		
Site id:	CO6000000080915		

AG244
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000215564

Fid:	215563	Objectid:	215564
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0022226B		
Receipt:	0022226B	Permit:	13286-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	660
Coordewdir:	W	Coordns:	1690
Coordnsdir:	N		
Utmx:	498499.1		
Utmy:	4491770.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576718		
Longdecdeg:	-105.017733		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1994-03-16		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	RAINEY BILL	Ogcc api:	Not Reported
Completwew:	0		
Ogjobbatch:	0		
Disputmx:	498499		
Disputmy:	4491770		
Latitude:	40.5767177734		
Longitude:	-105.017733325		
Site id:	CO6000000215564		

AG245
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000220679

Fid:	220678	Objectid:	220679
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0025999B		
Receipt:	0025999B	Permit:	45154-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0730
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	8	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.25		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	660
Coordewdir:	W	Coordns:	1690
Coordnsdir:	N		
Utmx:	498499.1		
Utmy:	4491770.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.576718		
Longdecdeg:	-105.017733		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1995-06-27		
Permexpire:	1996-06-27		
Wellconstr:	1996-01-13		
Firstbenef:	1996-01-15		
Pumpinstal:	1996-01-15		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	21
Toppercas:	11	Botpercas:	21
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	RAINEY BILL	Ogcc api:	Not Reported
Complewew:	3		
Ogjobbatch:	0		
Disputmx:	498509.3		
Disputmy:	4491798.2		
Latitude:	40.5767177734		
Longitude:	-105.017733325		
Site id:	CO6000000220679		

AH246
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000232836

Fid:	232835	Objectid:	232836
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0036236		
Receipt:	0036236	Permit:	3245-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	3
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	350
Coordewdir:	W	Coordns:	1050
Coordnsdir:	N		
Utmx:	498407.7		
Utmy:	4491967.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578491		
Longdecdeg:	-105.018814		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-10-03		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	GRONENTHAL JANIE	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498407.7		
Disputmy:	4491967.5		
Latitude:	40.578491455		
Longitude:	-105.018813725		
Site id:	CO6000000232836		

AI247
SSE
1/2 - 1 Mile
Lower

CO WELLS CO6000000419006

Fid:	419005	Objectid:	419006
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441232		
Receipt:	0441232	Permit:	46831-DW
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499698.6		
Utmy:	4491251		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57204		
Longdecdeg:	-105.00356		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-02-07		
Permexpire:	2007-05-07		
Wellconstr:	2007-02-16		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Four (4) holes to be constructed. Formerly known as 441232-DW.		
Elev:	0	Welldepth:	34
Topperfcas:	10	Botperfcas:	34
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	WESTERN INVESTMENTS LLC		
Completw:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499698		
Disputmy:	4491251		
Latitude:	40.5720380522		
Longitude:	-105.003560831		
Site id:	CO6000000419006		

AI248
SSE
1/2 - 1 Mile
Lower

CO WELLS CO6000000419021

Fid:	419020	Objectid:	419021
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441244A		
Receipt:	0441244A	Permit:	46834-DW
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499698.6		
Utmy:	4491251		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57204		
Longdecdeg:	-105.00356		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-02-09		
Permexpire:	2007-05-09		
Wellconstr:	2007-02-19		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Twenty (20) holes to be constructed. Formerly known as 441244-DW.		
Elev:	0	Welldepth:	34
Topperfcas:	10	Botperfcas:	34
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	WESTERN INVESTMENTS LLC		
Completw:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499708.3		
Disputmy:	4491279.2		
Latitude:	40.5720380522		
Longitude:	-105.003560831		
Site id:	CO6000000419021		

AJ249
West
1/2 - 1 Mile
Higher

CO WELLS CO600000082110

Fid:	82109	Objectid:	82110
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039979		
Receipt:	9039979	Permit:	37747-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	Not Reported	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	100
Coordewdir:	W	Coordns:	100
Coordnsdir:	N		
Utmx:	498336		
Utmy:	4492258		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581108		
Longdecdeg:	-105.019662		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-05-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	ALSO LOT 6		
Elev:	0	Welldepth:	19
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	CHAVEZ BEN	Ogcc api:	Not Reported
Complewe:	1		
Ogjobbatch:	0		
Disputmx:	498336		
Disputmy:	4492258		
Latitude:	40.5811083985		
Longitude:	-105.019661658		
Site id:	CO6000000082110		

**AH250
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082121

Fid:	82120	Objectid:	82121
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039990		
Receipt:	9039990	Permit:	37961-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	3	Lot:	15
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	265
Coordewdir:	W	Coordns:	1050
Coordnsdir:	N		
Utmx:	498381.8		
Utmy:	4491968		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578496		
Longdecdeg:	-105.01912		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-05-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	21
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	BAKER VERL	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498381.8		
Disputmy:	4491968		
Latitude:	40.5784959094		
Longitude:	-105.019119746		
Site id:	CO6000000082121		

**AH251
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082120

Fid:	82119	Objectid:	82120
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039989		
Receipt:	9039989	Permit:	37960-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	3	Lot:	15
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	NW
Q10:	Not Reported	Coordew:	265
Coordewdir:	W	Coordns:	1150
Coordnsdir:	N		
Utmx:	498381.3		
Utmy:	4491937.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578221		
Longdecdeg:	-105.019126		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-06-02		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	21
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	HAMBLÉN SAM & BAKER VERL		
Completw:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498381.3		
Disputmy:	4491937.5		
Latitude:	40.5782211377		
Longitude:	-105.019125576		
Site id:	CO6000000082120		

AJ252
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000082112

Fid:	82111	Objectid:	82112
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039981		
Receipt:	9039981	Permit:	37749-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	Not Reported	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SW
Q10:	Not Reported	Coordew:	10
Coordewdir:	W	Coordns:	10
Coordnsdir:	N		
Utmx:	498308.9		
Utmy:	4492286		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581361		
Longdecdeg:	-105.019982		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-05-27		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	19
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	CHAVEZ BEN & LEE C	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498308.9		
Disputmy:	4492286		
Latitude:	40.5813605927		
Longitude:	-105.019981944		
Site id:	CO6000000082112		

AG253
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082568

Fid:	82567	Objectid:	82568
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040449		
Receipt:	9040449	Permit:	54794-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	7
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498496.5		
Utmy:	4491681.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575911		
Longdecdeg:	-105.017764		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-03-31		
Permexpire:	Not Reported		
Wellconstr:	1972-06-17		
Firstbenef:	1972-06-17		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	27
Toppercas:	17	Botpercas:	27
Yield:	15		
Staticwl:	5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	TRIPPEL F JOHN	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498506.3		
Disputmy:	4491709.2		
Latitude:	40.5759114727		
Longitude:	-105.017763831		
Site id:	CO6000000082568		

**AG254
SW
1/2 - 1 Mile
Lower**

CO WELLS

CO6000000080672

Fid:	80671	Objectid:	80672
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038394		
Receipt:	9038394	Permit:	6445-R
Wdid:	0306192	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498496.5		
Utmy:	4491681.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575911		
Longdecdeg:	-105.017764		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1958-12-11		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1947-03-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Toppercas:	0	Botpercas:	0
Yield:	700		
Staticwl:	5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	LEOPARD C DUANE & JANICE E		
Completere:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498496		
Disputmy:	4491681		
Latitude:	40.5759114727		
Longitude:	-105.017763831		
Site id:	CO6000000080672		

**AG255
SW
1/2 - 1 Mile
Lower**

CO WELLS

CO6000000082602

Fid:	82601	Objectid:	82602
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040482		
Receipt:	9040482	Permit:	56037-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	5
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498496.5		
Utmy:	4491681.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575911		
Longdecdeg:	-105.017764		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-04-06		
Permexpire:	Not Reported		
Wellconstr:	1972-06-09		
Firstbenef:	1972-06-09		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	26
Toppercas:	13	Botpercas:	26
Yield:	15		
Staticwl:	5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	FARNAT WILLIAM	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498522		
Disputmy:	4491696		
Latitude:	40.5759114727		
Longitude:	-105.017763831		
Site id:	CO6000000082602		

**AG256
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082589

Fid:	82588	Objectid:	82589
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040470		
Receipt:	9040470	Permit:	55377-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	SUNRISE ACRES		
Filing:	4	Lot:	6
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	NW	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498496.5		
Utmy:	4491681.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575911		
Longdecdeg:	-105.017764		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-04-04		
Permexpire:	Not Reported		
Wellconstr:	1972-06-09		
Firstbenef:	1972-06-09		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	26
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	CLAY GARY	Ogcc api:	Not Reported
Completw:	3		
Ogjobbatch:	0		
Disputmx:	498515.3		
Disputmy:	4491704		
Latitude:	40.5759114727		
Longitude:	-105.017763831		
Site id:	CO6000000082589		

**257
West
1/2 - 1 Mile
Higher**

CO WELLS CO6000000083522

Fid:	83521	Objectid:	83522
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9041400		
Receipt:	9041400	Permit:	83277-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	8
Q160:	SE	Q40:	SE
Q10:	Not Reported	Coordew:	50
Coordewdir:	E	Coordns:	300
Coordnsdir:	S		
Utmx:	498291		
Utmy:	4492380.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.582209		
Longdecdeg:	-105.020194		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1976-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	26
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	11		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	BOWNE JOHN & DORHEA	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498291		
Disputmy:	4492380.2		
Latitude:	40.5822091939		
Longitude:	-105.020193705		
Site id:	CO6000000083522		

AE258
South
1/2 - 1 Mile
Lower

CO WELLS

CO6000000232135

Fid:	232134	Objectid:	232135
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0035586		
Receipt:	0035586	Permit:	3104-AD
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W7113
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	1	Lot:	19
Block:	2	Ctyparclid:	Not Reported
Parcelsize:	1		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1680
Coordewdir:	E	Coordns:	1710
Coordnsdir:	S		
Utmx:	499388.6		
Utmy:	4491170		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57131		
Longdecdeg:	-105.00722		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-08-25		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1972-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Block 2&3		
Elev:	0	Welldepth:	20
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	RUFF JAMES F.	Ogcc api:	Not Reported
Completwew:	1		
Ogjobbatch:	0		
Disputmx:	499388.6		
Disputmy:	4491170		
Latitude:	40.5713081597		
Longitude:	-105.007223188		
Site id:	CO6000000232135		

AK259
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000458569

Fid:	458568	Objectid:	458569
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0503715		
Receipt:	0503715	Permit:	246951-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	1	Lot:	7
Block:	2	Ctyparclid:	Not Reported
Parcelsize:	1		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1800
Coordewdir:	W	Coordns:	2200
Coordnsdir:	S		
Utmx:	498839.8		
Utmy:	4491333.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.572777		
Longdecdeg:	-105.013707		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.75		
Permitunit:	ACRES		
Annappropr:	1		
Permissued:	2003-01-09		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-06-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	0	Botperfcas:	0
Yield:	30		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	NEWTON GERRITT B & BONNIE		
Completw:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498839.8		
Disputmy:	4491333.1		
Latitude:	40.5727769253		
Longitude:	-105.013707107		
Site id:	CO6000000458569		

AK260
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000381247

Fid:	381246	Objectid:	381247
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0387237		
Receipt:	0387237	Permit:	191059-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	1	Lot:	8
Block:	2&3	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1877
Coordewdir:	W	Coordns:	2058
Coordnsdir:	S		
Utmx:	498862.6		
Utmy:	4491289.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.572381		
Longdecdeg:	-105.013438		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	1		
Permissued:	1995-11-02		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	18
Toppercas:	0	Botpercas:	0
Yield:	20		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	OAKES PHILIP B & MARY A	Ogcc api:	Not Reported
Completw:	1		
Ogjobbatch:	0		
Disputmx:	498862.6		
Disputmy:	4491289.1		
Latitude:	40.5723805653		
Longitude:	-105.013437659		
Site id:	CO6000000381247		

AK261
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081607

Fid:	81606	Objectid:	81607
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039439		
Receipt:	9039439	Permit:	23252-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	Not Reported	Lot:	4
Block:	2	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498893.8		
Utmy:	4491268.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572196		
Longdecdeg:	-105.013069		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1965-04-07		
Permexpire:	1965-06-28		
Wellconstr:	1965-05-29		
Firstbenef:	1965-05-29		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	11	Botperfcas:	20
Yield:	15		
Staticwl:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	CHAVEZ BEN	Ogcc api:	Not Reported
Complewew:	3		
Ogjobbatch:	0		
Disputmx:	498903.3		
Disputmy:	4491296.2		
Latitude:	40.5721959246		
Longitude:	-105.013069015		
Site id:	CO6000000081607		

AK262
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081701

Fid:	81700	Objectid:	81701
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039535		
Receipt:	9039535	Permit:	25379-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498893.8		
Utmy:	4491268.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572196		
Longdecdeg:	-105.013069		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1965-09-20		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-09-27		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	22
Topperfcas:	16	Botperfcas:	22
Yield:	75		
Staticwl:	9		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	STROBLE CALVIN	Ogcc api:	Not Reported
Complewe:	3		
Ogjobbatch:	0		
Disputmx:	498912.3		
Disputmy:	4491291		
Latitude:	40.5721959246		
Longitude:	-105.013069015		
Site id:	CO6000000081701		

AK263
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082256

Fid:	82255	Objectid:	82256
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040131		
Receipt:	9040131	Permit:	42595-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	Not Reported	Lot:	9
Block:	3	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498893.8		
Utmy:	4491268.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572196		
Longdecdeg:	-105.013069		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1970-08-07		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	22
Toppercas:	0	Botpercas:	0
Yield:	20		
Staticwl:	6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	ROGERS ROY D & SHARON S		
Completw:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498893		
Disputmy:	4491268		
Latitude:	40.5721959246		
Longitude:	-105.013069015		
Site id:	CO6000000082256		

264
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000262357

Fid:	262356	Objectid:	262357
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0084649		
Receipt:	0084649	Permit:	11221--A
Wdid:	0307055	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	320
Coordewdir:	W	Coordns:	1970
Coordnsdir:	N		
Utmx:	498394.2		
Utmy:	4491687		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.575964		
Longdecdeg:	-105.018973		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1978-08-30		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicant:	THORNBURG R	Ogcc api:	Not Reported
Completw:	0		
Ogjobbatch:	0		
Disputmx:	498394.2		
Disputmy:	4491687		
Latitude:	40.5759644329		
Longitude:	-105.018972519		
Site id:	CO6000000262357		

**AL265
East
1/2 - 1 Mile
Higher**

CO WELLS CO6000000324605

Fid:	324604	Objectid:	324605
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0291033		
Receipt:	0291033	Permit:	23049-F-R
Wdid:	0305314	Currstatus:	Well Constructed
Wellname:	REPLACE 23049F	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	2570
Coordewdir:	W	Coordns:	780
Coordnsdir:	S		
Utmx:	500679.1		
Utmy:	4492487.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.583174		
Longdecdeg:	-104.991976		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1988-09-27		
Permexpire:	Not Reported		
Wellconstr:	1988-07-01		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	75
Toppercas:	55	Botpercas:	75
Yield:	60		
Staticwl:	30		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	BOGGS LOGAN	Ogcc api:	Not Reported
Completwew:	3		
Ogjobbatch:	0		
Disputmx:	500689.3		
Disputmy:	4492515.2		
Latitude:	40.5831737312		
Longitude:	-104.991975576		
Site id:	CO6000000324605		

AL266
East
1/2 - 1 Mile
Higher

CO WELLS CO6000000262875

Fid:	262874	Objectid:	262880
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0086498		
Receipt:	0086498	Permit:	23049-F
Wdid:	0305314	Currstatus:	Permit Expired
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	2570
Coordewdir:	W	Coordns:	780
Coordnsdir:	S		
Utmx:	500679.1		
Utmy:	4492487.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.583177		
Longdecdeg:	-104.991976		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1977-11-30		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	COLUMBIA SAVNGS & LOAN ASSN		
Completw:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500679		
Disputmy:	4492487		
Latitude:	40.5831773348		
Longitude:	-104.991975575		
Site id:	CO6000000262875		

AM267
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082111

Fid:	82110	Objectid:	82111
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039980		
Receipt:	9039980	Permit:	37748-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	Not Reported	Lot:	11
Block:	3	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1950
Coordewdir:	W	Coordns:	1830
Coordnsdir:	S		
Utmx:	498883.8		
Utmy:	4491219.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57175		
Longdecdeg:	-105.013187		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-05-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	4		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	MOE JOHN A & ANITA	Ogcc api:	Not Reported
Complewew:	1		
Ogjobbatch:	0		
Disputmx:	498883.8		
Disputmy:	4491219.1		
Latitude:	40.5717499706		
Longitude:	-105.013187071		
Site id:	CO6000000082111		

AN268
SW
1/2 - 1 Mile
Lower

FED USGS USGS40000222460

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403427105010101		
Monloc name:	SB00706816BDD1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5741491
Longitude:	-105.0174762	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4911.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	24.7
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-08-27	8.60	

269
ESE
1/2 - 1 Mile
Higher

CO WELLS CO6000000080658

Fid:	80657	Objectid:	80658
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038374		
Receipt:	9038374	Permit:	6128-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	NW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500504.7		
Utmy:	4491644.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575584		
Longdecdeg:	-104.994037		
Use1:	INDUSTRIAL	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1964-09-18		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	100
Topperfcas:	0	Botperfcas:	0
Yield:	10		
Staticwl:	8		
Applicantn:	EAST SIDE LUMBER CO		
Completewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500504.7		
Disputmy:	4491644.6		
Latitude:	40.5755838596		
Longitude:	-104.994037005		
Site id:	CO6000000080658		

**AO270
SSE
1/2 - 1 Mile
Lower**

CO WELLS CO6000000419003

Fid:	419002	Objectid:	419003
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0441230		
Receipt:	0441230	Permit:	46829-DW
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500101.9		
Utmy:	4491244		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57198		
Longdecdeg:	-104.9988		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	MONITORING WELL	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annapprpr:	0		
Permissued:	2007-02-06		
Permexpire:	2007-05-07		
Wellconstr:	2007-02-15		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Four (4) holes to be constructed. Formerly known as 441230-DW.		
Elev:	0	Welldpth:	34
Topperfcas:	10	Botperfcas:	34
Yield:	0		
Staticwl:	0		
Applicant:	CW SUB TRUST		
Completewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500101.9		
Disputmy:	4491244		
Latitude:	40.5719750385		
Longitude:	-104.998796123		
Site id:	CO6000000419003		

**AO271
SSE
1/2 - 1 Mile
Lower**

CO WELLS CO600000080542

Fid:	80541	Objectid:	80542
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038249		
Receipt:	9038249	Permit:	3734-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500101.8		
Utmy:	4491243.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.571971		
Longdecdeg:	-104.998797		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1959-08-02		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	43
Topperfcas:	0	Botperfcas:	0
Yield:	25		
Staticwl:	15		
Applicantn:	RUDOLPH LARRY		
Completeew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500111.3		
Disputmy:	4491271.2		
Latitude:	40.5719714349		
Longitude:	-104.998797305		
Site id:	CO6000000080542		

**AO272
SSE
1/2 - 1 Mile
Lower**

CO WELLS CO6000000080234

Fid:	80233	Objectid:	80234
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9037927		
Receipt:	9037927	Permit:	192-RN
Wdid:	0306871	Currstatus:	Well Constructed
Wellname:	RUDOLPH FARM WELL #5	Caseno:	W6376
Div:	1	Wd:	3
County:	LARIMER	Mgmtndist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500101.8		
Utmy:	4491243.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.571971		
Longdecdeg:	-104.998797		
Use1:	DOMESTIC	Use2:	STOCK
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1956-11-25		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	49
Topperfcas:	0	Botperfcas:	0
Yield:	30		
Staticwl:	14		
Applicantn:	RUDOLPH FANNIE E		
Completewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500101		
Disputmy:	4491243		
Latitude:	40.5719714349		
Longitude:	-104.998797305		
Site id:	CO6000000080234		

**AO273
SSE
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081471

Fid:	81470	Objectid:	81471
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039295		
Receipt:	9039295	Permit:	19642-S
Wdid:	0305441	Currstatus:	Well Constructed
Wellname:	WELL #2	Caseno:	W6376
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500101.8		
Utmy:	4491243.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.571971		
Longdecdeg:	-104.998797		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-03-30		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1930-01-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Lincoln Trust CO & Highlands Properties also part owners		
Elev:	0	Welldepth:	32
Topperfcas:	0	Botperfcas:	0
Yield:	450		
Staticwl:	5		
Applicantn:	WHITE ERIC CHRISTOPHER JASON DANIEL JANE		
Completewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500127		
Disputmy:	4491258		
Latitude:	40.5719714349		
Longitude:	-104.998797305		
Site id:	CO6000000081471		

**AO274
SSE
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081470

Fid:	81469	Objectid:	81470
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039294		
Receipt:	9039294	Permit:	19642-R
Wdid:	0305447	Currstatus:	Well Constructed
Wellname:	RUDOLPH FARM WELL #8	Caseno:	W6376
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500101.8		
Utmy:	4491243.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.571971		
Longdecdeg:	-104.998797		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-03-30		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1930-01-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	32
Topperfcas:	0	Botperfcas:	0
Yield:	450		
Staticwl:	5		
Applicantn:	WHITE ERIC S ET AL		
Completewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500120.3		
Disputmy:	4491266		
Latitude:	40.5719714349		
Longitude:	-104.998797305		
Site id:	CO6000000081470		

AP275
West
1/2 - 1 Mile
Higher

FED USGS USGS40000222494

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403447105011501		
Monloc name:	SB00706816BAB1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5797047
Longitude:	-105.0213651	Sourcemap scale:	12500

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4924.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	35.7
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-07-21	8.20	

AQ276
East
1/2 - 1 Mile
Higher

CO WELLS CO6000000081242

Fid:	81241	Objectid:	81242
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039034		
Receipt:	9039034	Permit:	15201-F
Wdid:	0306385	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	2612
Coordewdir:	E	Coordns:	92
Coordnsdir:	N		
Utmx:	500724.1		
Utmy:	4492221		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580776		
Longdecdeg:	-104.991444		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1970-09-17		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1970-09-22		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	72
Toppercas:	62	Botpercas:	72
Yield:	615		
Staticwl:	14		
Applicantr:	CLYDESDALE PARK HOA		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500724.1		
Disputmy:	4492221		
Latitude:	40.5807764264		
Longitude:	-104.991444149		
Site id:	CO6000000081242		

AN277
SW
1/2 - 1 Mile
Lower

FED USGS USGS40000222462

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403428105010401		
Monloc name:	SB00706816BDD2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5744269
Longitude:	-105.0183095	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4910.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	30.8
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-08-27	7.50	

AM278
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000083709

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	83708	Objectid:	83709
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9041589		
Receipt:	9041589	Permit:	88436-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	Not Reported	Lot:	20
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1680
Coordewdir:	W	Coordns:	1762
Coordnsdir:	S		
Utmx:	498801.2		
Utmy:	4491200.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.571582		
Longdecdeg:	-105.014163		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1972-04-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	DALRYMPLE MICHAEL R		
Compleewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498801.2		
Disputmy:	4491200.5		
Latitude:	40.5715822893		
Longitude:	-105.014162893		
Site id:	CO6000000083709		

AR279
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000028012

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	28011	Objectid:	28012
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=3648254		
Receipt:	3648254	Permit:	284723-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	1	Lot:	3
Block:	3	Ctyparclid:	Not Reported
Parcelsize:	.75		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1560
Coordewdir:	W	Coordns:	1800
Coordnsdir:	S		
Utmx:	498764.8		
Utmy:	4491213		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.571694		
Longdecdeg:	-105.014592		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	.5		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	2010-12-28		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-05-20		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	WHITE HARLEY & ALZINA		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498764.8		
Disputmy:	4491213		
Latitude:	40.5716948475		
Longitude:	-105.014592955		
Site id:	CO6000000028012		

AS280
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082154

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82153	Objectid:	82154
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040023		
Receipt:	9040023	Permit:	39353-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES 2ND REPLAT		
Filing:	Not Reported	Lot:	7 & 8
Block:	4	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	400
Coordewdir:	E	Coordns:	1000
Coordnsdir:	N		
Utmx:	498179.3		
Utmy:	4491983.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578635		
Longdecdeg:	-105.021512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1969-09-18		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-11-15		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	19
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	8		
Applicantn:	LIGHT LUTHER & AMANDA FAVIS		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498179.3		
Disputmy:	4491983.5		
Latitude:	40.5786351271		
Longitude:	-105.021512418		
Site id:	CO6000000082154		

**AT281
West
1/2 - 1 Mile
Higher**

CO WELLS CO6000000082274

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82273	Objectid:	82274
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040148		
Receipt:	9040148	Permit:	43116-
Wdid:	0305552	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	8
Q160:	SE	Q40:	SE
Q10:	Not Reported	Coordew:	575
Coordewdir:	E	Coordns:	225
Coordnsdir:	S		
Utmx:	498130.9		
Utmy:	4492356.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.581993		
Longdecdeg:	-105.022085		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1970-09-18		
Permexpire:	Not Reported		
Wellconstr:	1954-05-26		
Firstbenef:	1954-05-26		
Pumpinstal:	Not Reported		
Wellplugge:	1992-11-16		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	0	Botpercas:	0
Yield:	50		
Staticwl:	13		
Applicantn:	YOUDER WILLIAM A		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498130.9		
Disputmy:	4492356.2		
Latitude:	40.5819926345		
Longitude:	-105.02208539		
Site id:	CO6000000082274		

AT282
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000351099

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	351098	Objectid:	351099
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0342096		
Receipt:	0342096	Permit:	43116--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W0267
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	8
Q160:	SE	Q40:	SE
Q10:	Not Reported	Coordew:	575
Coordewdir:	E	Coordns:	285
Coordnsdir:	S		
Utmx:	498130.9		
Utmy:	4492374.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.582159		
Longdecdeg:	-105.022085		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1992-10-05		
Permexpire:	Not Reported		
Wellconstr:	1992-10-21		
Firstbenef:	Not Reported		
Pumpinstal:	1992-10-23		
Wellplugge:	Not Reported		
Comment :	WELL ADD SAME AS ABV; 1 AC PAR; CASE W 267; USE 5-26-1954		
Elev:	0	Welldepth:	35
Topperfcas:	22	Botperfcas:	35
Yield:	35		
Staticwl:	10		
Applicantn:	YOUDER WILLIAM A & RUTH J		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498130.9		
Disputmy:	4492374.7		
Latitude:	40.5821592986		
Longitude:	-105.022085445		
Site id:	CO6000000351099		

AO283
SE
1/2 - 1 Mile
Lower

FED USGS USGS40000222448

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403419104595001		
Monloc name:	SB00706815CBB1 USGS 403419104595001		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5719269
Longitude:	-104.9977533	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4922.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported		
Welldepth units:	ft	Welldepth:	55
Wellholedepth units:	Not Reported	Wellholedepth:	Not Reported

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1958-07-14	32.90		1958-07-14	32.90	

AQ284
East
1/2 - 1 Mile
Higher

CO WELLS CO6000000444830

Fid:	444829	Objectid:	444830
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0480160		
Receipt:	0480160	Permit:	10130-R-R
Wdid:	0306700	Currstatus:	Well Constructed
Wellname:	WHEELER WELL #2-R10130	Caseno:	W3631
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported		
Block:	Not Reported		
Parcelsize:	75.010002	Lot:	Not Reported
Pm:	S	Ctyparclid:	Not Reported
Range:	68.0 W	Township:	7.0 N
Q160:	NE	Section :	15
Q10:	Not Reported	Q40:	NW
Coordewdir:	E	Coordew:	2510
Coordnsdir:	N	Coordns:	365
Utmx:	500754.4		
Utmy:	4492137.1		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.580021		
Longdecdeg:	-104.991086		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	75.010002		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	2001-10-03		
Permexpire:	2002-10-03		
Wellconstr:	2002-05-04		
Firstbenef:	Not Reported		
Pumpinstal:	2002-08-17		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	69
Topperfcas:	49	Botperfcas:	69
Yield:	550		
Staticwl:	18		
Applicantn:	CLYDESDALE PARK HOA		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500754.4		
Disputmy:	4492137.1		
Latitude:	40.5800205525		
Longitude:	-104.991086229		
Site id:	CO6000000444830		

285
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000083487

Fid:	83486	Objectid:	83487
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9041364		
Receipt:	9041364	Permit:	82292-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W5600
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SW
Q10:	Not Reported	Coordew:	227
Coordewdir:	E	Coordns:	1576
Coordnsdir:	N		
Utmx:	498229.3		
Utmy:	4491808.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.577056		
Longdecdeg:	-105.020921		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1976-01-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-08-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	10		
Staticwl:	0		
Applicantn:	STONEMETS FOREST L & DORIS E		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498229.3		
Disputmy:	4491808.2		
Latitude:	40.5770559752		
Longitude:	-105.020921152		
Site id:	CO6000000083487		

**286
West
1/2 - 1 Mile
Higher**

CO WELLS CO6000000080583

Fid:	80582	Objectid:	80583
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038295		
Receipt:	9038295	Permit:	4892-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	8
Q160:	SE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498105.4		
Utmy:	4492490.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.5832		
Longdecdeg:	-105.022387		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1959-12-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	29
Topperfcas:	0	Botperfcas:	0
Yield:	16		
Staticwl:	10		
Applicantn:	DYRENG MORGAN		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498105.4		
Disputmy:	4492490.2		
Latitude:	40.5831997684		
Longitude:	-105.022387102		
Site id:	CO6000000080583		

AU287
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000014916

Fid:	14915	Objectid:	14916
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=3623754		
Receipt:	3623754	Permit:	276217-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	Not Reported	Lot:	16
Block:	2,3	Ctyparclid:	Not Reported
Parcelsize:	.41		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1828
Coordewdir:	W	Coordns:	1458
Coordnsdir:	S		
Utmx:	498844.9		
Utmy:	4491107		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57074		
Longdecdeg:	-105.01365		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	12360		
Permitunit:	SQ. FT.		
Annappropr:	0		
Permissued:	2007-12-13		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1969-12-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	4880	Welldepth:	15
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	SULLIVAN DWIGHT & SHERI		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498844.9		
Disputmy:	4491107		
Latitude:	40.5707400184		
Longitude:	-105.01364644		
Site id:	CO6000000014916		

AV288
North
1/2 - 1 Mile
Higher

CO WELLS CO6000000080706

Fid:	80705	Objectid:	80706
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038430		
Receipt:	9038430	Permit:	7033-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499704.5		
Utmy:	4493669.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.593828		
Longdecdeg:	-105.003492		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1960-09-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Topperfcas:	0	Botperfcas:	0
Yield:	20		
Staticwl:	4		
Applicantn:	ROBINSON DON		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499704		
Disputmy:	4493669		
Latitude:	40.5938278628		
Longitude:	-105.00349226		
Site id:	CO6000000080706		

AV289
North
1/2 - 1 Mile
Higher

CO WELLS CO6000000081430

Fid:	81429	Objectid:	81430
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039252	Permit:	19324-R
Receipt:	9039252	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499704.5		
Utmy:	4493669.7		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.593828		
Longdecdeg:	-105.003492		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-04-29		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1949-05-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	REPORTED PLUGGED BY CURRENT OWNER OF 19324-S		
Elev:	0	Welldepth:	35
Topperfcas:	23	Botperfcas:	35
Yield:	375		
Staticwl:	6		
Applicantn:	MILL JAKE		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499714.3		
Disputmy:	4493697.2		
Latitude:	40.5938278628		
Longitude:	-105.00349226		
Site id:	CO6000000081430		

**290
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000083268

Fid:	83267	Objectid:	83268
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9041147		
Receipt:	9041147	Permit:	76835-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	3	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	1115
Coordewdir:	W	Coordns:	1856
Coordnsdir:	S		
Utmx:	498629.5		
Utmy:	4491233.6		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from section lines		
Latdecdeg:	40.57188		
Longdecdeg:	-105.016191		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1977-04-20		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	32
Topperfcas:	0	Botperfcas:	0
Yield:	15		
Staticwl:	5		
Applicantn:	WELSH JOHN W.		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498629.5		
Disputmy:	4491233.6		
Latitude:	40.5718802176		
Longitude:	-105.016191467		
Site id:	CO6000000083268		

AP291
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000081377

Fid:	81376	Objectid:	81377
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039189	Permit:	18699-
Receipt:	9039189	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1964-02-13		
Permexpire:	Not Reported		
Wellconstr:	1964-03-19		
Firstbenef:	1964-03-09		
Pumpinstal:	1968-04-25		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Topperfcas:	20	Botperfcas:	40
Yield:	12		
Staticwl:	12		
Applicantn:	POTTS TYLER J		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498129.5		
Disputmy:	4492091.2		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO6000000081377		

AP292
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000082255

Fid:	82254	Objectid:	82255
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040130		
Receipt:	9040130	Permit:	42594-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	2	Lot:	3
Block:	5	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1970-08-06		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Topperfcas:	0	Botperfcas:	0
Yield:	20		
Staticwl:	8		
Applicantn:	MUNIS JOE		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498110.3		
Disputmy:	4492114.2		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO6000000082255		

AP293
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000081054

Fid:	81053	Objectid:	81054
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038809	Permit:	12018-
Receipt:	9038809	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1962-06-27		
Permexpire:	Not Reported		
Wellconstr:	1962-06-25		
Firstbenef:	1962-06-25		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	19
Topperfcas:	11	Botperfcas:	20
Yield:	10		
Staticwl:	10		
Applicantn:	ANGEL W L		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498126		
Disputmy:	4492101		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO600000081054		

AP294
West
1/2 - 1 Mile
Higher

CO WELLS CO600000081281

Fid:	81280	Objectid:	81281
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039083	Permit:	15954-R
Receipt:	9039083	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-04-30		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1959-07-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Topperfcas:	0	Botperfcas:	0
Yield:	475		
Staticwl:	8		
Applicantn:	WEILAND RALPH		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498119.3		
Disputmy:	4492109		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO6000000081281		

AP295
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000082594

Fid:	82593	Objectid:	82594
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040474	Permit:	55865-
Receipt:	9040474	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-04-06		
Permexpire:	Not Reported		
Wellconstr:	1972-09-07		
Firstbenef:	1972-09-07		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	27
Topperfcas:	17	Botperfcas:	27
Yield:	12		
Staticwl:	8		
Applicantn:	BERNHART ALBERT		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498119.3		
Disputmy:	4492063		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO6000000082594		

AP296
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000486208

Fid:	486207	Objectid:	486187
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0904119	Permit:	48455-
Receipt:	0904119	Currstatus:	Permit Expired
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	Not Reported	Lot:	3-4
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	SLOCUM TRUMAN DUANE		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498100		
Disputmy:	4492086		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO6000000486208		

AP297
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000082343

Fid:	82342	Objectid:	82343
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040224	Permit:	46433-
Receipt:	9040224	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1971-06-09		
Permexpire:	Not Reported		
Wellconstr:	1971-06-11		
Firstbenef:	1971-06-11		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	DONEGAN DALE W		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498129.5		
Disputmy:	4492080.8		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO6000000082343		

AP298
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000082347

Fid:	82346	Objectid:	82347
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040228	Permit:	46608-
Receipt:	9040228	Currstatus:	Well Constructed
Wdid:	Not Reported	Caseno:	Not Reported
Wellname:	Not Reported	Wd:	3
Div:	1	Mgmtdist:	Not Reported
County:	LARIMER		
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	2	Lot:	6&7
Block:	6	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498100.5		
Utmy:	4492086.2		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Locaccurac:	Spotted from quarters		
Latdecdeg:	40.57956		
Longdecdeg:	-105.022444		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1971-06-15		
Permexpire:	Not Reported		
Wellconstr:	1971-06-14		
Firstbenef:	1971-06-14		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	26
Topperfcas:	11	Botperfcas:	26
Yield:	15		
Staticwl:	9		
Applicantn:	PROPP FREDERICK & COMINGS LARRY		
Complewew:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498126		
Disputmy:	4492071		
Latitude:	40.5795601635		
Longitude:	-105.022443785		
Site id:	CO6000000082347		

299
NNE
1/2 - 1 Mile
Higher

FED USGS USGS40000222578

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403537105000501		
Monloc name:	SB00706810BAB1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5935936
Longitude:	-105.0019198	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4960.30
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	Not Reported	Wellholeddepth:	Not Reported
Welldepth units:	Not Reported		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
-----	-----	-----	-----	-----	-----
1959-10-22	8.70		1959-10-22	8.70	

AR300
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000274781

Fid:	274780	Objectid:	274781
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0109566		
Receipt:	0109566	Permit:	109476--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	Not Reported	Lot:	7
Block:	1	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	1250
Coordewdir:	W	Coordns:	1700
Coordnsdir:	S		
Utmx:	498669.9		
Utmy:	4491185.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.571443		
Longdecdeg:	-105.015714		
Use1:	DOMESTIC	Use2:	STOCK
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1979-08-14		
Permexpire:	Not Reported		
Wellconstr:	1980-03-26		
Firstbenef:	Not Reported		
Pumpinstal:	1980-04-03		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Topperfcas:	12	Botperfcas:	28
Yield:	15		
Staticwl:	5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Applicantn:	DUKE HAROLD R & JUANITA R		
Completwewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498669.9		
Disputmy:	4491185.1		
Latitude:	40.5714433512		
Longitude:	-105.015714068		
Site id:	CO6000000274781		

AW301
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000021981

Fid:	21980	Objectid:	21981
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=3639302		
Receipt:	3639302	Permit:	280729-
Wdid:	0306318	Currstatus:	Well Constructed
Wellname:	CRIM WELL NO 1	Caseno:	W5216
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	810
Coordewdir:	E	Coordns:	231
Coordnsdir:	N		
Utmx:	498058		
Utmy:	4492217		
Locaccurac:	User supplied		
Latdecdeg:	40.58074		
Longdecdeg:	-105.02295		
Use1:	DOMESTIC	Use2:	STOCK
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	2009-05-27		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1949-04-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Topperfcas:	0	Botperfcas:	0
Yield:	50		
Staticwl:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	2	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	1810
Coordewdir:	W	Coordns:	1340
Coordnsdir:	S		
Utmx:	498838.8		
Utmy:	4491071.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.570417		
Longdecdeg:	-105.013718		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-06-05		
Permexpire:	Not Reported		
Wellconstr:	1972-06-12		
Firstbenef:	1972-06-12		
Pumpinstal:	1972-06-12		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	16
Topperfcas:	11	Botperfcas:	16
Yield:	0		
Staticwl:	5		
Applicantn:	GREENWALT ROBERT D & FLORENCE I		
Complewete:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498838.8		
Disputmy:	4491071.1		
Latitude:	40.5704165899		
Longitude:	-105.01371844		
Site id:	CO6000000082766		

**304
NNW
1/2 - 1 Mile
Higher**

FED USGS USGS40000222583

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403539105003401		
Monloc name:	SB00706809AAA1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5941491
Longitude:	-105.0099757	Sourcemap scale:	12500

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4957.50
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	26
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-10-21	6.90	

AX305
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081024

Fid:	81023	Objectid:	81024
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038781		
Receipt:	9038781	Permit:	11691-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1962-05-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Toppercas:	0	Botpercas:	0
Yield:	20		
Staticwl:	5		
Applicantn:	SCHRADER WAYNE K		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498517		
Disputmy:	4491292		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000081024		

**AX306
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081236

Fid:	81235	Objectid:	81236
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039027		
Receipt:	9039027	Permit:	15094-
Wdid:	0307095	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1963-05-10		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	NO SUB LISTED		
Elev:	0	Welldepth:	22
Toppercas:	12	Botpercas:	22
Yield:	20		
Staticwl:	9		
Applicantn:	COLLIER GERTRUDE		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498520.5		
Disputmy:	4491282.2		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000081236		

**AX307
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000080736

Fid:	80735	Objectid:	80736
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038466		
Receipt:	9038466	Permit:	7488-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1961-04-17		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	17
Toppercas:	0	Botpercas:	0
Yield:	12		
Staticwl:	5		
Applicantn:	GREENWALT R G		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498510.3		
Disputmy:	4491300		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000080736		

**AX308
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000080617

Fid:	80616	Objectid:	80617
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038329		
Receipt:	9038329	Permit:	5440-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1960-08-18		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	17
Toppercas:	0	Botpercas:	0
Yield:	12		
Staticwl:	5		
Applicantn:	DEINES EUGENE H		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498501.3		
Disputmy:	4491305.2		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000080617		

AX309
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000080620

Fid:	80619	Objectid:	80620
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038332		
Receipt:	9038332	Permit:	5459-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3	Use2:	Not Reported
Utmy:	4491277.1	Aquifer1:	ALL UNNAMED AQUIFERS
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC		
Specialuse:	Not Reported		
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1960-05-11		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Toppercas:	0	Botpercas:	0
Yield:	14		
Staticwl:	8		
Applicantn:	HOLTER GEORGE A		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498491		
Disputmy:	4491277		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000080620		

AX310
SW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081889

Fid:	81888	Objectid:	81889
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039740		
Receipt:	9039740	Permit:	29783-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1967-02-27		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	21
Toppercas:	0	Botpercas:	0
Yield:	50		
Staticwl:	5		
Applicantr:	DUNAWAY CAL L		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498510.3		
Disputmy:	4491254		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000081889		

**AX311
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082687

Fid:	82686	Objectid:	82687
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040568		
Receipt:	9040568	Permit:	59149-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-04-28		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	1972-06-14		
Firstbenef:	1972-06-14		
Pumpinstal:	1972-06-13		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	29
Toppercas:	20	Botpercas:	29
Yield:	15		
Staticwl:	6		
Applicantr:	MANESS MARION T		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498491		
Disputmy:	4491247		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000082687		

**AX312
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081870

Fid:	81869	Objectid:	81870
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039716		
Receipt:	9039716	Permit:	29268-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	4
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	1	Lot:	10
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1966-12-12		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	21
Toppercas:	0	Botpercas:	0
Yield:	40		
Staticwl:	9		
Applicantn:	KLEIN RAYMOND J		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498517		
Disputmy:	4491262		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000081870		

**AX313
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081474

Fid:	81473	Objectid:	81474
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039298		
Receipt:	9039298	Permit:	19732-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	Not Reported	Lot:	3
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1964-06-06		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Toppercas:	0	Botpercas:	0
Yield:	10		
Staticwl:	9		
Applicantr:	BOWYER HAROLD S & HAROLD S		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498520.5		
Disputmy:	4491271.8		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000081474		

**AX314
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081823

Fid:	81822	Objectid:	81823
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039669		
Receipt:	9039669	Permit:	28648-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOX ELDER ESTATES		
Filing:	1	Lot:	9
Block:	1	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	NW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498491.3		
Utmy:	4491277.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.572272		
Longdecdeg:	-105.017824		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1966-08-29		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	1966-09-07		
Firstbenef:	1966-09-07		
Pumpinstal:	1966-09-07		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Toppercas:	6	Botpercas:	25
Yield:	20		
Staticwl:	9		
Applicantr:	MARVIN DAVID W & LYNETTE		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498501.3		
Disputmy:	4491248.8		
Latitude:	40.5722718652		
Longitude:	-105.017824304		
Site id:	CO6000000081823		

**AY315
WNW
1/2 - 1 Mile
Higher**

CO WELLS CO6000000247091

Fid:	247090	Objectid:	247091
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0046883		
Receipt:	0046883	Permit:	46883-DW
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	8
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498107.2		
Utmy:	4492894.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.58684		
Longdecdeg:	-105.02237		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	DEWATERING	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-03-05		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	2007-06-03		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Two (2) holes to be constructed.		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	S & H INC		
Complewee:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498107		
Disputmy:	4492894		
Latitude:	40.5868420658		
Longitude:	-105.022367046		
Site id:	CO6000000247091		

**AY316
WNW
1/2 - 1 Mile
Higher**

CO WELLS CO6000000247289

Fid:	247288	Objectid:	247289
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0047076		
Receipt:	0047076	Permit:	47076-DW
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	8
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498107.2		
Utmy:	4492894.5		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.58684		
Longdecdeg:	-105.02237		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	DEWATERING	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	2007-05-22		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	2007-08-19		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Eighteen (18) holes to be constructed.		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	BARKER EH & PATRICIA		
Complewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498117.3		
Disputmy:	4492922.2		
Latitude:	40.5868420658		
Longitude:	-105.022367046		
Site id:	CO6000000247289		

**AZ317
ENE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000188434

Fid:	188433	Objectid:	188434
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=C350057		
Receipt:	C350057	Permit:	57-WCB
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500708.7		
Utmy:	4493054		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.588281		
Longdecdeg:	-104.991625		
Use1:	Not Reported	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1954-03-15		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	58
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	BOXBERGER JOHN		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500708		
Disputmy:	4493054		
Latitude:	40.5882808444		
Longitude:	-104.991625176		
Site id:	CO6000000188434		

**AZ318
ENE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000188454

Fid:	188453	Objectid:	188454
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=C350077		
Receipt:	C350077	Permit:	77-WCB
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500708.7		
Utmy:	4493054		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.588281		
Longdecdeg:	-104.991625		
Use1:	Not Reported	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1954-08-05		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	65
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	BOXBERGER JOHN		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500718.3		
Disputmy:	4493082.2		
Latitude:	40.5882808444		
Longitude:	-104.991625176		
Site id:	CO6000000188454		

**AZ319
ENE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000188455

Fid:	188454	Objectid:	188455
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=C350078		
Receipt:	C350078	Permit:	78-WCB
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500708.7		
Utmy:	4493054		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.588281		
Longdecdeg:	-104.991625		
Use1:	Not Reported	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1954-08-05		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	65
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	BOXBERGER JOHN		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500727.3		
Disputmy:	4493077		
Latitude:	40.5882808444		
Longitude:	-104.991625176		
Site id:	CO6000000188455		

**320
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000285327

Fid:	285326	Objectid:	285327
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0217331		
Receipt:	0217331	Permit:	121472--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	250
Coordewdir:	E	Coordns:	2450
Coordnsdir:	N		
Utmx:	498218.2		
Utmy:	4491541.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.574654		
Longdecdeg:	-105.021052		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1981-08-13		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1950-06-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Toppercas:	0	Botpercas:	0
Yield:	25		
Staticwl:	0		
Applicantr:	PANDO PLACIDO P & PHYLLIS		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498218.2		
Disputmy:	4491541.6		
Latitude:	40.5746541782		
Longitude:	-105.021051549		
Site id:	CO6000000285327		

AW321
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000081459

Fid:	81458	Objectid:	81459
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039282		
Receipt:	9039282	Permit:	19525-F
Wdid:	0306607	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	W5142
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1000
Coordewdir:	E	Coordns:	500
Coordnsdir:	N		
Utmx:	497998.8		
Utmy:	4492134.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579997		
Longdecdeg:	-105.023646		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	2		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1975-03-04		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1954-04-20		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	8		
Staticwl:	0		
Applicantr:	KINCAID DOYLE		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	497998.8		
Disputmy:	4492134.7		
Latitude:	40.5799968554		
Longitude:	-105.023645588		
Site id:	CO6000000081459		

**322
East
1/2 - 1 Mile
Higher**

CO WELLS CO6000000082407

Fid:	82406	Objectid:	82407
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040287		
Receipt:	9040287	Permit:	47979-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	VISTA BONITA		
Filing:	Not Reported	Lot:	17
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	10
Q160:	SE	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500910.3		
Utmy:	4492445.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.5828		
Longdecdeg:	-104.989244		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1971-12-09		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	UHL MICHAEL A & AMY L		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500910.3		
Disputmy:	4492445.6		
Latitude:	40.5827996402		
Longitude:	-104.989243715		
Site id:	CO6000000082407		

**323
SW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000233560

Fid:	233559	Objectid:	233560
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0036898		
Receipt:	0036898	Permit:	3316-AD
Wdid:	Not Reported	Currstatus:	Application Denied
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	SE	Q40:	NE
Q10:	Not Reported	Coordew:	50
Coordewdir:	E	Coordns:	2850
Coordnsdir:	N		
Utmx:	498277.3		
Utmy:	4491420.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.573563		
Longdecdeg:	-105.020353		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-10-18		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantr:	CLOOS D. H.	Ogcc api:	Not Reported
Complewe:	0		
Ogjobbatch:	0		
Disputmx:	498277.3		
Disputmy:	4491420.5		
Latitude:	40.5735633249		
Longitude:	-105.020352965		
Site id:	CO6000000233560		

BA324
South
1/2 - 1 Mile
Lower

CO WELLS CO6000000080862

Fid:	80861	Objectid:	80862
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038595		
Receipt:	9038595	Permit:	9580-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499295.2		
Utmy:	4490854.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568462		
Longdecdeg:	-105.008326		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1961-09-16		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	31
Toppercas:	0	Botpercas:	0
Yield:	10		
Staticwl:	8		
Applicantn:	PROCTER WINSTON G		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499295		
Disputmy:	4490854		
Latitude:	40.5684621706		
Longitude:	-105.008326279		
Site id:	CO6000000080862		

BA325
South
1/2 - 1 Mile
Lower

CO WELLS CO6000000080881

Fid:	80880	Objectid:	80881
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038614		
Receipt:	9038614	Permit:	9964-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	BOXELDER ESTATES		
Filing:	Not Reported	Lot:	1
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	SW
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499295.2		
Utmy:	4490854.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568462		
Longdecdeg:	-105.008326		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1961-10-25		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	0	Botpercas:	0
Yield:	9		
Staticwl:	9		
Applicantr:	BISHOP GLEN	Ogcc api:	Not Reported
Complewe:	3		
Ogjobbatch:	0		
Disputmx:	499305.3		
Disputmy:	4490882.2		
Latitude:	40.5684621706		
Longitude:	-105.008326279		
Site id:	CO6000000080881		

BB326
West
1/2 - 1 Mile
Higher

FED USGS USGS40000222489

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403446105012401		
Monloc name:	SB00706816BBA1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5794269
Longitude:	-105.0238652	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4920.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	31.2
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-07-21	5.90	

BC327
North
1/2 - 1 Mile
Higher

CO WELLS CO6000000082683

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82682	Objectid:	82683
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040564		
Receipt:	9040564	Permit:	58979-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	1850
Coordewdir:	E	Coordns:	188
Coordnsdir:	N		
Utmx:	499340.6		
Utmy:	4493821.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.595197		
Longdecdeg:	-105.007793		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-04-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1967-10-23		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	WISE FRED M		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499340.6		
Disputmy:	4493821.7		
Latitude:	40.5951970014		
Longitude:	-105.00779304		
Site id:	CO6000000082683		

BD328
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082638

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82637	Objectid:	82638
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040518		
Receipt:	9040518	Permit:	57046-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtid:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	.89999998		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	660
Coordewdir:	E	Coordns:	1980
Coordnsdir:	N		
Utmx:	498095.4		
Utmy:	4491684.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022503		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-04-13		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1957-06-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	0	Botpercas:	0
Yield:	40		
Staticwl:	0		
Applicantn:	MATTSON RAY W & ALYCE P		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498095.4		
Disputmy:	4491684.2		
Latitude:	40.5759385738		
Longitude:	-105.022502831		
Site id:	CO6000000082638		

BD329
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082125

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82124	Objectid:	82125
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039994		
Receipt:	9039994	Permit:	38213-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	2	Lot:	12
Block:	3	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498094.6		
Utmy:	4491684.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1969-06-12		
Permexpire:	Not Reported		
Wellconstr:	1969-07-31		
Firstbenef:	1969-07-23		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	ALSO S 1/2 OF LOT 11		
Elev:	0	Welldepth:	19
Topperfcas:	10	Botperfcas:	19
Yield:	15		
Staticwl:	9		
Applicantn:	STONEMETS FOREST L		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498113.3		
Disputmy:	4491707		
Latitude:	40.575938572		
Longitude:	-105.022512283		
Site id:	CO6000000082125		

**BD330
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081596

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81595	Objectid:	81596
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039427		
Receipt:	9039427	Permit:	22913-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498094.6		
Utmy:	4491684.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1965-02-24		
Permexpire:	Not Reported		
Wellconstr:	1965-04-09		
Firstbenef:	1965-04-09		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	28
Toppercas:	21	Botpercas:	28
Yield:	5		
Staticwl:	7		
Applicantn:	YOUNIE GENE		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498104.3		
Disputmy:	4491712.2		
Latitude:	40.575938572		
Longitude:	-105.022512283		
Site id:	CO6000000081596		

BD331
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081492

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81491	Objectid:	81492
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039317		
Receipt:	9039317	Permit:	20258-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	Not Reported	Lot:	3
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498094.6		
Utmy:	4491684.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1964-06-12		
Permexpire:	Not Reported		
Wellconstr:	1964-07-10		
Firstbenef:	1964-07-10		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	17
Toppercas:	11	Botpercas:	17
Yield:	20		
Staticwl:	9		
Applicantn:	WEBB TED		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498094		
Disputmy:	4491684		
Latitude:	40.575938572		
Longitude:	-105.022512283		
Site id:	CO6000000081492		

BD332
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082131

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82130	Objectid:	82131
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040000		
Receipt:	9040000	Permit:	38724-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	2	Lot:	11&11
Block:	3	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498094.6		
Utmy:	4491684.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1969-07-23		
Permexpire:	Not Reported		
Wellconstr:	1969-07-24		
Firstbenef:	1969-07-24		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	19
Topperfcas:	10	Botperfcas:	19
Yield:	15		
Staticwl:	8		
Applicantn:	GREGG GILBERT MICHAEL & JUDY KAY		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498120		
Disputmy:	4491699		
Latitude:	40.575938572		
Longitude:	-105.022512283		
Site id:	CO6000000082131		

BD333
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082726

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82726	Objectid:	82726
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040607		
Receipt:	9040607	Permit:	60120-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASAND ACRES		
Filing:	2	Lot:	2
Block:	6	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498094.6		
Utmy:	4491684.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1972-05-05		
Permexpire:	Not Reported		
Wellconstr:	1972-10-11		
Firstbenef:	1973-04-05		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Topperfcas:	20	Botperfcas:	30
Yield:	15		
Staticwl:	10		
Applicantn:	PALMER RENDELL & DONNA		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498120		
Disputmy:	4491669		
Latitude:	40.575938572		
Longitude:	-105.022512283		
Site id:	CO6000000082726		

BD334
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000082254

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82253	Objectid:	82254
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040129		
Receipt:	9040129	Permit:	42517-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498094.6		
Utmy:	4491684.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1970-08-12		
Permexpire:	Not Reported		
Wellconstr:	1970-08-03		
Firstbenef:	1970-08-03		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	30
Topperfcas:	20	Botperfcas:	30
Yield:	20		
Staticwl:	8		
Applicantn:	CAMPBELL LARRY		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498123.5		
Disputmy:	4491678.8		
Latitude:	40.575938572		
Longitude:	-105.022512283		
Site id:	CO6000000082254		

**BD335
WSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000082176

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	82175	Objectid:	82176
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9040046		
Receipt:	9040046	Permit:	39799-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	Not Reported	Lot:	5&6
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498094.6		
Utmy:	4491684.2		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.575939		
Longdecdeg:	-105.022512		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1969-11-18		
Permexpire:	Not Reported		
Wellconstr:	1969-11-21		
Firstbenef:	1969-11-21		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	20
Topperfcas:	10	Botperfcas:	20
Yield:	15		
Staticwl:	7		
Applicantn:	HUTCHINS MERLE A		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498123.5		
Disputmy:	4491689.2		
Latitude:	40.575938572		
Longitude:	-105.022512283		
Site id:	CO6000000082176		

BE336
South
1/2 - 1 Mile
Lower

CO WELLS CO6000000080429

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	80428	Objectid:	80429
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038129		
Receipt:	9038129	Permit:	1859-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499699.8		
Utmy:	4490844.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568377		
Longdecdeg:	-105.003546		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1958-08-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	26
Toppercas:	0	Botpercas:	0
Yield:	10		
Staticwl:	0		
Applicantn:	ARMENT LEONARD E		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499699		
Disputmy:	4490844		
Latitude:	40.5683768312		
Longitude:	-105.003546461		
Site id:	CO6000000080429		

BE337
South
1/2 - 1 Mile
Lower

CO WELLS CO6000000080457

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	80456	Objectid:	80457
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038157		
Receipt:	9038157	Permit:	2151-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SE	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	499699.8		
Utmy:	4490844.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568377		
Longdecdeg:	-105.003546		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1958-10-25		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Toppercas:	0	Botpercas:	0
Yield:	10		
Staticwl:	6		
Applicantn:	BRYANT PAUL T		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499709.3		
Disputmy:	4490872.2		
Latitude:	40.5683768312		
Longitude:	-105.003546461		
Site id:	CO6000000080457		

BF338
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000454638

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	454637	Objectid:	454638
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0497123B		
Receipt:	0497123B	Permit:	243453--A
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	Not Reported	Lot:	9
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	3		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1050
Coordewdir:	E	Coordns:	1145
Coordnsdir:	N		
Utmx:	497980.5		
Utmy:	4491937.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578222		
Longdecdeg:	-105.023861		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	ACRES		
Annappropr:	0		
Permissued:	2002-08-27		
Permexpire:	2004-08-27		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	CLARK JACQUELINE		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	497980.5		
Disputmy:	4491937.7		
Latitude:	40.5782220577		
Longitude:	-105.023861185		
Site id:	CO6000000454638		

BF339
WSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000454637

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	454636	Objectid:	454637
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0497123A		
Receipt:	0497123A	Permit:	243453-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	Not Reported	Lot:	9
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	3		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1050
Coordewdir:	E	Coordns:	1150
Coordnsdir:	N		
Utmx:	497980.4		
Utmy:	4491936.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.578209		
Longdecdeg:	-105.023862		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	ACRES		
Annappropr:	1		
Permissued:	2002-08-27		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1943-01-01		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	15
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	0		
Applicantn:	CLARK JACQUELINE		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	497980.4		
Disputmy:	4491936.2		
Latitude:	40.5782085445		
Longitude:	-105.023862362		
Site id:	CO6000000454637		

**BG340
SE
1/2 - 1 Mile
Lower**

CO WELLS CO6000000081053

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81052	Objectid:	81053
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038808		
Receipt:	9038808	Permit:	11993-R
Wdid:	0306724	Currstatus:	Well Constructed
Wellname:	RUDOLPH FARM WELL #2	Caseno:	W6376
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500504.9		
Utmy:	4491239.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.571935		
Longdecdeg:	-104.994035		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-04-21		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1955-05-09		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Also CW Subtrust, Lincoln Trust Co. - custodian BFBO Marbara A. Medina Ind. Retirement Account, Highlands Properties 48		
Elev:	0	Welldepth:	58
Topperfcas:	0	Botperfcas:	0
Yield:	700		
Staticwl:	16		
Applicantn:	WHITE ERIC CHRISTOPHER DANIEL & JANE ET		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500514.3		
Disputmy:	4491267.2		
Latitude:	40.5719352516		
Longitude:	-104.994034966		
Site id:	CO6000000081053		

BG341
SE
1/2 - 1 Mile
Lower

CO WELLS CO6000000081414

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81413	Objectid:	81414
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039234		
Receipt:	9039234	Permit:	19252-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	SW	Q40:	NE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500504.9		
Utmy:	4491239.6		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.571935		
Longdecdeg:	-104.994035		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1964-04-16		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	42
Toppercas:	0	Botpercas:	0
Yield:	3		
Staticwl:	20		
Applicantn:	EAST SIDE LUMBER CO		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500504		
Disputmy:	4491239		
Latitude:	40.5719352516		
Longitude:	-104.994034966		
Site id:	CO6000000081414		

BB342
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000198218

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	198217	Objectid:	198218
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0007326A		
Receipt:	0007326A	Permit:	123366--A
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	Not Reported	Lot:	13
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1211
Coordewdir:	E	Coordns:	600
Coordnsdir:	N		
Utmx:	497934		
Utmy:	4492103.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579717		
Longdecdeg:	-105.024411		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1982-02-26		
Permexpire:	1984-02-26		
Wellconstr:	1984-02-12		
Firstbenef:	Not Reported		
Pumpinstal:	1983-04-01		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	12
Toppercas:	3	Botpercas:	12
Yield:	12		
Staticwl:	5		
Applicantn:	STOKLEY PAULA J & CLAYTON E		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	497934		
Disputmy:	4492103.7		
Latitude:	40.5797174198		
Longitude:	-105.024411144		
Site id:	CO6000000198218		

BC343
North
1/2 - 1 Mile
Higher

CO WELLS CO6000000081431

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81430	Objectid:	81431
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039253		
Receipt:	9039253	Permit:	19324-S
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1858
Coordewdir:	E	Coordns:	41
Coordnsdir:	N		
Utmx:	499338.4		
Utmy:	4493866.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.595602		
Longdecdeg:	-105.007819		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-04-29		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1949-05-31		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	35
Toppercas:	23	Botpercas:	35
Yield:	300		
Staticwl:	6		
Applicantn:	FRONT RANGE STORAGE SYSTEMS LLC		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499338.4		
Disputmy:	4493866.7		
Latitude:	40.5956023987		
Longitude:	-105.007819088		
Site id:	CO6000000081431		

BB344
West
1/2 - 1 Mile
Higher

CO WELLS CO6000000084279

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	84278	Objectid:	84279
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9042242		
Receipt:	9042242	Permit:	123366-
Wdid:	Not Reported	Currstatus:	Well Abandoned
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	PLEASANT ACRES		
Filing:	Not Reported	Lot:	13
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	17
Q160:	NE	Q40:	NE
Q10:	Not Reported	Coordew:	1250
Coordewdir:	E	Coordns:	600
Coordnsdir:	N		
Utmx:	497922.1		
Utmy:	4492103.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.579717		
Longdecdeg:	-105.024552		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1981-11-19		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-05-01		
Pumpinstal:	Not Reported		
Wellplugge:	1982-02-26		
Comment :	Not Reported		
Elev:	0	Welldepth:	12
Toppercas:	0	Botpercas:	0
Yield:	20		
Staticwl:	0		
Applicantn:	SIGWARD EDWARD A		
Complewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	497922.1		
Disputmy:	4492103.7		
Latitude:	40.5797173901		
Longitude:	-105.0245175		
Site id:	CO6000000084279		

BC345
North
1/2 - 1 Mile
Higher

CO WELLS CO6000000081432

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81431	Objectid:	81432
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039254		
Receipt:	9039254	Permit:	19324-T
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	2026
Coordewdir:	E	Coordns:	43
Coordnsdir:	N		
Utmx:	499287.2		
Utmy:	4493867.2		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.595607		
Longdecdeg:	-105.008424		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-04-29		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1946-06-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	32
Toppercas:	23	Botpercas:	32
Yield:	750		
Staticwl:	6		
Applicantn:	FRONT RANGE STORAGE SYSTEMS LLC		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499287.2		
Disputmy:	4493867.2		
Latitude:	40.5956068612		
Longitude:	-105.008424193		
Site id:	CO6000000081432		

**BH346
SE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000188389

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	188388	Objectid:	188389
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=C350012		
Receipt:	C350012	Permit:	12-WCB
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500711.5		
Utmy:	4491435		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.573695		
Longdecdeg:	-104.991594		
Use1:	Not Reported	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1955-05-20		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	58
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	RUDOLPH LARRY		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500721.3		
Disputmy:	4491463.2		
Latitude:	40.5736954407		
Longitude:	-104.991593915		
Site id:	CO6000000188389		

**BH347
SE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000188433

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	188432	Objectid:	188433
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=C350056		
Receipt:	C350056	Permit:	56-WCB
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500711.5		
Utmy:	4491435		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.573695		
Longdecdeg:	-104.991594		
Use1:	Not Reported	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1954-03-10		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	62
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	FRITZLER FRED B		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500711		
Disputmy:	4491435		
Latitude:	40.5736954407		
Longitude:	-104.991593915		
Site id:	CO6000000188433		

**BH348
SE
1/2 - 1 Mile
Higher**

CO WELLS CO6000000188595

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	188594	Objectid:	188595
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=C350218		
Receipt:	C350218	Permit:	218-WCB
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	Not Reported	Q40:	Not Reported
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	500711.5		
Utmy:	4491435		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.573695		
Longdecdeg:	-104.991594		
Use1:	Not Reported	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	Not Reported		
Annappropr:	0		
Permissued:	1956-08-10		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	59
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	NELSON BASTROM A		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	500730.3		
Disputmy:	4491458		
Latitude:	40.5736954407		
Longitude:	-104.991593915		
Site id:	CO6000000188595		

**BI349
SSW
1/2 - 1 Mile
Lower**

CO WELLS CO6000000084142

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	84141	Objectid:	84142
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9042098		
Receipt:	9042098	Permit:	110878-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	3770
Coordewdir:	E	Coordns:	889
Coordnsdir:	S		
Utmx:	498753.1		
Utmy:	4490935.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.569196		
Longdecdeg:	-105.014731		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	1		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1961-03-08		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	25
Toppercas:	0	Botpercas:	0
Yield:	25		
Staticwl:	10		
Applicantn:	BATH JAMES		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498753		
Disputmy:	4490935		
Latitude:	40.5691957575		
Longitude:	-105.014730633		
Site id:	CO6000000084142		

BI350
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000276020

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	276019	Objectid:	276020
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0111547		
Receipt:	0111547	Permit:	110878--A
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	3770
Coordewdir:	E	Coordns:	889
Coordnsdir:	S		
Utmx:	498753.1		
Utmy:	4490935.5		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.569195		
Longdecdeg:	-105.014731		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1979-10-05		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Toppercas:	0	Botpercas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	BATH J		
Completewe:	2	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498763.3		
Disputmy:	4490963.2		
Latitude:	40.5691948564		
Longitude:	-105.014730633		
Site id:	CO6000000276020		

**BJ351
NNW
1/2 - 1 Mile
Higher**

FED USGS USGS40000222600

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403544105003501		
Monloc name:	SB00706809ABB2 USGS 403544105003501		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.595538
Longitude:	-105.0102535	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Alluvium and Terrace Deposits		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	32
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

BK352
SSW
1/2 - 1 Mile
Lower

CO WELLS CO600000080607

Fid:	80606	Objectid:	80607
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038319		
Receipt:	9038319	Permit:	5243-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498890.7		
Utmx:	4490864.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568552		
Longdecdeg:	-105.013105		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1960-03-28		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	574
Toppercas:	0	Botpercas:	0
Yield:	15		
Staticwl:	5		
Applicantn:	HENRY JOHN T		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498909.3		
Disputmy:	4490887		
Latitude:	40.5685518159		
Longitude:	-105.013104929		
Site id:	CO6000000080607		

BK353
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000080544

Fid:	80543	Objectid:	80544
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038251		
Receipt:	9038251	Permit:	3781-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498890.7		
Utmy:	4490864.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568552		
Longdecdeg:	-105.013105		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1959-08-10		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	31
Toppercas:	0	Botpercas:	0
Yield:	30		
Staticwl:	6		
Applicantr:	BULLARD REASE		
Complewee:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498900.3		
Disputmy:	4490892.2		
Latitude:	40.5685518159		
Longitude:	-105.013104929		
Site id:	CO6000000080544		

BK354
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000080543

Fid:	80542	Objectid:	80543
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038250		
Receipt:	9038250	Permit:	3735-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498890.7		
Utmy:	4490864.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568552		
Longdecdeg:	-105.013105		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1959-07-02		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Toppercas:	0	Botpercas:	0
Yield:	13		
Staticwl:	6		
Applicantn:	ORCUTT JOHN M		
Complewe:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498890		
Disputmy:	4490864		
Latitude:	40.5685518159		
Longitude:	-105.013104929		
Site id:	CO6000000080543		

BK355
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081601

Fid:	81600	Objectid:	81601
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039433		
Receipt:	9039433	Permit:	23037-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498890.7		
Utmy:	4490864.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568552		
Longdecdeg:	-105.013105		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-03-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Toppercas:	0	Botpercas:	0
Yield:	10		
Staticwl:	9		
Applicantr:	MILLER THOMAS A		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498919.5		
Disputmy:	4490858.8		
Latitude:	40.5685518159		
Longitude:	-105.013104929		
Site id:	CO6000000081601		

BK356
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000081595

Fid:	81594	Objectid:	81595
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039426		
Receipt:	9039426	Permit:	22897-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498890.7		
Utmy:	4490864.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568552		
Longdecdeg:	-105.013105		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1965-03-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	24
Toppercas:	0	Botpercas:	0
Yield:	10		
Staticwl:	7		
Applicantr:	HIATT DON		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498919.5		
Disputmy:	4490869.2		
Latitude:	40.5685518159		
Longitude:	-105.013104929		
Site id:	CO6000000081595		

BK357
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000080843

Fid:	80842	Objectid:	80843
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9038576		
Receipt:	9038576	Permit:	9163-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	0
Coordewdir:	Not Reported	Coordns:	0
Coordnsdir:	Not Reported		
Utmx:	498890.7		
Utmy:	4490864.1		
Locaccurac:	Spotted from quarters		
Latdecdeg:	40.568552		
Longdecdeg:	-105.013105		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1961-07-22		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	23
Toppercas:	0	Botpercas:	0
Yield:	10		
Staticwl:	9		
Applicantn:	WRIGHT WALTER E		
Complewe:	3	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498916		
Disputmy:	4490879		
Latitude:	40.5685518159		
Longitude:	-105.013104929		
Site id:	CO6000000080843		

BL358
NNW
1/2 - 1 Mile
Higher

FED USGS USGS40000222584

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403539105005401		
Monloc name:	SB00706809ABB3		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5941491
Longitude:	-105.0155314	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4959.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	29.4
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-07-21	3.00	

BJ359
NNW
1/2 - 1 Mile
Higher

CO WELLS CO6000000081433

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	81432	Objectid:	81433
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039255		
Receipt:	9039255	Permit:	19324-U
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	WELL #4	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	9
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	2596
Coordewdir:	E	Coordns:	54
Coordnsdir:	N		
Utmx:	499113.5		
Utmy:	4493867.7		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.595611		
Longdecdeg:	-105.010477		
Use1:	IRRIGATION	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1960-04-29		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1946-06-30		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	68
Toppercas:	38	Botpercas:	68
Yield:	1000		
Staticwl:	4		
Applicantn:	MILL JAKE		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	499113.5		
Disputmy:	4493867.7		
Latitude:	40.5956111977		
Longitude:	-105.010477059		
Site id:	CO6000000081433		

BI360
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000336134

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Fid:	336133	Objectid:	336134
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0314693A		
Receipt:	0314693A	Permit:	157669-
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtldist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported
Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	1675
Coordewdir:	W	Coordns:	730
Coordnsdir:	S		
Utmx:	498794.8		
Utmy:	4490886.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.56875		
Longdecdeg:	-105.014238		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-07-18		
Permexpire:	Not Reported		
Wellconstr:	1990-06-12		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	35
Toppercas:	20	Botpercas:	35
Yield:	15		
Staticwl:	8		
Applicantn:	HIXON TIM		
Completwew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498794.8		
Disputmy:	4490886.1		
Latitude:	40.5687498781		
Longitude:	-105.014237903		
Site id:	CO6000000336134		

361
NNE
1/2 - 1 Mile
Higher

FED USGS USGS40000222599

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403544105000401		
Monloc name:	SB00706809AAA		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.595538
Longitude:	-105.001642	Sourcemap scale:	Not Reported
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4963.00
Vert measure units:	feet	Vertacc measure val:	5.
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Alluvium and Terrace Deposits		
Aquifer type:	Unconfined single aquifer		
Construction date:	Not Reported	Welldepth:	26
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1959-10-01	7.00		1959-10-01	7.00	

BJ362
NNW
1/2 - 1 Mile
Higher

FED USGS USGS40000222602

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403545105003501		
Monloc name:	B7-68-9ABB1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5958158
Longitude:	-105.0102535	Sourcemap scale:	Not Reported
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	Not Reported	Wellholeddepth:	Not Reported
Welldepth units:	Not Reported		
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

BL363
NNW
1/2 - 1 Mile
Higher

FED USGS USGS40000222581

Org. Identifier:	USGS-CO		
Formal name:	USGS Colorado Water Science Center		
Monloc Identifier:	USGS-403538105005801		
Monloc name:	SB00706809ABB2 USGS 403538105005801		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	10190007	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	40.5938713
Longitude:	-105.0166426	Sourcemap scale:	12500
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	4960.00
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	32.3
Welldepth units:	ft	Wellholeddepth:	Not Reported
Wellholeddepth units:	Not Reported		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-07-21	4.20	

B1364
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000207797

Fid:	207796	Objectid:	207797
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0016324		
Receipt:	0016324	Permit:	90208-VE
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	1675
Coordewdir:	W	Coordns:	690
Coordnsdir:	S		
Utmx:	498794.6		
Utmy:	4490874.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.568642		
Longdecdeg:	-105.01424		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annappropr:	0		
Permissued:	1990-06-01		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HIXON TIM		
Completewe:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498794.6		
Disputmy:	4490874.1		
Latitude:	40.5686417706		
Longitude:	-105.014240243		
Site id:	CO6000000207797		

**365
East
1/2 - 1 Mile
Higher**

CO WELLS CO600000081280

Fid:	81279	Objectid:	81280
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=9039082		
Receipt:	9039082	Permit:	15944-F
Wdid:	Not Reported	Currstatus:	Well Constructed
Wellname:	Not Reported	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtdist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	15
Q160:	NE	Q40:	NW
Q10:	Not Reported	Coordew:	3760
Coordewdir:	W	Coordns:	100
Coordnsdir:	N		
Utmx:	501040.4		
Utmy:	4492212.6		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.5807		
Longdecdeg:	-104.987707		
Use1:	OTHER	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	Not Reported		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	1972-07-05		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	18
Topperfcas:	0	Botperfcas:	0
Yield:	30		
Staticwl:	0		
Applicantn:	WHEELER SHERMAN S.		
Complewew:	1	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	501040.4		
Disputmy:	4492212.6		
Latitude:	40.5807004139		
Longitude:	-104.987706812		
Site id:	CO6000000081280		

BI366
SSW
1/2 - 1 Mile
Lower

CO WELLS CO6000000336135

Fid:	336134	Objectid:	336135
Moreinfo:	http://www.dwr.state.co.us/WellPermitSearch/View.aspx?receipt=0314693B		
Receipt:	0314693B	Permit:	157660--A
Wdid:	Not Reported	Currstatus:	Permit Issued; Completion Status Unknown
Wellname:	REPLACES LR	Caseno:	Not Reported
Div:	1	Wd:	3
County:	LARIMER	Mgmtndist:	Not Reported
Desigbasin:	Not Reported		
Subdivname:	Not Reported		
Filing:	Not Reported	Lot:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Block:	Not Reported	Ctyparclid:	Not Reported
Parcelsize:	0		
Pm:	S	Township:	7.0 N
Range:	68.0 W	Section :	16
Q160:	SW	Q40:	SE
Q10:	Not Reported	Coordew:	1635
Coordewdir:	W	Coordns:	690
Coordnsdir:	S		
Utmx:	498782.4		
Utmy:	4490874.1		
Locaccurac:	Spotted from section lines		
Latdecdeg:	40.568642		
Longdecdeg:	-105.014384		
Use1:	DOMESTIC	Use2:	Not Reported
Specialuse:	Not Reported	Aquifer1:	ALL UNNAMED AQUIFERS
Aquifer2:	Not Reported		
Permitarea:	0		
Permitunit:	acres		
Annapprpr:	0		
Permissued:	1990-07-18		
Permexpire:	Not Reported		
Wellconstr:	Not Reported		
Firstbenef:	Not Reported		
Pumpinstal:	Not Reported		
Wellplugge:	Not Reported		
Comment :	Not Reported		
Elev:	0	Welldepth:	0
Topperfcas:	0	Botperfcas:	0
Yield:	0		
Staticwl:	0		
Applicantn:	HIXON TIM		
Complewew:	0	Ogcc api:	Not Reported
Ogjobbatch:	0		
Disputmx:	498782.4		
Disputmy:	4490874.1		
Latitude:	40.5686417526		
Longitude:	-105.014384371		
Site id:	CO6000000336135		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CO Radon

Radon Test Results

Zip	Total Sites	Avg	% sites<=4 pCi/L	% sites>4<10 pCi/L	% sites>=10<20 pCi/L	% sites>20 pCi/L
80524	12	5.18	58.33	25.00	8.33	8.33

Federal EPA Radon Zone for LARIMER County: 1

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 80524

Number of sites tested: 7

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	2.500 pCi/L	67%	33%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	7.814 pCi/L	43%	43%	14%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Riparian Vegetation Data

Source: Division of Wildlife

Telephone: 970-416-3360

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Colorado GIS Well Database

Source: Office of State Engineer, Division of Water Resources

Telephone: 303-866-3581

The GIS Well database includes all wells that the Division of Water Resources permits.

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Locations

Source: Department of Natural Resources

Telephone: 303-894-2100

RADON

State Database: CO Radon

Source: Department of Public Health & Environment

Telephone: 303-692-3090

Radon Study in Colorado

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

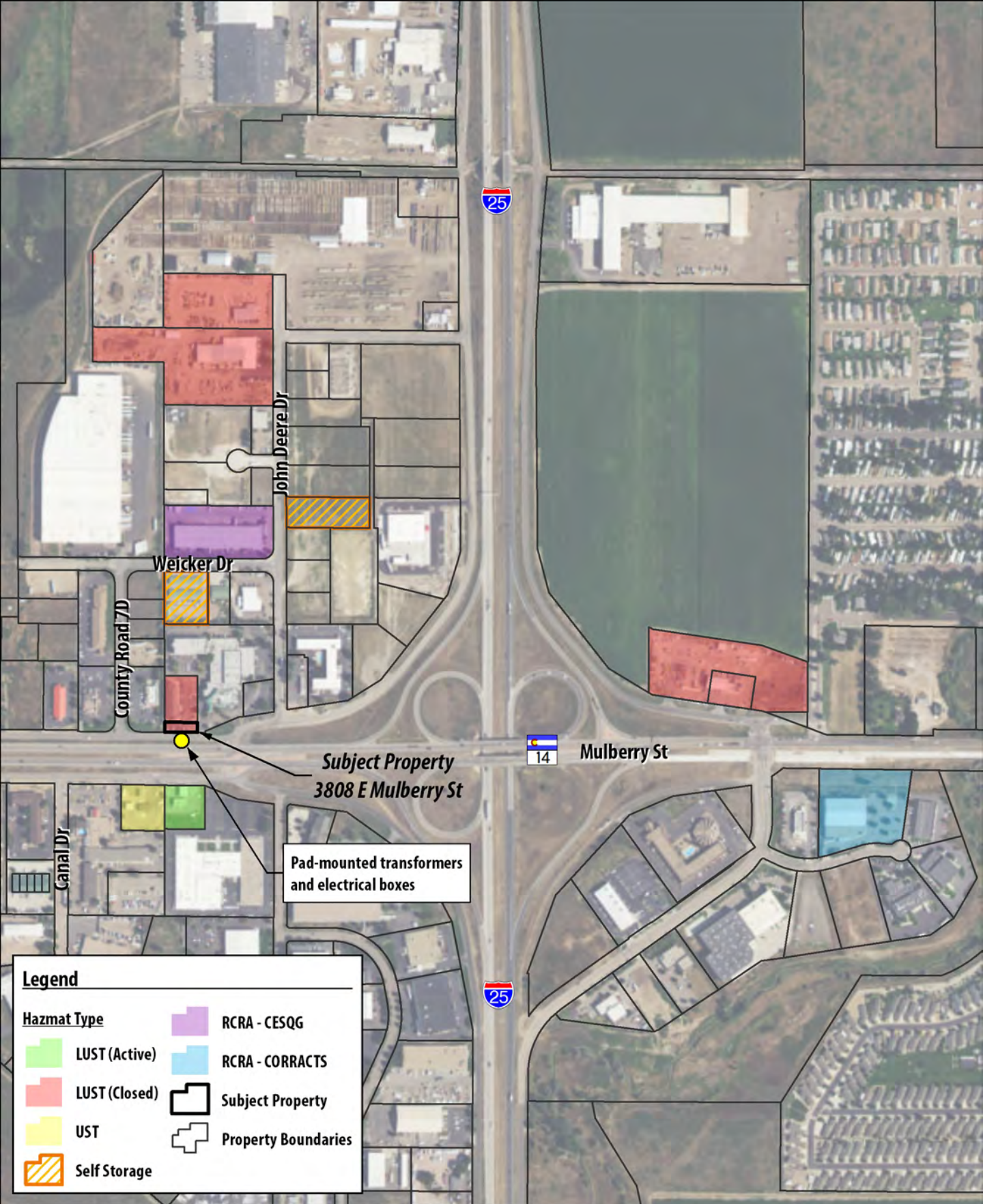
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

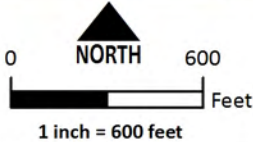
STREET AND ADDRESS INFORMATION

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Legend

Hazmat Type	
LUST (Active)	RCRA - CESQG
LUST (Closed)	RCRA - CORRACTS
UST	Subject Property
Self Storage	Property Boundaries



Hazardous Materials Map
NI-25: SH 392 to SH 14

North I-25 ROD 1 – 3808 Mulberry St Photo Log:



Photo 1

Red Lion Inn & Suites

(Looking northwest at the front entrance to the Red Lion Inn & Suites. The subject property is located on the same parcel.)



Photo 2

Red Lion Inn & Suites – Pad-Mounted Transformers

(Looking west at a set of pad-mounted transformers, electrical meters, and other electrical boxes located at the southwest corner of the property. One of the electrical boxes had a damaged casing and exposed wires.)



Photo 3

Pole-Mounted Transformers

(Looking south from the Red Lion Inn & Suites at power lines crossing Mulberry Street with a pole-mounted transformer.)



Photo 4

Monitoring Well – On Subject Property

(Looking at a monitoring well cap in the parking lot of the Red Lion Inn & Suites. The well is within the subject property to be acquired.)



Photo 5

Exposed Electrical Box

(Looking at a median in front of the Red Lion Inn & Suites with an open electrical box with exposed wires.)



Photo 6

View of FedEx Shipping Center

(Looking north at the FedEx Shipping center, located about 700 feet northeast of Red Lion Inn & Suites.)



Photo 7

Cleary Building Corp

(Looking south at the Cleary Building Corp, located about 400 feet northeast of Red Lion Inn & Suites.)



Photo 8

Swenson Self Storage

(Looking south at a self-storage property. The property is about 400 feet north of Red Lion Inn & Suites.)



Photo 9

NOCO Self Storage

(Looking southeast at another self-storage location.)



Photo 10

Vetline Equine Inc

(Looking southwest at Vetline Equine Inc, which is a retailer of medical supplies and supplements specifically for horses.)



Photo 11

Colorado Machinery LLC

(Looking west at the Colorado Machinery LLC main structure.)

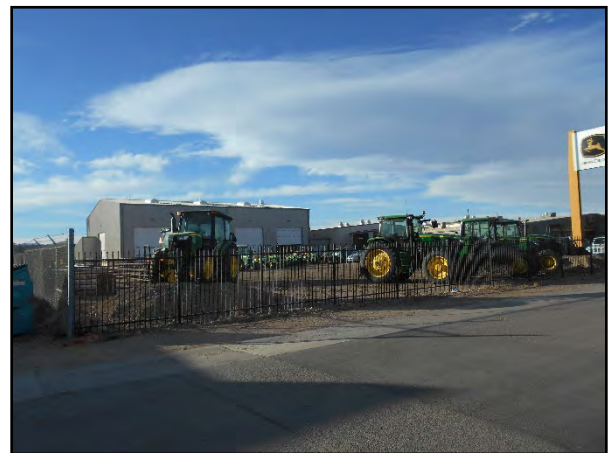


Photo 12

Colorado Machinery LLC

(Looking west at the lot for the Colorado Machinery LLC.)



Photo 13

Colorado Machinery LLC

(Looking northwest at another large structure on the Colorado Machinery property. Larger vehicles and machinery can be seen on this portion of the lot.)



Photo 14

Architectural Sheet Metal and Panels Inc.

(Looking southwest at a sheet metal fabrication business that appears to make sheet metal walls, roofs, and other items.)



Photo 15

Cap-It Covers

(Looking northeast at Cap-It Covers, formerly "Auto Collision Experts.")



Photo 16

Country Store #440

(Looking west at a gas station and convenience store, directly across Mulberry Street from the target property.)



Photo 17

Shell Gas Station

(Looking east at the Shell Gas Station, directly across Mulberry Street from the subject property.)



Photo 18

Monitoring Well – Shell Gas Station

(Looking at a monitoring well cap on the Shell Gas Station property.)



Photo 19

Edge Sports Center

(Looking northwest at the Edge Sports Center, listed as Marathon Metallic Building in the EDR report.)



Photo 20

Sunstate Equipment Co LLC

(Looking northeast at the Sunstate Equipment Co property containing large machinery, several garages, a variety of trucking vehicles, and an office.)

Attachment F: Traffic Analysis



**North I-25 Environmental Impact Statement
Revised Record of Decision 1
North I-25 SH 392 to SH 14**

**Traffic Analysis
Technical Memorandum**

**FHWA-CO-EIS-08-01-F
CDOT Project Number 18357 IM 0253-221**

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Federal Highway Administration
Colorado Department of Transportation

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FHU Project #: 109124-15, 113319-23

July 2017

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1.0 Introduction

In the North I-25 Record of Decision 1 (ROD1), the Federal Highway Administration (FHWA) selected acceleration/deceleration lanes in both directions on Interstate 25 (I-25) from State Highway 392 (SH 392) on the south to State Highway 14 (SH 14) on the north. This was considered an interim improvement and ultimately the acceleration/deceleration (accel/decel) lanes would be incorporated into the FEIS Preferred Alternative cross section when additional funds were identified. The Express Lane Alternative replaces the accel/decel lanes in both directions with the Express Lanes, consistent with the FEIS Preferred Alternative.

This ROD1 Reevaluation evaluates the implementation of Express Lanes (the Express Lane Alternative) in lieu of accel/decel lanes (Accel/Decel Alternative) as part of a longer system of Express Lanes extending south to SH 66. **Figure 1** illustrates the Express Lane Alternative.

This document summarizes traffic conditions at the four interchanges and along I-25 from SH 392 to SH 14 and compares the results among the No Action, Accel/Decel Alternative, and Express Lane Alternative scenarios.

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Figure 1. Express Lane Alternative Vicinity Map



2.0 2040 Volume Projections

The 2040 mainline volumes were obtained from AECOM (June 2017). The projections include mainline and ramp volumes and are based on the current North Front Range Metropolitan Planning Organization's (NFRMPO) travel demand model and future land use projections. The on-/off-ramp volumes developed were used as a basis for developing 2040 peak hour turning volume estimates at the four interchanges in the study area. The memorandum describes two sets of 2040 traffic volumes developed for this analysis. The first set of volumes maintains two through lanes on I-25 to reflect a No Action scenario. The second set of volumes adds capacity to I-25 by widening with Express Lanes. In this case, a constraint was placed on the cross-street demand to more accurately reflect the cross street and interchange capacity. The NFRMPO reviewed and concurred with this post processing methodology. These volumes are considered the "Build Volumes" and are applied to analysis of both build scenarios—the Accel/Decel Alternative and the Express Lane Alternative. Details on the methodology used to develop 2040 traffic projections can be found in the AECOM Traffic Technical Memorandum in **Appendix A**.

3.0 Traffic Operations Analysis

The traffic operations analyses are separated into two sections. The first section presents an analysis of ramp terminal intersections at each of the four interchanges, including intersection analyses for the West Frontage Road at the Harmony Road interchange. The second section summarizes the FREEVAL mainline I-25 traffic analysis.

3.1 Ramp Terminal Intersection Operation

Operational conditions were analyzed at each ramp terminal intersection based on procedures documented in the *Highway Capacity Manual (HCM) 2010* (Transportation Research Board, 2010). When this reevaluation was initiated this was the latest accepted methodology for intersection operation analysis. While HCM 2015 was released during the course of this project, a review of updates to the signalized intersection methodology suggests that updating to this methodology would not result in substantial changes to the operations analysis provided in HCM 2010. This analysis procedure provides a level of service (LOS), which is a qualitative measure based on the average delay per vehicle at a controlled intersection. Levels of service are described by a letter ranging from "A" to "F." LOS A represents minimal delay, while LOS F represents excessive congestion and delay. The signalized intersection analysis reports a LOS rating for the entire intersection. Typically, LOS D or better is acceptable for signalized intersections in urban areas. LOS calculations were developed using the Synchro traffic analysis software.

The Synchro analysis for each intersection also examined volume to capacity (V/C) ratios and queue lengths. The V/C ratio is a measure of the analyzed volume compared to the overall capacity of an intersection or a movement. Ratios approaching or above 1.0 indicate that the intersection or movement is approaching or is above capacity and may have operational issues. Queue length is a measure of the length of vehicles that are queued due to intersection control. Long queue lengths can disrupt intersection operations, especially if they extend into previous intersections or obstruct the flow of traffic on roadways. Queue lengths in the 95th percentile represent the worst-case scenario and are used in this analysis. The LOS outputs can be found in **Appendix C**.



3.1.1 SH 392

No Action ramp terminal intersection analyses at SH 392 are shown on **Figure 2**. With this configuration, both ramp terminals would operate at LOS C or better during the 2040 peak hours.

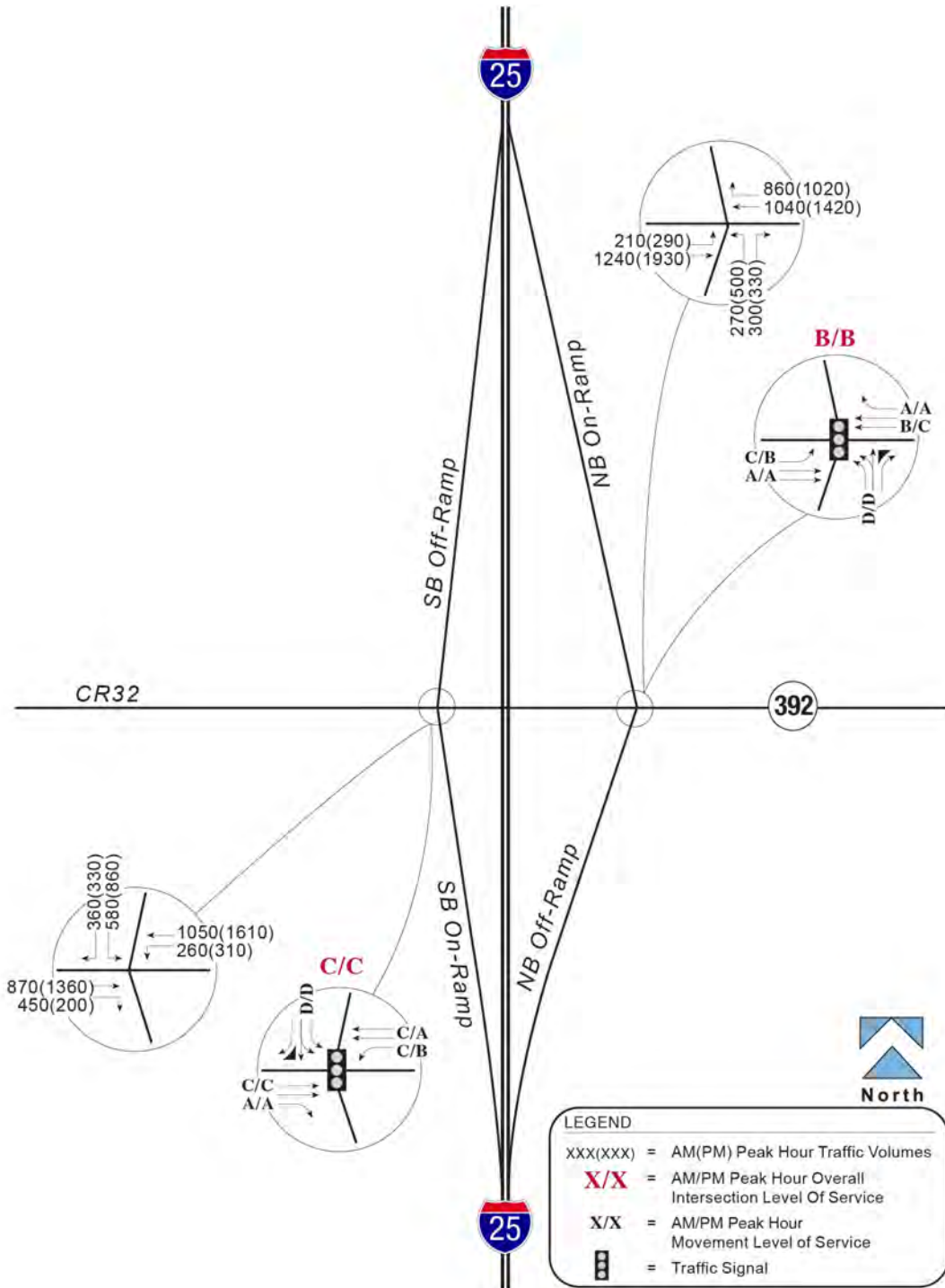
Both ramp terminal intersections are expected to operate at LOS B or better during AM and PM peak hours for both the Accel/Decel Alternative and the Express Lane Alternative as shown on **Figure 3**.

For the No Action scenario in the PM peak hours, the westbound right turn movement at the northbound ramp terminal causes queuing more than the available storage (690 feet). The westbound left turn movement at the southbound ramp terminal also has queues that exceed the available storage length (235 feet).

For the Accel/Decel Alternative and Express Lane Alternative scenarios, the westbound right turn movement at the northbound ramp terminal queueing issue is resolved due to less westbound vehicle volume in the PM peak hour. The addition of a second eastbound left-turn lane at the southbound ramp terminal resolves the westbound storage capacity issue.

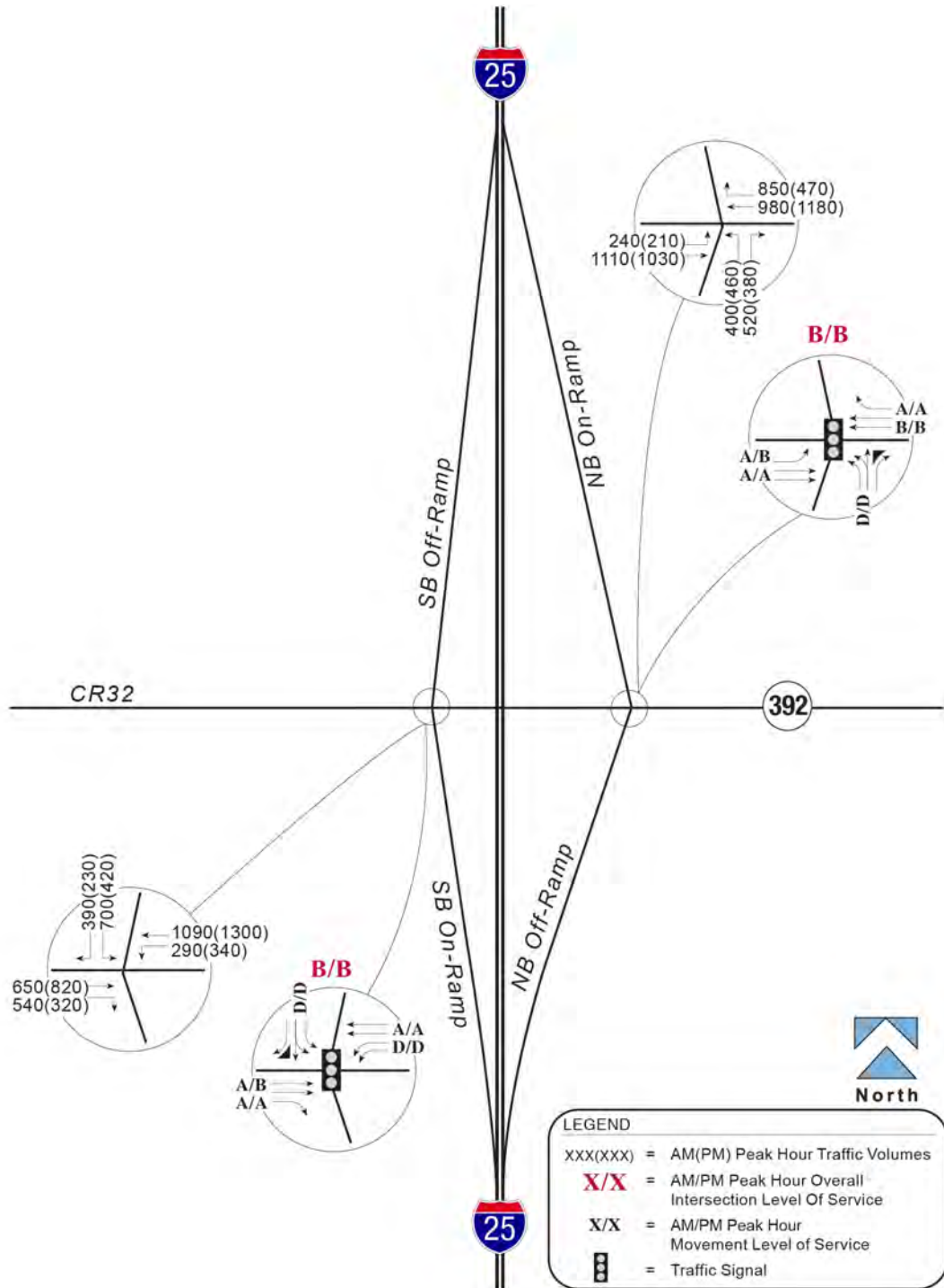


**Figure 2. No Action
I-25/SH 392 Interchange 2040 Traffic Conditions**





**Figure 3. Express Lane Alternative and Accel/Decel Alternative
SH 392 Interchange 2040 Traffic Conditions**



3.1.2 Harmony Road

Under the No Action scenario both Harmony Road ramp terminals would operate at LOS F during the 2040 peak hours except for the southbound ramp terminal, which would operate at LOS D during the AM peak period (see **Figure 4**).

Figure 5 shows the Accel/Decel Alternative scenario. This is Accel/Decel Alternative with No Action laneage and build volumes.

As part of the Express Lane Alternative ramp terminal intersection modifications are planned along Harmony Road. The westbound leg of the northbound ramp terminal intersection will provide an additional through lane. The northbound approach at that intersection will also add a third left turn lane. This increases the westbound through capacity and improves intersection operations for both movements. **Figure 6** shows the geometry configuration and LOS results for the Express Lane Alternative with ramp terminal improvements. As shown, the LOS would improve substantially as a result of the planned ramp terminal improvements and the difference between the constrained and unconstrained traffic volumes.

For the No Action scenario, V/C ratios would exceed 1.0 for some movements. The eastbound approach of the southbound ramp terminal intersection with Harmony Road would have queues that extend back to the frontage road intersection during both AM and PM peak hours. For both peak hours, excessive queuing would occur between the ramp terminal intersections.

For the Accel/Decel Alternative scenario, fewer movements would experience V/C ratios over 1.0. Northbound left turn LOS will slightly improve but long queues are still present. The eastbound approach for the southbound ramp terminal intersection queues no longer extend back to the frontage road intersection during both peak hours.

For the Express Lane Alternative, fewer movements would experience V/C ratios over 1.0 and excessive queuing would be reduced. Northbound queuing at the northbound ramp terminal intersection would be long but would not exceed the available storage at the ramp terminal intersection.

The LOS results for both the Accel/Decel Alternative and Express Lane Alternative show operational improvement over the No Action scenario. Express Lane Alternative includes additional eastbound storage that provides a substantial improvement to queuing.

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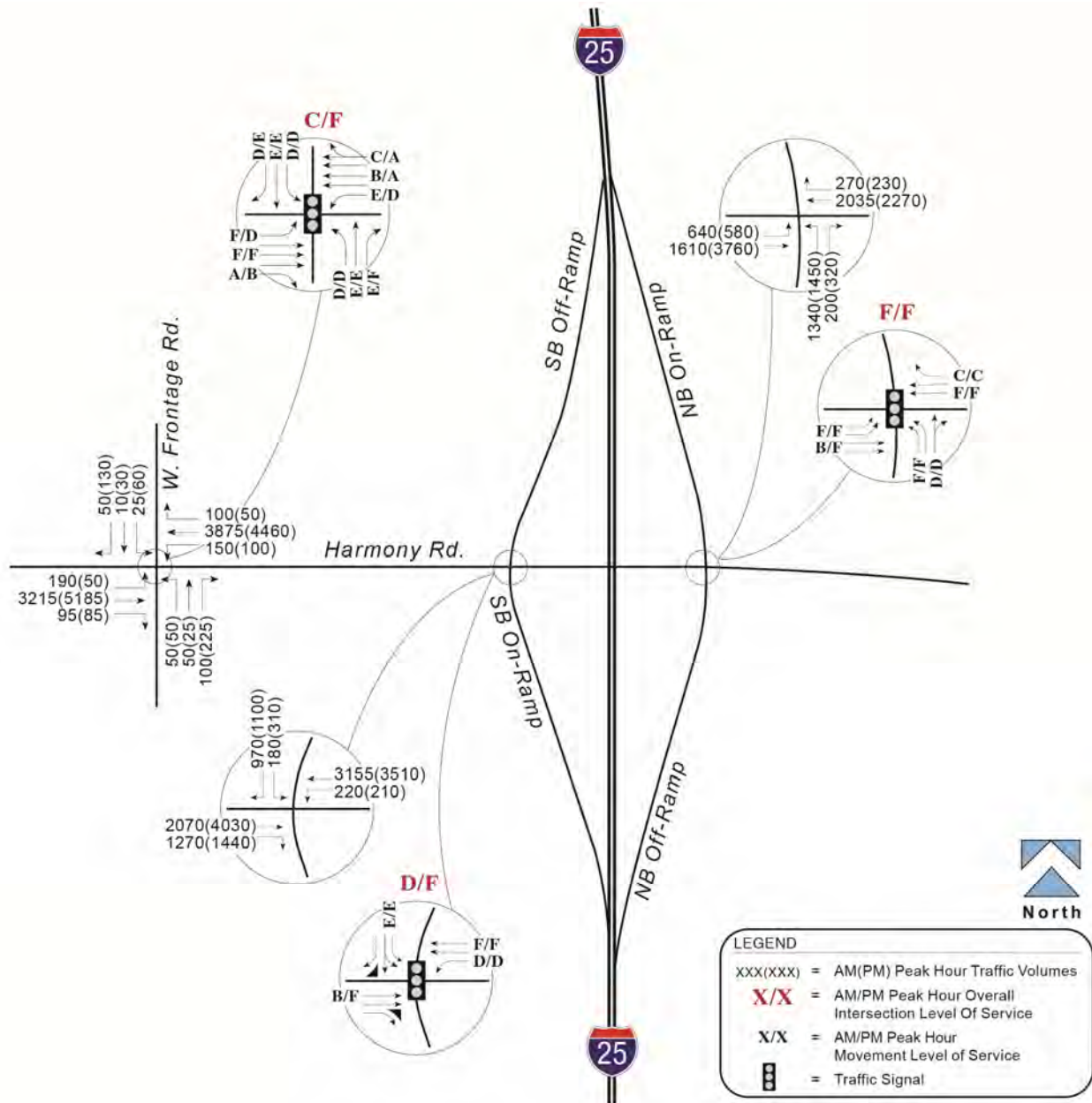
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**Figure 4. No Action
I-25/Harmony Road Interchange 2040 Traffic Conditions**



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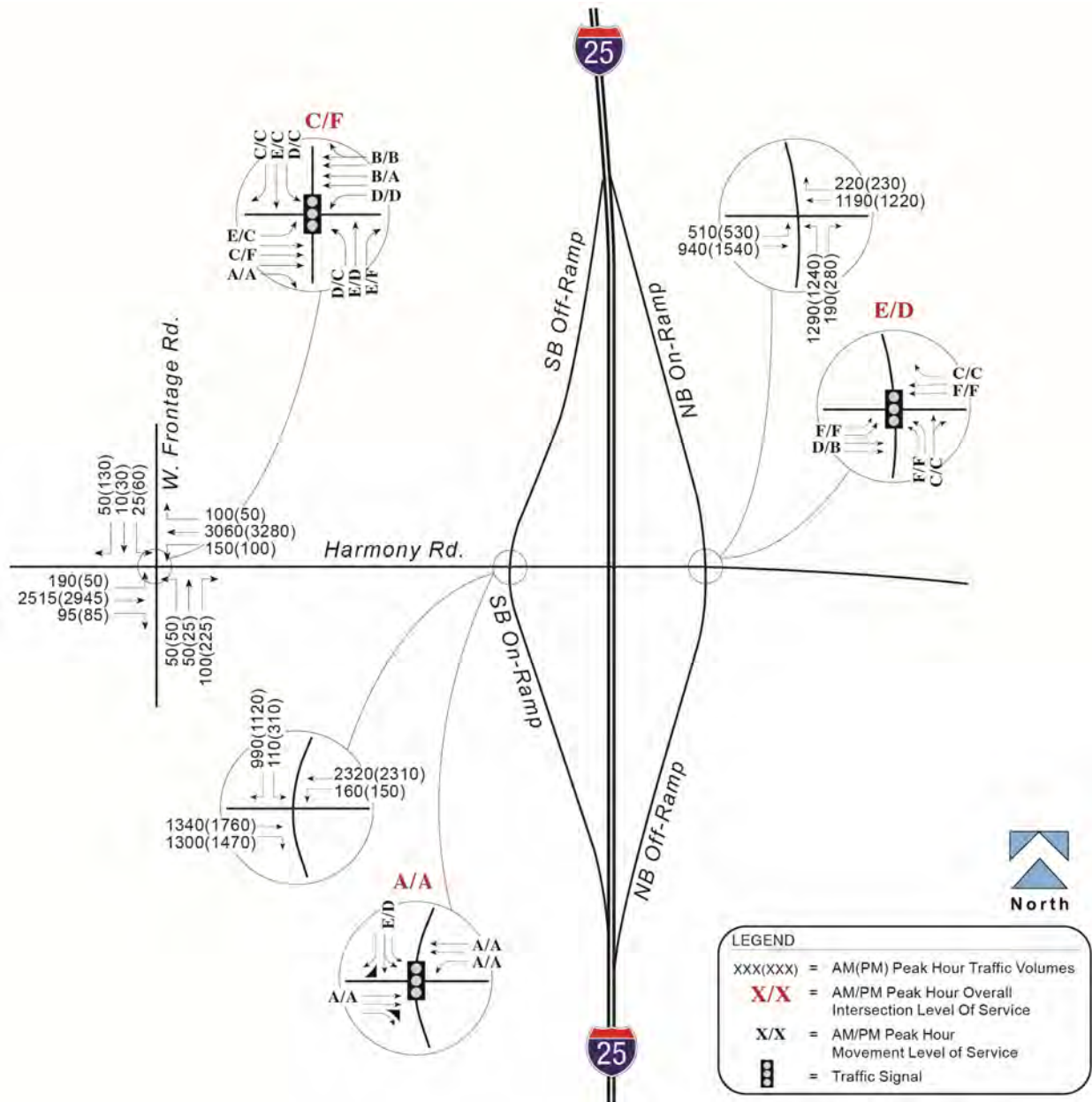
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**Figure 5. Accel/Decel Alternative
I-25/Harmony Interchange 2040 Traffic Conditions**



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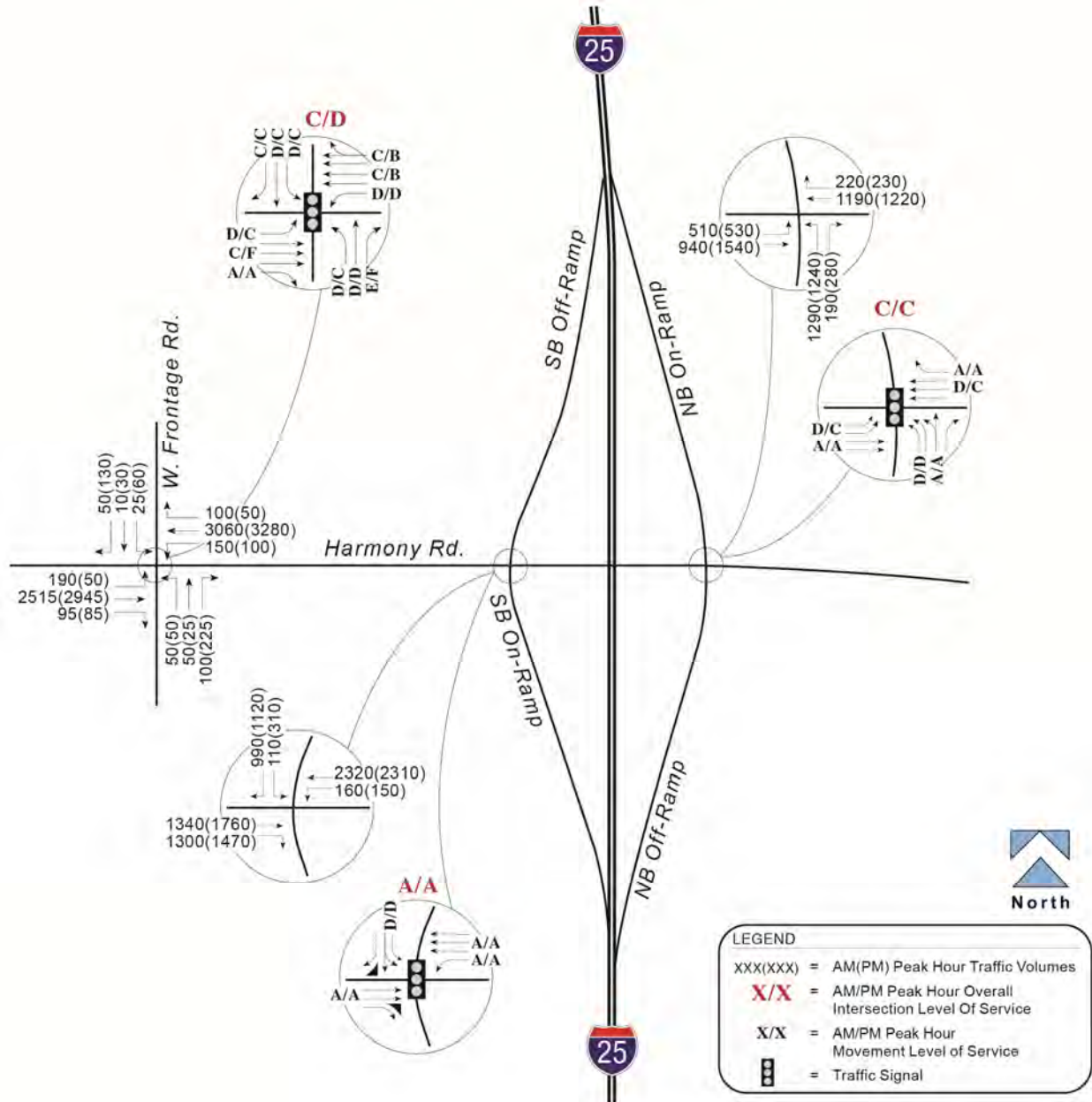
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**Figure 6. Express Lane Alternative
I-25/Harmony Interchange 2040 Traffic Conditions**



3.1.3 Prospect Road

Under the No Action scenario, both Prospect Road ramp terminals would operate at LOS F during both 2040 analysis periods, as shown on **Figure 7**.

Both ramp terminal intersections would improve to LOS C or better during both peak hours under the Accel/Decel Alternative and the Express Lane Alternative scenarios (see **Figure 8**).

For the No Action scenario, V/C ratios exceed 1.0 for some movements and cause excessive queuing. For the PM peak hour, excessive queuing occurs between the ramp terminal intersections. For both peak hours, westbound movements at the northbound ramp terminal intersection experience long queues extending away from the interchange.

For the Accel/Decel Alternative and Express Lane Alternative scenarios, V/C ratios and queuing are improved slightly and the excessive queuing between the ramp terminal intersections is eliminated.

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**Figure 7. No Action
I-25/Prospect Interchange 2040 Traffic Conditions**

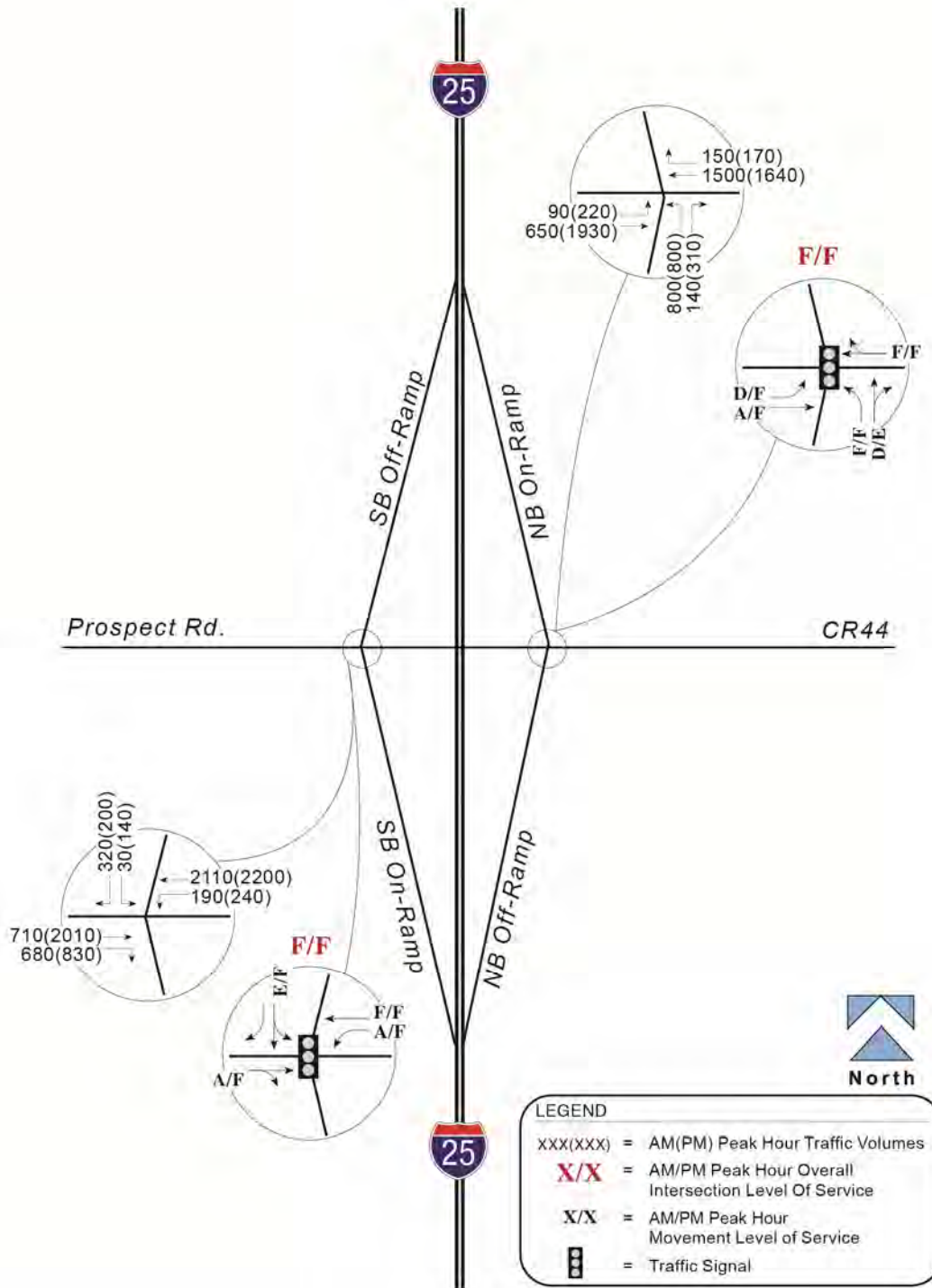
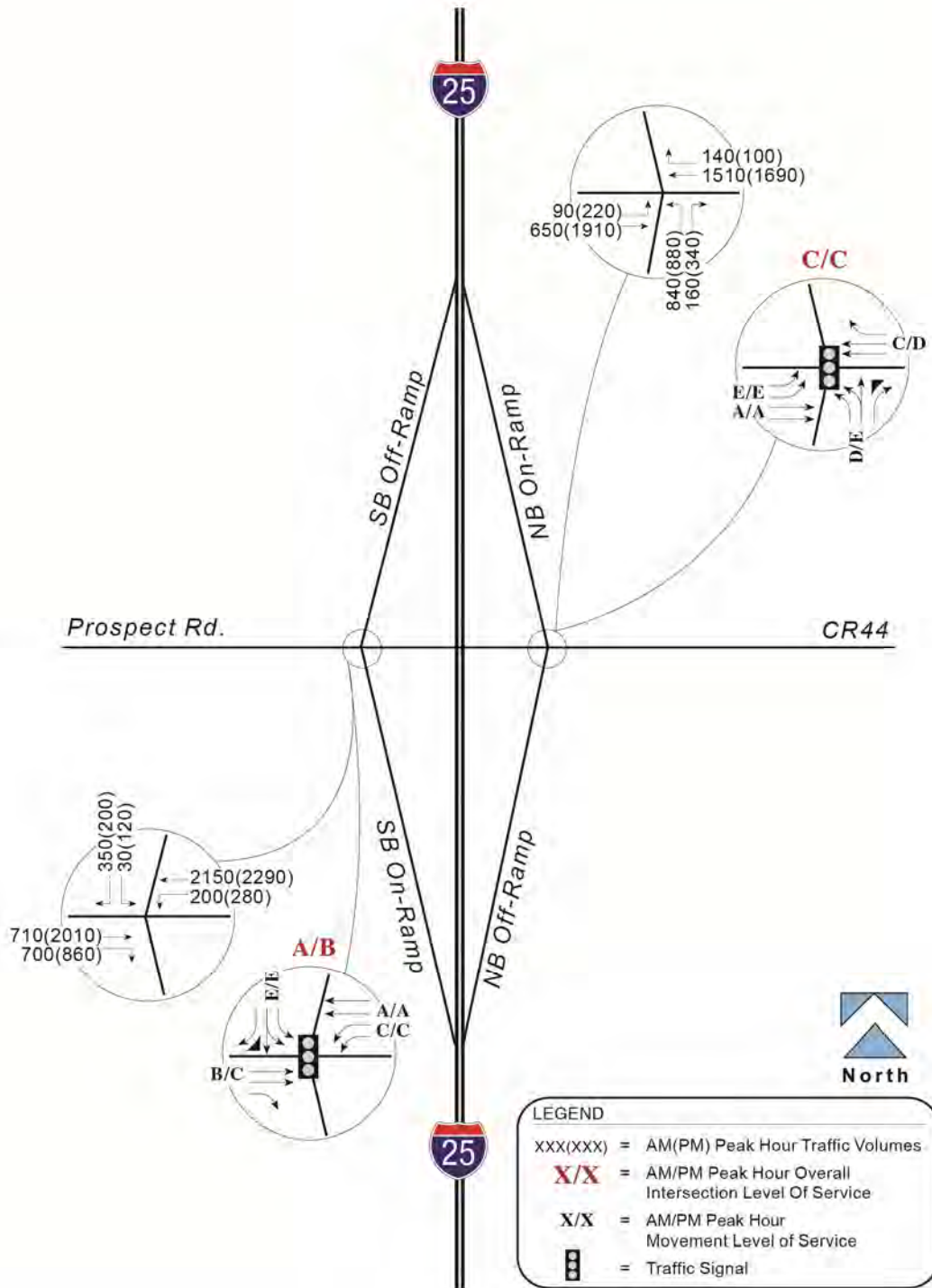




Figure 8. Accel/Decel Alternative and Express Lane Alternative Prospect Interchange 2040 Traffic Conditions



3.1.4 SH 14

The No Action SH 14 interchange configuration consists of three of four clover loop ramps. This configuration results in only one yield movement (eastbound to northbound left) on which to conduct LOS analysis. Under the No Action scenario, this left turn movement operates at LOS E and LOS F in the AM and PM peak hours, respectively (see **Figure 9**).

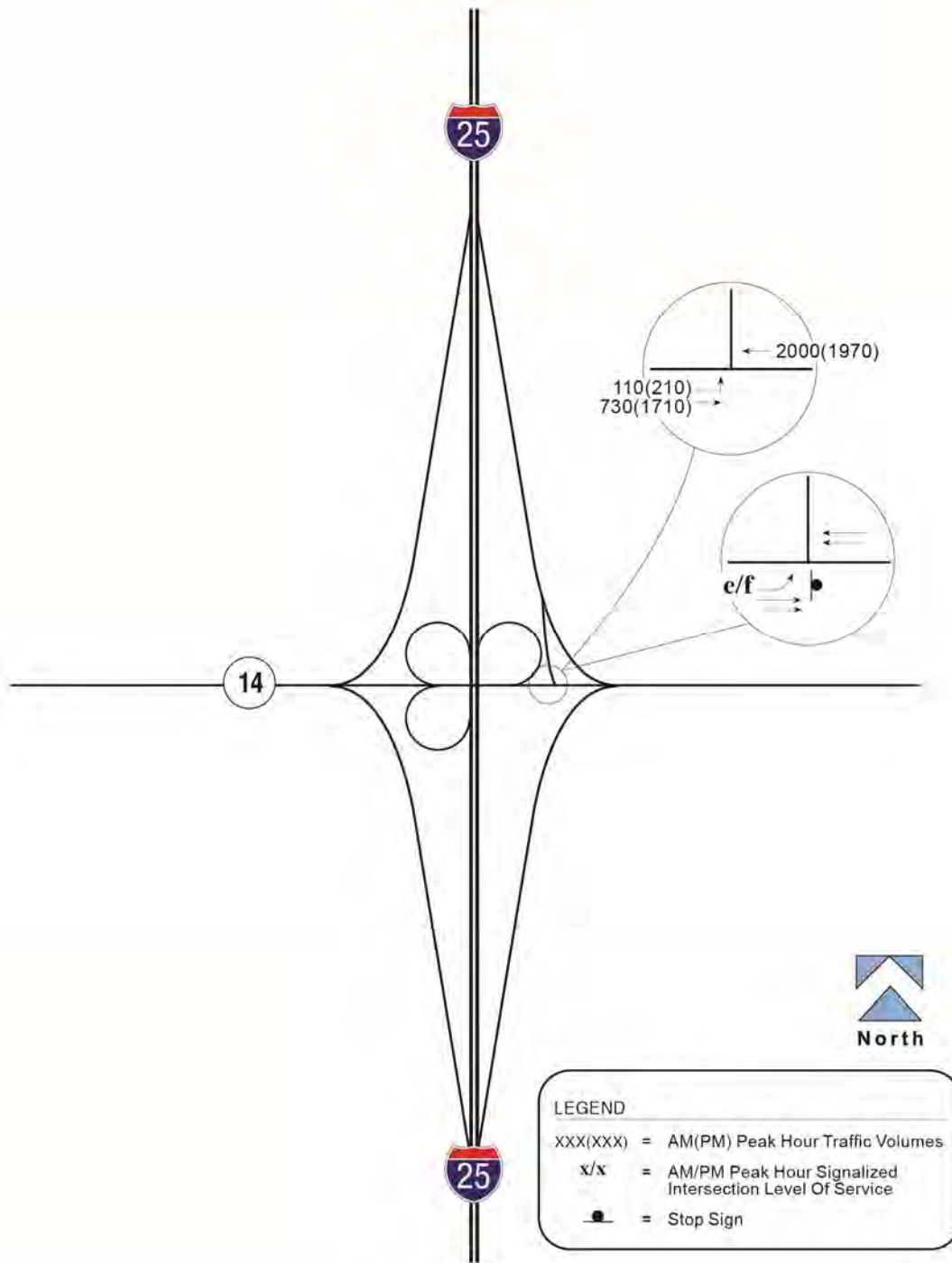
Under the Accel/Decel Alternative and Express Lane Alternative scenarios, the intersection would operate at LOS F in both peak hours (see **Figure 10**).

For the Express Lane Alternative, V/C ratios and queuing would be similar to those of the No Action. Delays and queuing would be slightly increased but would not exceed available storage.

While not included in the latest design, analysis of the Accel/Decel Alternative interchange design was completed. The Accel/Decel Alternative configuration of the SH 14/I-25 interchange eliminates the substandard loop ramps and creates a more conventional diamond interchange. Analysis of this configuration resulted in LOS A on the southbound ramp terminal and LOS B on the northbound ramp terminal during the AM and PM peak periods (see **Figure 11**).



Figure 9. No Action at I-25/SH 14 Interchange 2040 Traffic Conditions



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Figure 10. Express Lane Alternative at SH 14 Interchange 2040 Traffic Conditions

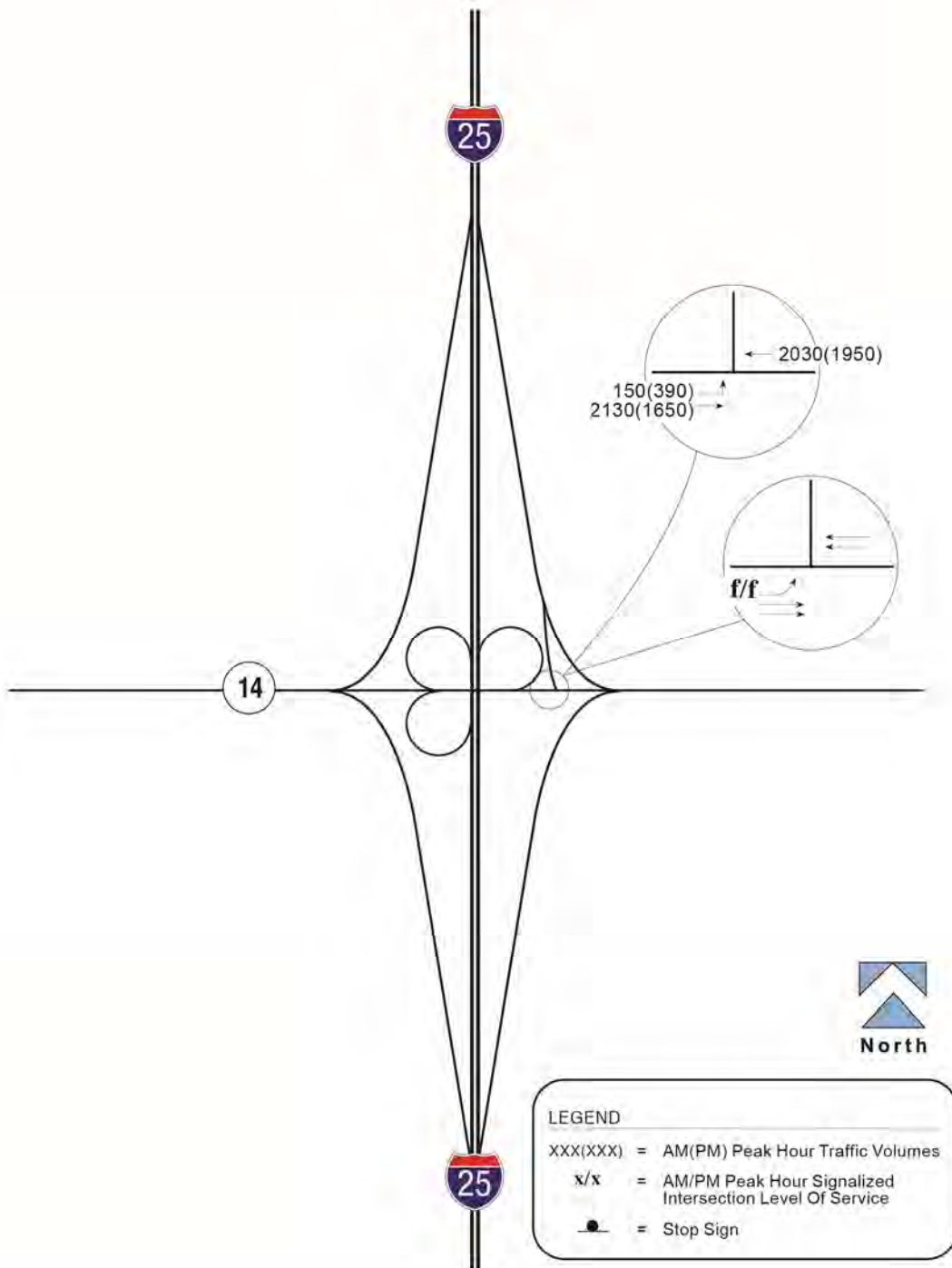
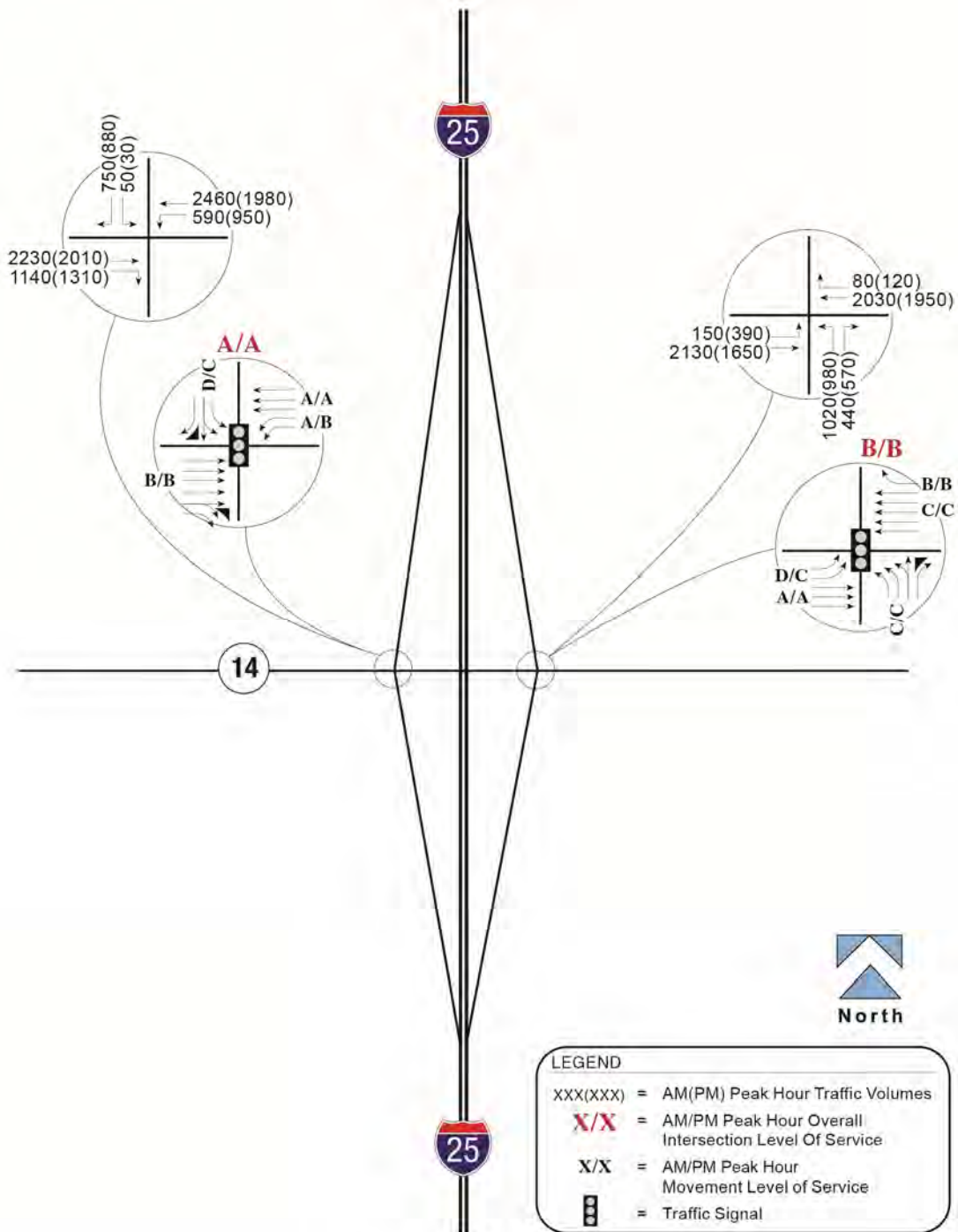




Figure 11. Accel/Decel Alternative with Interchange Reconstruction at I-25/SH 14 Interchange 2040 Traffic Conditions



3.2 I-25 Mainline Operation

FREEVAL (FREEway EVALuation) 2015e software was used for evaluation of 2040 I-25 ROD1 scenarios. FREEVAL was selected because of its ability to apply methodologies outlined in Chapter 10 of the HCM for both undersaturated and oversaturated freeway conditions. The condition for the facilities chapter to be used correctly requires the system being analyzed to begin in time and space outside of saturated conditions (LOS F). This tool can provide measures of effectiveness (MOEs) for freeway segments, weaving segments, merge and diverge segments, as well as the entirety of the corridor. It allows for evaluation of express lanes and includes a module to evaluate the effectiveness of Active Traffic and Demand Management (ATDM) including ramp metering, hard shoulder running, incident management, demand diversion, and others as defined by the user.

The software yields key metrics to evaluate scenarios including level of service, speed, vehicle miles of travel, vehicle hours of travel, and density. While the software provides a more comprehensive review of operations and evaluation metrics than HCM Basic Freeway segments, it has some limitations when evaluating a long and highly saturated corridor. It is recommended that the model not exceed 12 miles and that it begin and end outside of congestion both spatially and temporally. However, by 2040 congestion is anticipated along the entire corridor and over much of the day. As a result, the most critical section of the corridor was included in the model (CR 16 to SH 14), approximately 16 miles. This exceeds the recommended model length and in addition both the north and south ends of the corridor experience congestion. To improve the reliability of the results, a 24-hour analysis period was chosen. Spatially however, the termini of the model, near SH 14 and County Road 16 (CR 16), experience congestion over several hours of the day. As the southern end of the analysis moves south, spatially, there is not a location that would be out of saturated conditions during the analysis period within a reasonable distance. Similarly, a sensitivity analysis at the north end indicates that extending the southbound model two miles north (six miles over the recommended model length) would not eliminate congestion spatially in 2040. This saturated condition may impact select overall congestion and delay metric outputs. As a result, numerous metrics were compared for each of the scenarios to ensure that reliable results were being reported.

Three scenarios were evaluated using the model. They are described below.

Scenario 1: No Action – This scenario maintains two through lanes on I-25 and existing merge/diverge and interchange configurations. Volumes in the scenario are somewhat lower than the other two scenarios, reflecting the potential for travelers to use alternate routes as a result of long delays and queues on I-25 that would result without improvement to the corridor.

Scenario 2: Accel/Decel Alternative - Continuous Accel/Decel Lanes – This scenario adds continuous accel/decel lanes on I-25 between interchanges from SH 392 to SH 14 and represents the Accel/Decel Alternative. South of SH 392 the model includes an express lane in each direction, reflecting the recently signed ROD4 improvement south of SH 392.

Scenario 3: Express Lane Alternative - Express Lanes – This scenario adds an express lane in each direction between SH 392 and SH 14 and represents the Express Lane Alternative. Similar

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to Scenario 2 the model also includes an express lane south of SH 392 to CR 16 to reflect ROD4 improvements.

Figure 12 provides a comparison of the daily mainline volumes included in the FREEVAL analysis. As shown, the build alternative volumes are approximately 10,000 daily vehicles higher than the No Action volumes.

Figure 12. I-25 Mainline Projected 2040 Daily Traffic Volumes

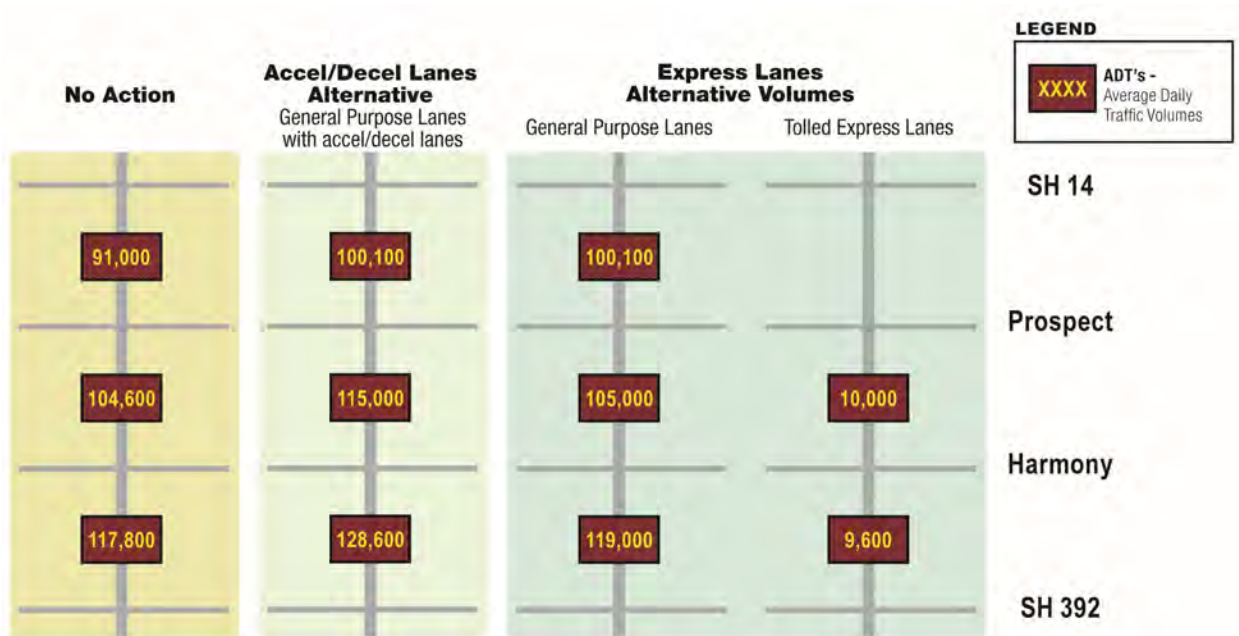


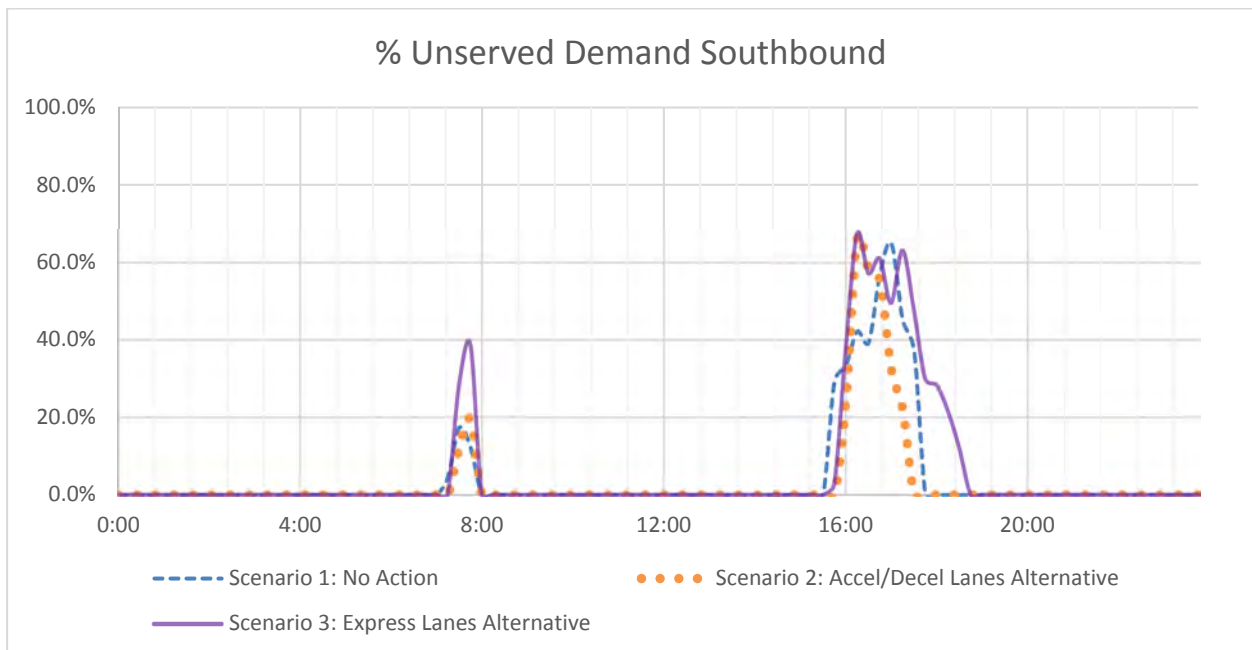
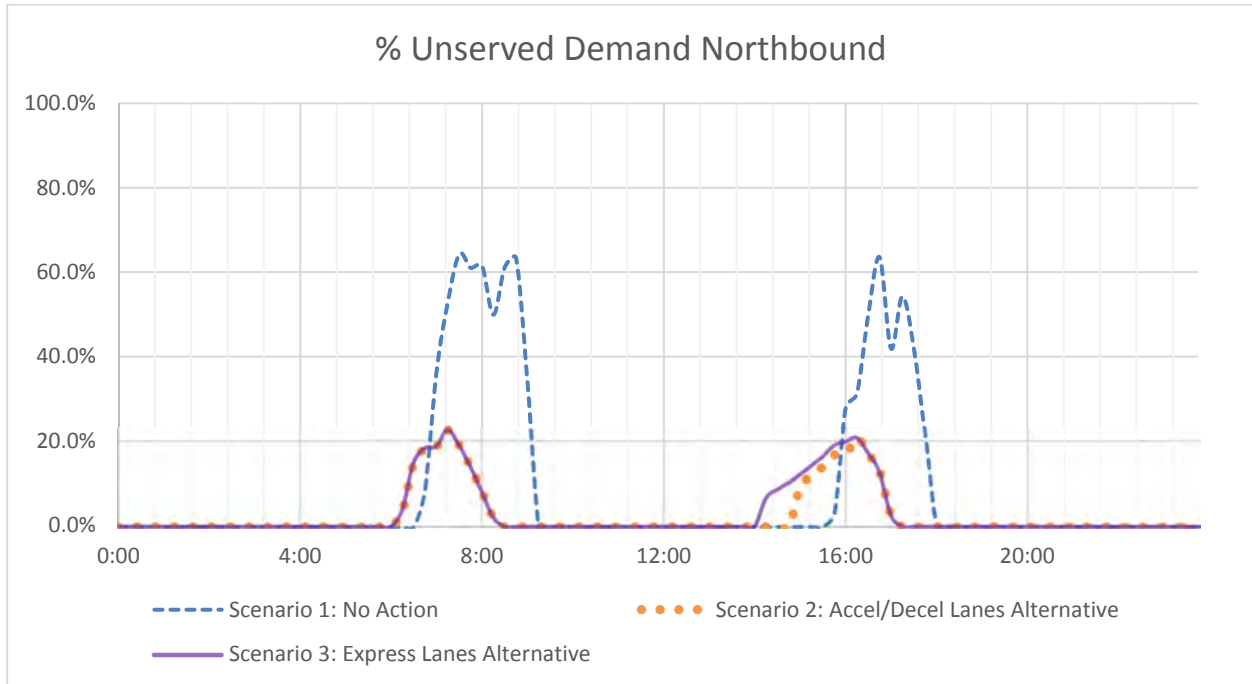
Figure 13 illustrates the duration of congestion anticipated daily under each of the three scenarios. The x axis represents the hours of the day while the y axis represents the percentage of vehicle demand not served in the same time period. Unserved demand is the number of vehicles in excess of available capacity in each 15 minute period of the day.

As shown, Scenario 1: No Action experiences the highest portion of unserved demand northbound during the peak periods. Scenario 2: Accel/Decel Alternative (continuous accel/decel lanes) and Scenario 3: Express Lane Alternative (express lanes) both increase capacity along I-25 and can process unserved demand more rapidly than Scenario 1: No Action.

Southbound, lower traffic volumes included in Scenario 1: No Action, result in less unserved demand in the AM peak period. However, Scenario 2: Accel/Decel Alternative (continuous accel/decel lanes) and Scenario 3: Express Lane Alternative (express lanes) operate comparably. Scenario 2: Accel/Decel Alternative (accel/decel lanes) processes unserved demand somewhat more quickly than the Express Lane Alternative (express lanes). However, the express lanes (isolated from the general purpose lanes) operate well throughout the entire peak period. Scenarios 2 and 3 both increase capacity along I-25 and can process unserved demand more promptly than Scenario 1.



Figure 13. 2040 Percent of Vehicles Unserved Through Day



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Table 1 summarizes the daily volume of unserved demand. As shown, Scenario 1: No Action has the highest unserved demand. Scenarios 2 and 3 and are very comparable with less than 7,000 vehicles denied entry daily (sum of both directions). Scenarios 2 and 3 have a higher traffic demand than the No Action. The accel/decel lanes can serve more vehicles at the southbound entry segment, although the number of vehicles that are denied entry is very close to the No Action. The accel/decel lane scenario (Accel/Decel Alternative) also operates slightly better than the Express Lane Alternative. The northbound entry point for Scenarios 2 and 3 operates quite a bit better than the No Action. Northbound, Scenario 2 Accel/Decel Alternative (accel/decel lanes) reduces denied entry by about 400 vehicles compared to Scenario 3 Express Lane Alternative.

Table 1. 2040 Daily Vehicles Denied Entry at Beginning of Model

Scenario	Northbound	Southbound
1 – No Action	9,300	2,700
2 – Accel/Decel Alternative (Accel/Decel Lanes) SH 392 – SH 14	2,700	2,500
3 – Express Lane Alternative (Express Lanes) SH 392 to SH 14	3,100	3,900

Source: FREEVAL denied vehicles at entry point of the model.

For comparison, vehicles denied entry was also evaluated at key bottleneck locations in the No Action model. A bottleneck was defined as a location operating at LOS F followed by a segment with LOS A or B. The rapid and distinct improvement of LOS and correlating speed indicate a bottleneck. Northbound, a key bottleneck was identified at SH 392. Southbound, a key bottleneck was identified at the US 34 on ramps. **Table 2** shows the outputs of this evaluation. Scenario 2 (Accel/Decel Alternative) and Scenario 3 (Express Lane Alternative) both carry approximately 10,000 vehicles more daily than the No Action. As shown, the Express Lane Alternative (express lanes) reduces the number of vehicles denied entry more than both No Action and the Accel/Decel Alternative (accel/decel).

Table 2. 2040 Daily Vehicles Denied Entry at Key Bottlenecks

Scenario	Northbound SH 392	Southbound US 34 On Ramps
1 – No Action	5,400	2,400
2 – Accel/Decel Alternative (Accel/Decel Lanes) SH 392 – SH 14	2,700	2,500
3 – Express Lane Alternative (Express Lanes) SH 392 to SH 14	2,000	2,300

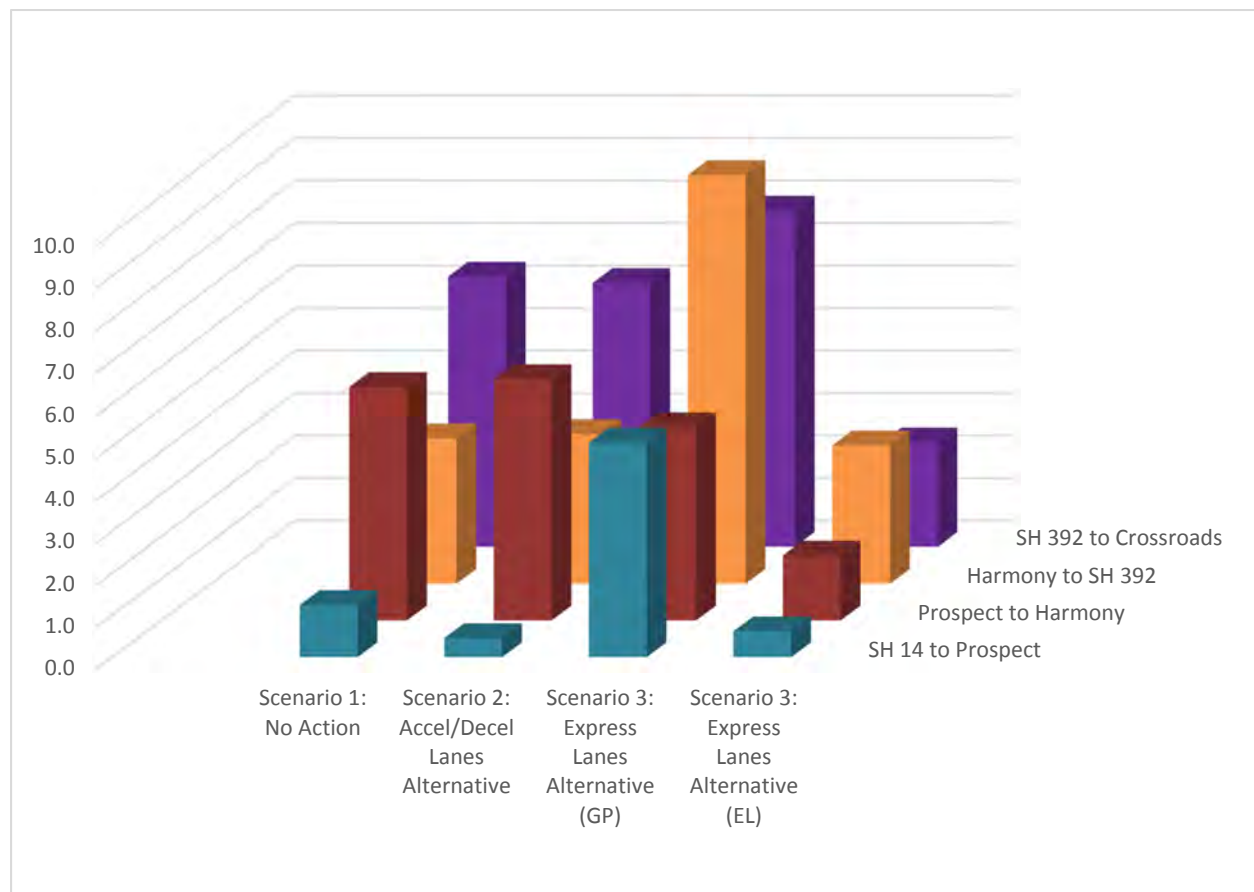
Source: FREEVAL denied vehicles northbound at SH 392 and southbound at US 34.

Figures 14 through **21** depict LOS heat maps. **Appendix B** contains the corresponding FREEVAL density and speed results.

Figure 22 summarizes the estimated hours of LOS F between the three scenarios. These results represent hours of LOS F per day (both directions) and are calculated using a weighted segment length between each interchange. As shown, Scenarios 2 and 3 would result in similar operation but Scenario 3 provides continuity with the express lanes south of SH 392 and, if selected, will bring the corridor’s facilities incrementally closer to the FEIS Preferred Alternative.

The level of service results included in the figures must be interpreted and used carefully with an understanding of the limitations of the model. It is important to consider the LOS in conjunction with the denied entry metrics as well as the post processed model volumes. For example, southbound, No Action appears to have a better LOS than the other two scenarios but looking more closely at the data shows us that it processes fewer vehicles while still denying entry to nearly 3,000 vehicles daily.

Figure 22. Hours of LOS F Daily





4.0 Conclusion

In the North I-25 ROD, FHWA selected Phase 1 of the FEIS Preferred Alternative. The North I-25 ROD selected acceleration/deceleration lanes in both directions on I-25 from SH 392 on the south to SH 14 on the north (Scenario 2). This was considered an interim improvement and ultimately these acceleration/deceleration lanes would be restriped to accommodate the Preferred Alternative cross section included in the FEIS.

The Express Lane Alternative would replace the acceleration/deceleration lanes in both directions with express lanes, consistent with the Preferred Alternative. These express lanes are part of a longer system of express lanes that connect south to SH 66.

This document summarizes the 2040 traffic conditions at the four interchanges in this section of I-25 and along mainline I-25. Synchro version 9 was used to evaluate interchanges and FREEVAL was used to evaluate mainline operation. While FREEVAL provides numerous metrics to compare and contrast alternatives, even in an over saturated condition, it does have some limitations. It is recommended that the model not exceed 12 miles and that it begin and end outside of congestion both spatially and temporally. However, by 2040 congestion is anticipated along the entire corridor and over much of the day. As a result, the most critical section of the corridor was included in the model (CR 16 to SH 14), approximately 16 miles. This exceeds the recommended model length process and in addition both the north and south ends of the corridor experience congestion. As a result, metrics must be interpreted and used carefully with an understanding of the limitations of the model. It is important to consider the LOS with the denied entry as well as the post processed model volumes. Together, these metrics play a critical role in understanding how well the system is working under the various scenarios.

The results of the analysis are summarized below:

- Ramp terminal intersection operations are expected to be similar for both the Express Lane Alternative and the Accel/Decel Alternative. This is due to similar geometry which and similar peak hour traffic volumes for both alternatives.
- The Accel/Decel Alternative (accel/decel) would operate with somewhat fewer hours of delay and better level of service than the Express Lane Alternative (express lanes).
- The Express Lane Alternative would bring the corridor's facilities incrementally closer to the FEIS Preferred Alternative. Accel/decel lanes included in the Accel/Decel Alternative were identified as an interim improvement and are not included in the FEIS Preferred Alternative. Express lanes included in the Express Lane Alternative are included in the FEIS Preferred Alternative.
- Express Lane Alternative (express lanes) and the Accel/Decel Alternative (accel/decel) reduce the number of vehicles unserved by approximately 5,000 and 7,000 vehicles daily (at entry into the modeling area), respectively compared to the No Action scenario.

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- The Express Lane Alternative (express lanes) reduces the number of vehicles denied entry at key bottlenecks more than both No Action and the Accel/Decel Alternative (accel/decel).
- The Express Lane (express lanes) and Accel/Decel Alternative (accel/decel) are projected to serve approximately 10,000 vehicles more daily compared to the No Action scenario. Since freeway travel is generally safer than surface street travel, an improvement in safety in the region is created.
- The express lanes included in the Express Lane Alternative would provide a non-congested alternative transportation option along the corridor with the potential to improve travel reliability for drivers.
- The express lanes included in Express Lane Alternative would provide travel time reliability for transit travel when compared to the No Action Alternative and the Accel/Decel Alternative (accel/decel).

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Appendix A. AECOM Travel Demand Modeling

2.0 Travel Demand Modeling

The FEIS 2035 traffic forecast model was an amalgam of contemporaneous Denver Regional Council of Governments (DRCOG) and NFRMPO 2035 traffic models supplemented with updated socio-economic assumptions for the North I-25 Corridor. As the FEIS analysis area overlapped the planning areas and their common boundary, an aggregation was needed to examine a wide-ranging set of alternatives.

Future traffic projections for this analysis were provided by the NFRMPO from their 2040 regional travel demand model. The model is based on information collected from member agencies including traffic volumes and future land uses and has been calibrated to reflect a base year of 2012. Due to different forecast years and model differences between the 2040 NFRMPO model and the model used for the FEIS 2035 traffic forecasts, updated NFRMPO forecasted travel volumes varied significantly in some locations from those in the 2035 FEIS forecasts.

The 2040 NFRMPO model forecasts consisted of two types: (a) unadjusted forecasts consisting of values directly out of the model assignment procedure, and (b) adjusted forecasts using adjustments outlined in Analytical Travel Forecasting Approaches for Project-Level Planning and Design better known simply as “National Cooperative Highway Research Program (NCHRP) 765” reflecting the NCHRP report number. This report is a tool box of techniques for directly creating project-level forecasts or for post-processing travel demand model results for use in the planning and design of highway projects.

Two NFRMPO models were used in this analysis:

- 2040 No-Build (No-Action). The NFRMPO 2040 No-Action model includes two general purpose (GP) lanes in each direction.
- 2040 2+1 (Selected Alternative). This NFRMPO model has two GP lanes and one Express Lane (EL) in each direction throughout the corridor (SH 60 – SH 14).

The existing condition year established by the 2011 FEIS was 2006. These data are nine years old and changes in socio-economic conditions and traffic patterns have occurred in the ensuing years.

For this update, traffic data collected by others in 2012, newer counts from 2015 and 2016, and updated CDOT ATR data have been used to establish a new existing conditions assessment.

CDOT maintains Average Annual Daily Traffic (AADT) volumes for each segment of I-25 through their Online Information Transportation System (OTIS) website. AADT values are the average for all days of the year whereas the NFRMPO 2040 forecasts are for a typical weekday. This weekday value is usually referred to as Average Daily Traffic, or ADT.

An existing 2016 baseline level of peak hour traffic was also established by using the CDOT Automatic Traffic Recorder (ATR) south of the US 34/I-25 interchange. The 30th highest day was selected between January 2016 and June 2016 (latest available data at the time for 2016 from CDOT OTIS). From this data and recent ramp data counts taken at study area interchanges, an existing condition baseline was established for 2016 traffic.

Figure 2-1 shows existing CDOT 2016 and future 2040 AADT forecasts. The 2040 NFRMPO Raw and 2040 NFRMPO NCHRP (“Adjusted”) daily travel demands are also shown along with the year 2035 from the FEIS for reference. NFRMPO and FEIS forecasts are in terms of ADT so they should trend higher than the CDOT AADT values.

The FEIS 2035 ADT forecasts at the south end of the study area are higher than both the Raw and Adjusted NFRMPO values for 2040 but are lower than the CDOT 2040 AADT. The decreases between 2035 FEIS and 2040 NFRMPO values are due to two major factors:

- Land uses used in the 2035 FEIS model were much higher than those used in the 2040 NFRMPO model. At the time of the FEIS, prospects for growth were more optimistic than they were at the time of the NFRMPO 2040 modeling effort.
- The proportion of total daily traffic assumed to occur in either the AM peak or PM peak hours (2 hours total, one hour AM + one hour PM) were assumed to be about 21% the daily total in the NFRMPO models. The FEIS forecasts and CDOT travel data indicate that this percentage is lower, more in the area of 14-15% of the total traffic occurring in either the one hour AM peak hour or the one hour PM peak hour. The NFRMPO 21% peak hour factor assumption results in significantly lower daily NFRMPO forecasts even when the FEIS and NFRMPO peak hour forecasts are much more comparable.

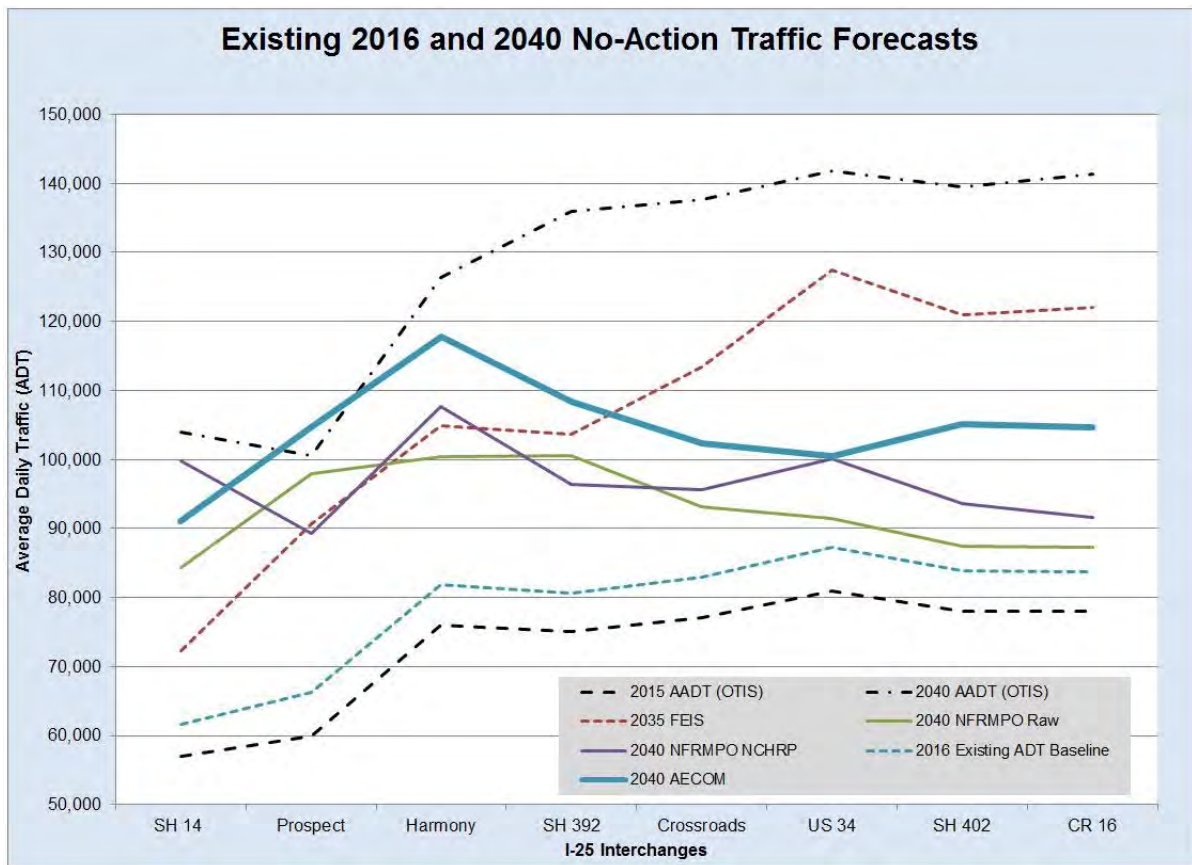


Figure 2-1 Existing 2016 and 2040 No-Action Traffic Forecasts

2.1 2040 No-Action Traffic Forecasts

Further refinements to the NFRMPO No-Action travel demand model forecasts were made to bring the Adjusted 2040 forecasts into better alignment with travel demand patterns observed in the field. Changes include:

- The Adjusted NFRMPO forecasts do not balance at every model node. With the adjustments, the number of vehicles entering a node or an intersection may differ significantly from those leaving. This is not the case in the Raw forecasts which have balanced in and out demands. Because of the imbalances in the Adjusted NFRMPO travel demand forecasts, balancing adjustments were made to the peak hour Adjusted forecasts so that the traffic entering an area equaled that leaving. The result was achieved in most cases by taking the average between inbound and outbound traffic.
- ADT forecasts were increased to reflect a better balance between peak and non-peak demands. This resulted in ADT's that were significantly higher than the Adjusted NFRMPO output but lower than the relatively high FEIS demands. The resulting final AECOM 2040 No-Action forecasts reflect significant peak spreading.
- The NFRMPO No-Action model does include some EL segments north of the Harmony/I-25 interchange. EL and GP demands were combined into as single GP value without further adjustment as the No-Action scenario does not include EL segments.

2040 No-Action AECOM forecasts were developed by using the proceeding assumptions. As shown on Figure 2-1, AECOM daily forecasts are higher than NFRMPO NCHRP values. This is primarily due to AECOM's application of a lower percent of total daily traffic assumed to occur during the peak hours. Overall, the daily travel patterns between AECOM 2040 No-Action and NFRMPO Adjusted 2040 No-Action forecasts are similar.

2.2 2021 No-Action Traffic Forecasts

The Opening Year 2021 No-Action traffic forecasts were developed using a straight line interpolation between existing 2016 travel demand and the 2040 No-Action traffic forecasts. This adjustment was made to each on-ramp and off-ramp demand as well as to all vehicles entering and leaving the model area at the northern and southern ends of the model.

2.3 2040 2+1 Selected Alternative Travel Demands

2.3.1 NFRMPO Travel Demands Model

NFRMPO developed 2040 Build 2+1 Selected Alternative travel demand models. As was the case with the No-Action models, both 2040 NFRMPO Raw and 2040 NFRMPO NCHRP Adjusted model forecasts were provided. Features of the NFRMPO 2+1 models include:

- Two GP lanes with one EL in each direction through the entire study area.
- Access to the EL occurred at locations concurrent with the GP on and off ramps.
- The interchange at CR 16 was modeled to be converted to a full movement diamond interchange from the current off-ramp only configuration. These ramps in the future terminate at CR 16 instead of the Eastern Frontage Road as is the case today in the northbound direction.
- Beside CR 16, the remaining interchanges reflect their current configurations including the partial-cloverleaf design at US 34 and the present $\frac{3}{4}$ cloverleaf ramps at SH 14.

- A grade-separated crossing at Kendall Parkway was modeled. No additional crossing points were added to those currently in place outside of Kendall Parkway.
- The portion of daily traffic assumed to take place in the two peak hours continued to be in the 21% range, consistent with the results from NFRMPO No-Action model.

Figure 2-2 show a comparison of the 2040 Raw and Adjusted AM peak hour travel demands compared with those from the FEIS.

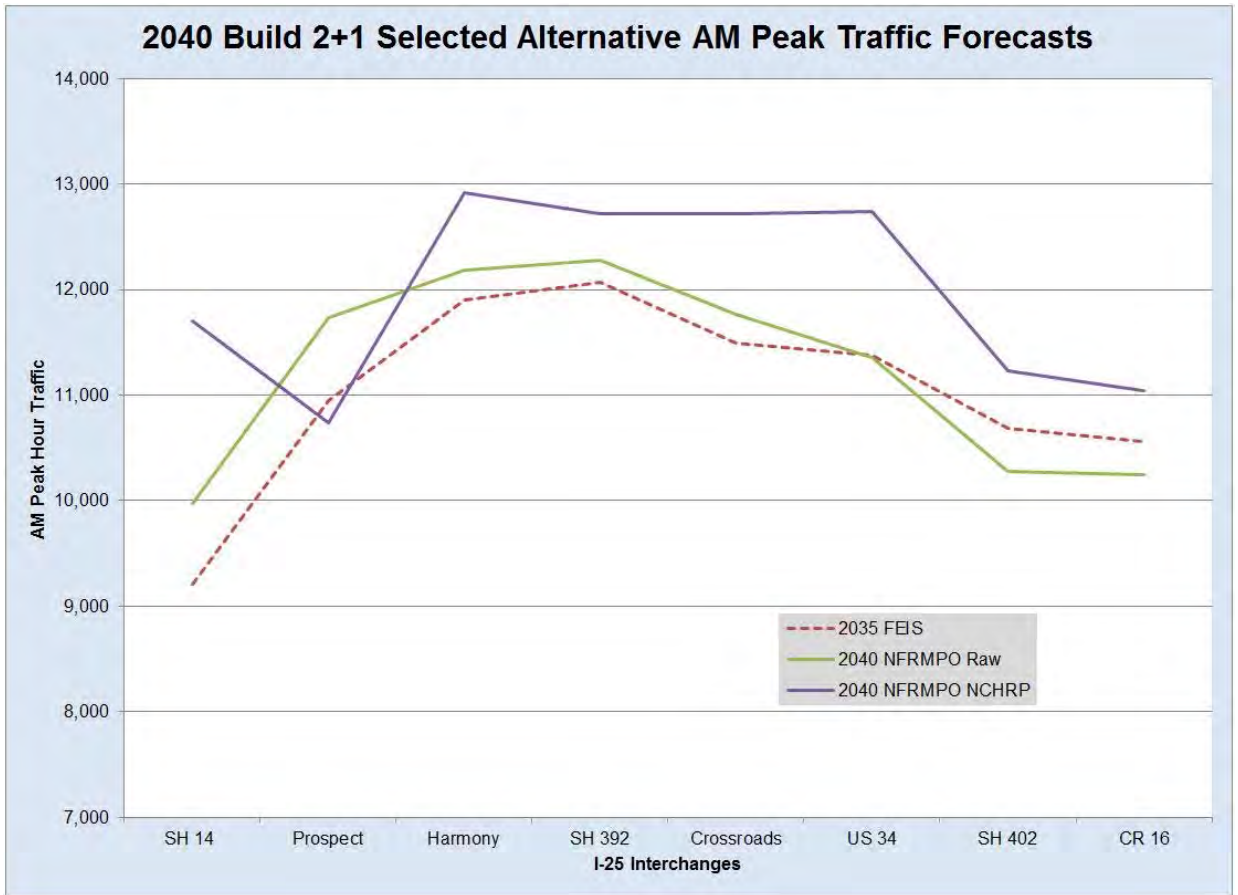


Figure 2-2 2040 Build 2+1 Selected Alternative AM Peak Traffic Forecasts

Figure 2-3 show a comparison of the 2040 Raw and Adjusted PM peak hour travel demands compared with those from the FEIS.

As shown, these charts show fairly comparable levels of peak hour traffic between 2035 FEIS and 2040 NFRMPO at the north end of the study area. However, the 2040 NFRMPO models show significant lower levels of peak hour traffic at the south end of the study area.

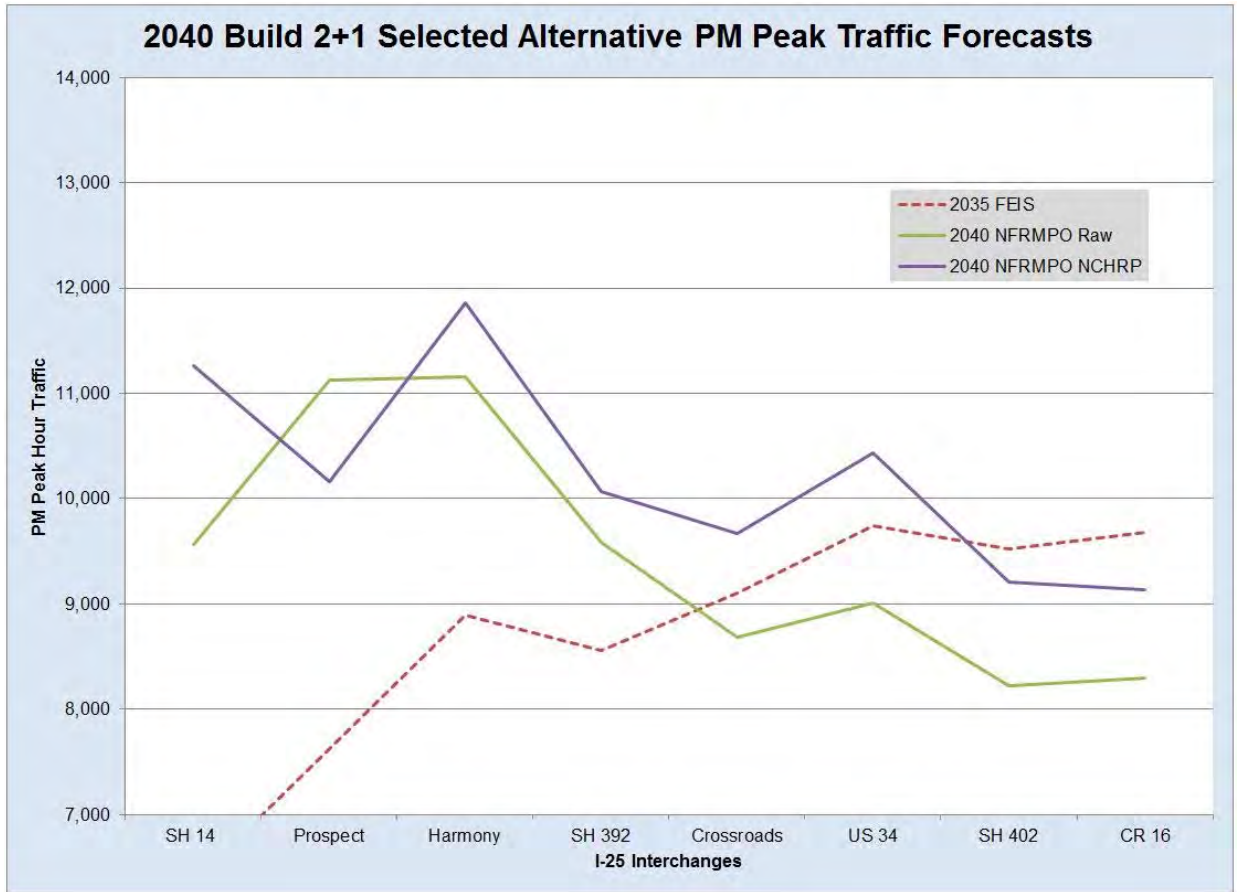


Figure 2-3 2040 Build 2+1 Selected Alternative PM Peak Traffic Forecasts

2040 NFRMPO Raw and Adjusted 2+1 daily travel demands are depicted on Figure 2-4. The 2035 FEIS 2+1 daily travel demand forecast is also depicted on the chart. As shown, the NFRMPO daily results are significantly lower than the 2035 FEIS travel demand forecasts. As mentioned previously, this is a result of lower land use forecasts and a significantly higher assumed portion of the total daily travel demand occurring during the peak hours.

NFRMPO also provided peak hour travel demands and these are depicted on Figure 2-5. Shown are the AM and PM peak hour demands for both GP and EL. Only the Adjusted NFRMPO values are shown for clarity. Factoring in both GP and EL demands, the total demand between the 2035 FEIS and the 2040 NFRMPO forecasts are similar. As noted previously, even though the peak demands are similar, the daily forecasts are much higher in the FEIS due to a greater degree of peak spreading.

There are variations in demand when comparing individual segments. The NFRMPO GP demand in the PM peak hour show a dip at I-25/Prospect Road, but no corresponding dip in the EL demand. Both FEIS and NFRMPO forecasts show higher GP demands in the PM peak hour than during the AM. For EL demands, PM peak FEIS demands are higher than AM peak but the opposite is true for NFRMPO forecasts.

Approximately 25% of FEIS demand is in the EL lanes. Since EL lane capacity is only one-third of total capacity, there is a higher per lane flow in GP lanes than EL lanes. The NFRMPO demand difference is more even with EL demand accounting for a little over 30% of the total.

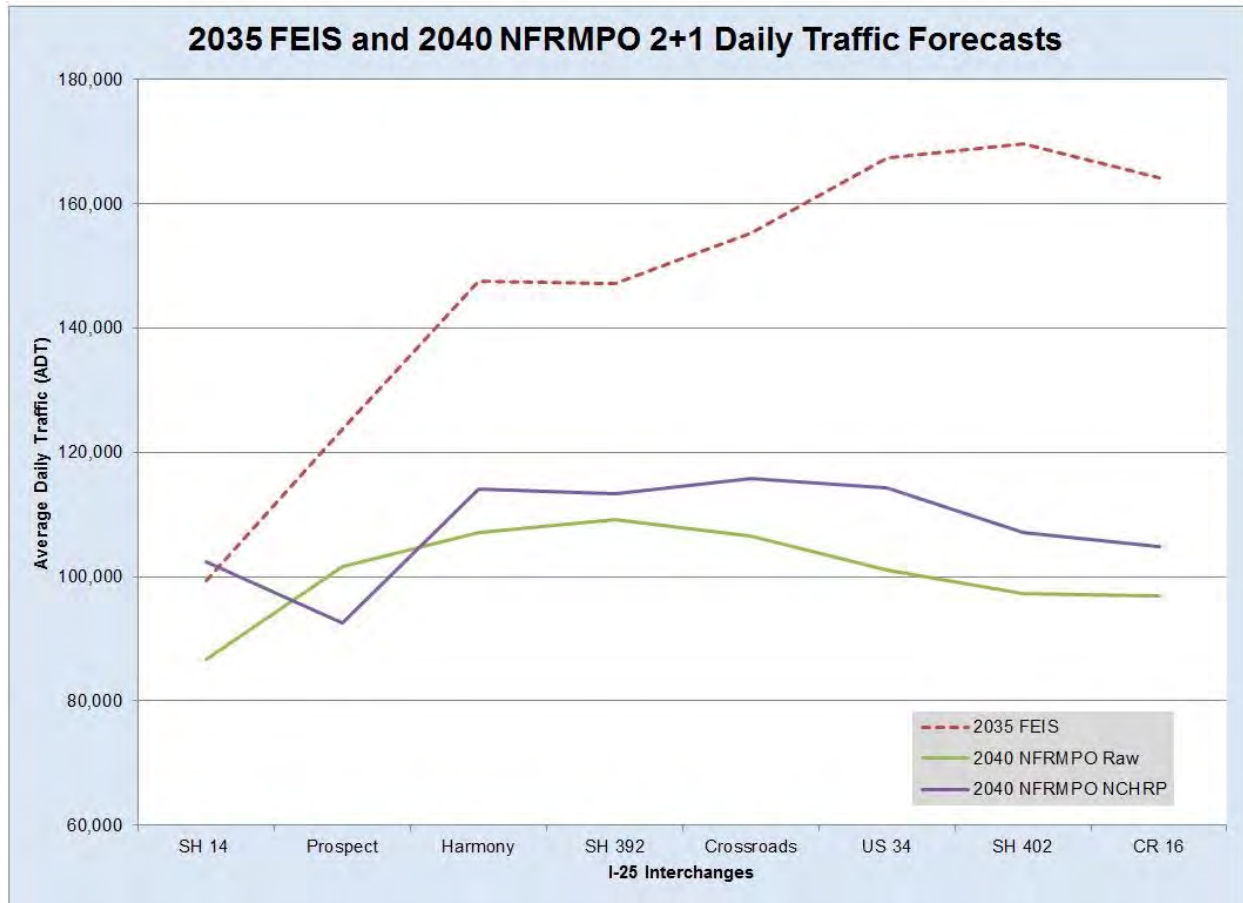


Figure 2-4 2035 FEIS and 2040 NFRMPO 2+1 Daily Traffic Forecasts

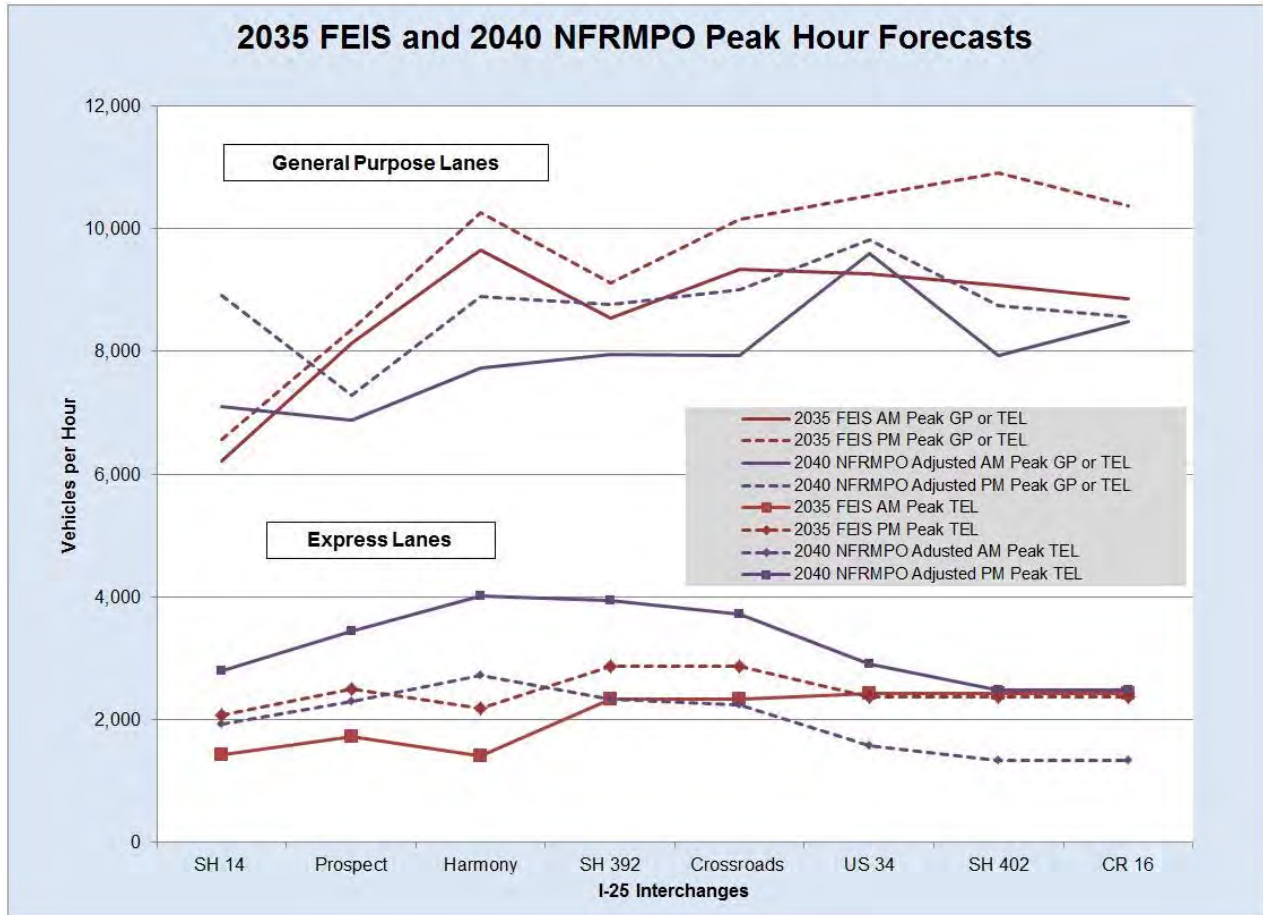


Figure 2-5 2035 FEIS and 2040 NFRMPO Peak Hour Traffic Forecasts

2.3.2 NFRMPO No-Action to Selected Alternative Travel Demand Increases

When the NFRMPO No-Action and Selected Alternative travel demands are compared, there is a significant increase in corridor demand with the addition of the EL. In some instances during the PM peak, the magnitude of the increase is greater than the additional capacity added.

The attraction to the I-25 corridor by addition of the EL is reflected not only on I-25 but is also in increases to interchange demands. Table 2-1 presents the difference in hourly volumes (Selected Alternative demand minus No-Action). The positive values on the table reflect the attraction of additional trips to the I-25 corridor as result of the EL lanes.

Table 2-1 NFRMPO 2040 Model Forecasts Differences, Build 2+1 minus NFRMPO No-Build

I-25 Interchanges	Northbound						Southbound					
	2040 AM		2040 PM		2040 Daily		2040 AM		2040 PM		2040 Daily	
	Raw	NCHRP	Raw	NCHRP	Raw	NCHRP	Raw	NCHRP	Raw	NCHRP	Raw	NCHRP
SH 14	186	205	186	205	2,429	2,467	50	49	224	238	1,187	1,286
Prospect	261	249	261	249	3,614	3,396	102	102	348	333	1,805	1,737
Harmony	444	452	444	452	6,684	6,403	182	178	581	605	3,179	3,279
SH 392	1,188	1,169	1,188	1,169	8,595	17,067	477	162	1,500	1,481	8,721	7,403
Crossroads	1,204	1,194	1,204	1,194	13,443	20,229	541	528	1,874	1,850	11,114	10,853
US 34	746	584	746	584	9,683	14,224	309	224	1,598	1,719	8,592	8,358
SH 402	608	594	608	594	9,783	13,516	304	299	1,439	1,427	8,219	8,123
CR 16	649	396	649	396	9,584	13,363	306	244	1,300	1,517	7,487	8,247

2.3.3 AECOM Adjusted Demand Forecasts

Similar to the adjustments made in the No-Action model, adjustments were also made to the Selected Alternative model demands. These adjustments made as part of this effort are outlined in the following section of this topic.

Continuity in Travel Demands

As previously mentioned, travel demands for the NFRMPO Adjusted travel forecasts often do not sum around a node or intersection. The first step taken was to combine GP and EL demands and to have them reflect and enforce continuity in demands by direction and time of day. This was first done for daily travel demand with similar adjustments made to peak hourly demands afterward.

Travel Demand Baseline

Using the 2016 baseline travel pattern and along with the shape of the NFRMPO daily travel demands, a 2+1 Selected Alternative travel demand curve was built. This curve includes both EL and GP demands which are split out separately in a later step. Some items considered in development of the daily travel demand:

- As mentioned previously, there is a significant drop in Adjusted NFRMPO forecasts. While the existing travel demands show little change between SH 14 and Prospect Road, there is no significant drop in travel demand. The Raw NFRMPO forecasts better reflect current conditions. Large changes in travel demand at Prospect Road/I-25 would result in unrealistically large forecasts. For these reasons, demand changes were assumed to be gradual and more in line with the NFRMPO Raw model output.
- Percent of ADT occurring during the peak hour was chosen to be much closer to the FEIS values than from NFRMPO for GP travel demand. A higher portion of total daily EL demand was assumed with the AM and PM peak hour accounting for a combined 35% of the daily total.

The resulting forecasts for the AECOM 2040, 2016 Baseline, and daily travel demands from the 2035 FEIS and 2040 NFRMPO models are shown in Figure 2-6. The FEIS shows volumes increasing significantly heading south but the NFRMPO and AECOM forecasts show a much flatter demand curve heading south.

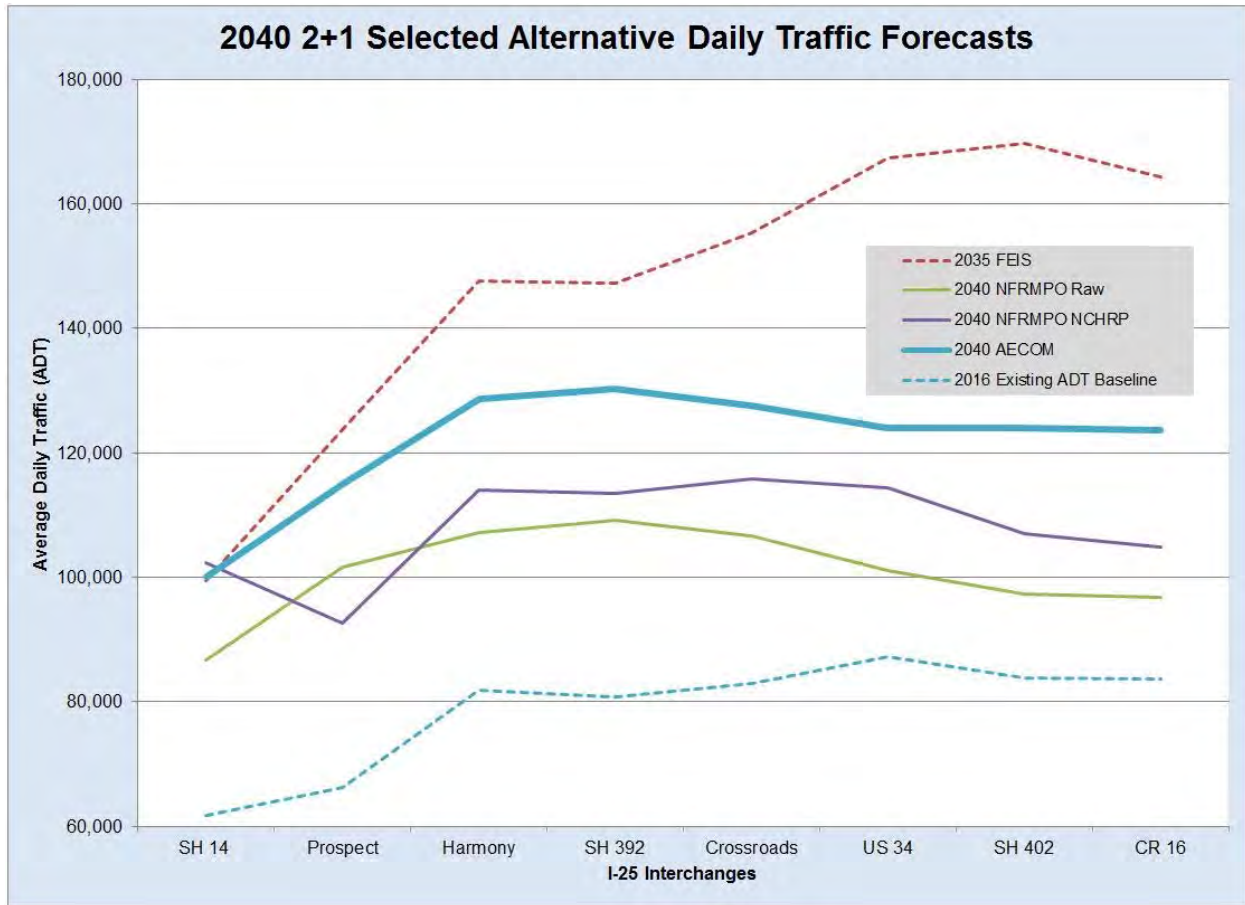


Figure 2-6 2040 2+1 Selected Alternative Daily Traffic Forecasts

Total Peak Hour Demands

2040 total bi-directional peak hour demands are depicted on Figure 2-7 and Figure 2-8 . In response to the dip at the I-25/Prospect Road interchange in the 2040 Adjusted NFRMPO model, the AECOM values are adjusted to be more in line with the Raw NFRMPO model and existing peak hour travel patterns. The hourly NFRMPO forecasts don't expand nearly as much heading south as they do in the daily FEIS forecasts rather they show slower accumulations of traffic reflective of existing travel demands.

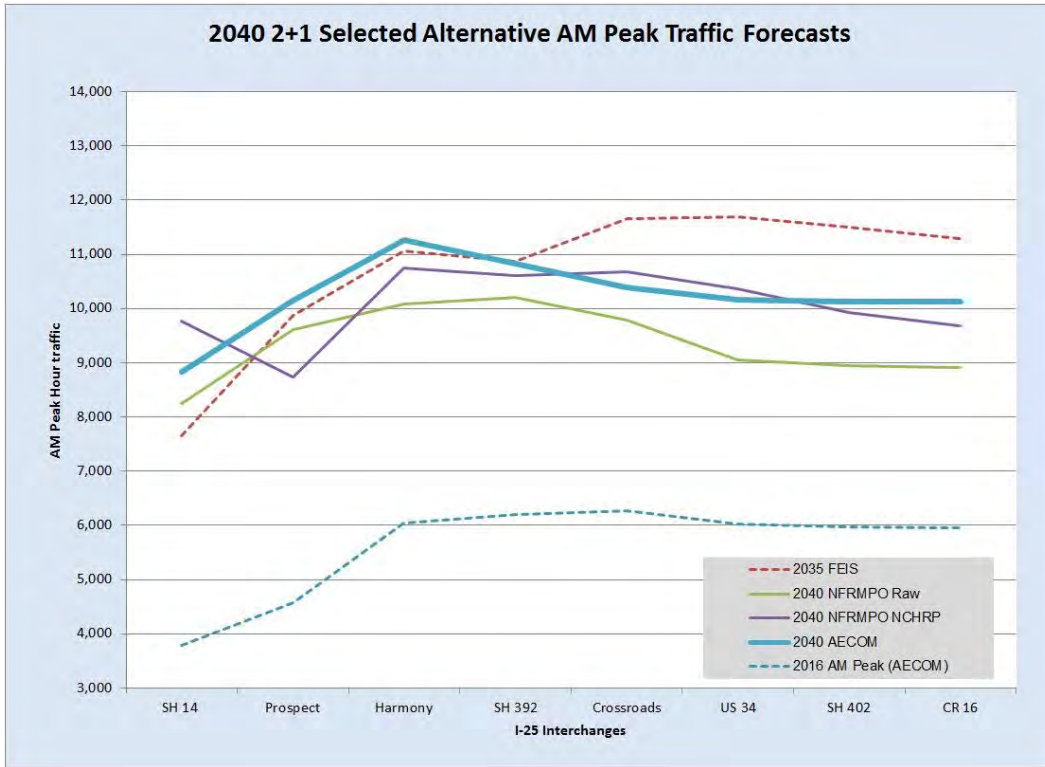


Figure 2-7 2040 2+1 Selected Alternative AM Peak Traffic Forecasts

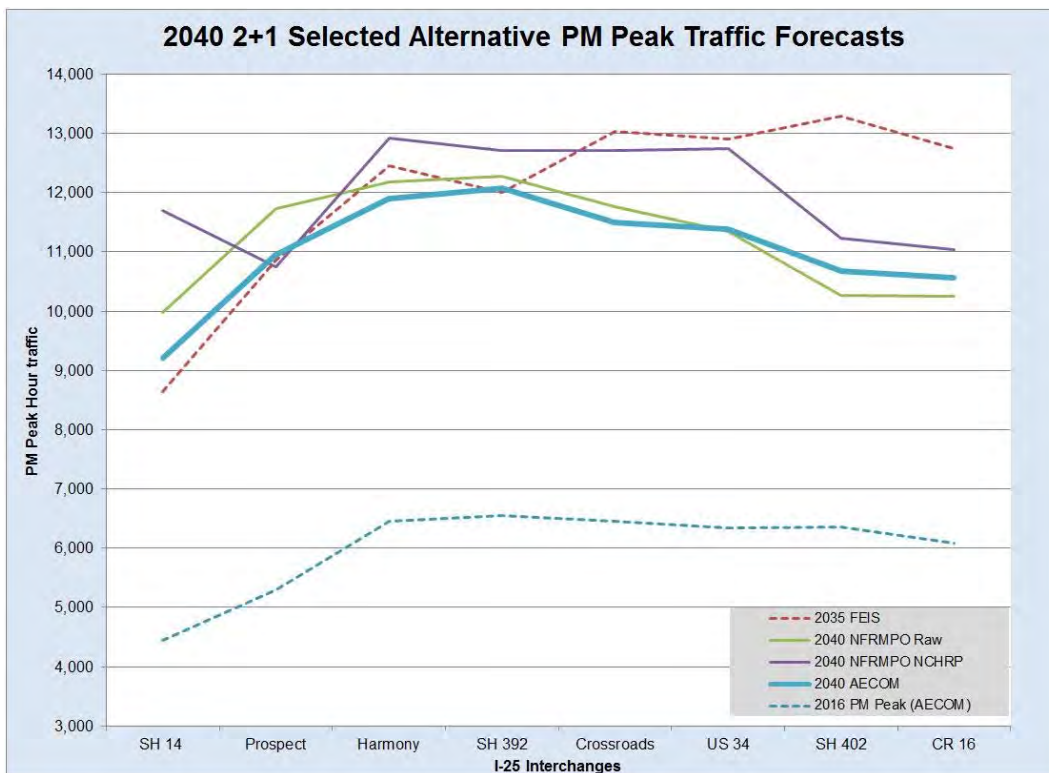


Figure 2-8 2040 2+1 Selected Alternative PM Peak Traffic Forecasts

Express Lane Hourly Demands

Express Lane hourly demands were developed using the following methodology:

- Forecasts in the NFRMPO model assume the EL accessible at any GP on or off-ramp location. The EL forecasts were reassigned to a limited set of access locations to be constructed with the 2+1 planned improvements.
- The amount of traffic using an ingress or egress depends on the volume in the adjacent GP lanes and the relative ramp demands. The more saturated the GP lanes the more traffic assigned to the EL. Ramps up or downstream of heavy GP ramp volumes were also assigned at increase levels to corresponding EL segments.
- Locations where there is little congestion receive a nominal volume due to HOV 3+ users and toll users attracted by low off-peak tolls coupled with improved driving experience.
- A maximum EL travel demand of approximately 1,600 vph was assumed in order to maintain free flow EL operations. The assumption is that the toll will be set to maintain free flow speeds in the Express Lane. With HOV 3+ being only a fraction of HOV 2+ it is not expected that HOV 3+ demands will result in constraints to tolled vehicles.

Assigned 2040 GP and EL travel demands are depicted in Figure 2-9.

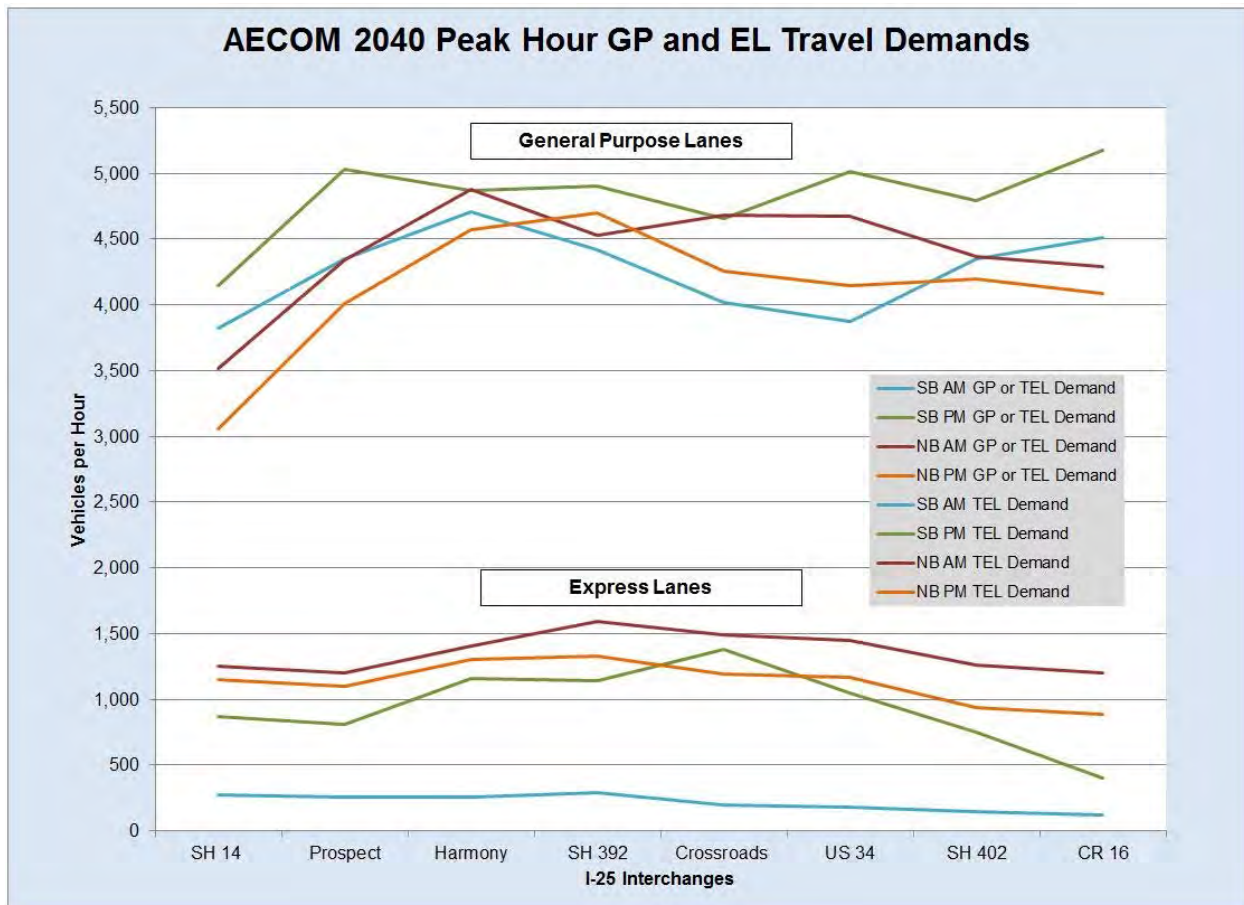


Figure 2-9 AECOM 2040 Peak Hour GP and EL Travel Demands

Interchange Access Constraint on Demand

Some peak spreading was present in the NFRMPO forecasts and the further AECOM adjustments made to those forecasts. Even with this spreading, many of the freeway segments are forecast to exceed capacity in the GP lanes even at maximum free flow volumes in the EL. Demands on cross streets are outlined in detail in the traffic operations analysis portion of this report. It was found that without a constraint placed due to interchange operations, many of the ramp terminals would be overwhelmed by the cross street demand accessing I-25.

Due to this, a capacity constraint was placed on each interchange ramp terminal due to its ultimate design and capacity. Capacity constraints were determined using an Interchange Capacity Utilization (ICU) process that takes into account conflicts by number of vehicles per lane. Trips removed due to interchange capacity constraints were assumed to use facilities other than I-25 to complete their trips.

The interchange constraint did improve interchange operations and had an impact on freeway flows. All 2040 AECOM forecast shown to this point have assumed this interchange capacity constraint. Table 2-2 shows the comparison of the constrained traffic forecasts versus the initial values without interchange terminal constraints.

Table 2-2 AECOM 2040 Forecasts With and Without Interchange Constraints

I-25 Interchanges	NB AM Constrained Demand	NB AM Un - constrained Demand	NB PM Constrained Demand	NB PM Un - constrained Demand	SB AM Constrained Demand	SB AM Un - constrained Demand	SB PM Constrained Demand	SB PM Un - constrained Demand
SH 14	4,770	4,880	4,210	4,700	4,090	4,180	5,020	5,600
Prospect	5,540	5,540	5,110	5,830	4,610	4,700	5,840	6,420
Harmony	6,290	6,290	5,870	6,590	4,970	5,060	6,030	6,610
SH 392	6,120	6,120	6,030	6,480	4,710	4,800	6,040	6,620
Crossroads	6,170	6,170	5,450	5,900	4,220	4,310	6,040	6,620
US 34	6,120	6,120	5,320	5,520	4,050	4,140	6,060	6,640
SH 402	5,630	5,630	5,140	4,040	4,500	4,590	5,540	6,120
CR 16	5,490	5,490	4,980	5,180	4,630	4,720	5,580	6,160

2.4 2021 2+1 Selected Alternative Travel Demands

Total Opening Year 2021 Selected Alternative travel demands were developed using a straight line interpolation between existing 2016 travel demand and the 2040 2+1 combined GP and EL forecasts. 2021 EL forecasts were estimated by assuming:

- A base percent of traffic was first assigned to the EL due to HOV 3+ and toll users who prefer the EL over GP for freedom of movement.
- Next, users who are shifted due to congestion in the GP lanes now willing to pay a toll were added. This number was reflective of the amount of over-capacity GP demands and the available free-flow capacity downstream of the ingress.

Figure 2-10 is a plot of all assumed EL Demands vs GP demands. The data included is for all EL segments, both AM and PM peak hours, both northbound and southbound directions, and for 2021 and 2040 forecast demands. These conditions have been grouped together to show a uniform methodology across the various conditions.

Variability in demands does occur as several factors beside total GP + EL travel demand forecasts also come into play. Source of this variability include:

- Relative location of ingress and egress points
- Beginning and termination of EL lanes
- Potential downstream EL and GP capacity
- Driver anticipation of expected reoccurring congestion locations
- Shorter trips that may be influenced by:
 - Toll gantry directly downstream of access points
 - Relative little time savings over the short trip distance

Four EL versus total demand regions have been highlighted on Figure 2-10. They are:

- Low volume total demand segments which consist of primarily of HOV 3+ users. While there is some variation, the overall demand is flat with about 5.5% of total demand opting for the EL. This is the base line assignment that is the minimum expected demand independent of congestion.
- A congestion sensitive region where HOV 3+ and toll users increase with overall vehicle demand. The higher the demand, the higher the percent of total traffic using the EL. There is a practical limit to the upper end of EL demand at around 1,600 vph, or the demand where free flow conditions will start to degrade in the EL. If conditions do degrade, the toll is assumed to be adjusted upward to maintain free flows.
- Two other smaller groups are shown which are distinct from the two larger regions:
 - Southbound I-25 south of US 34. Volumes in the EL are low given the total volume as there is little toll lane left to use and less justification to weave over and get into it for the short remaining distance.
 - NB I-25 at the South end of the EL. Forecasts quickly pick up approaching US 34 so vehicles are more likely to get into the lane to bypass anticipated downstream congestion.

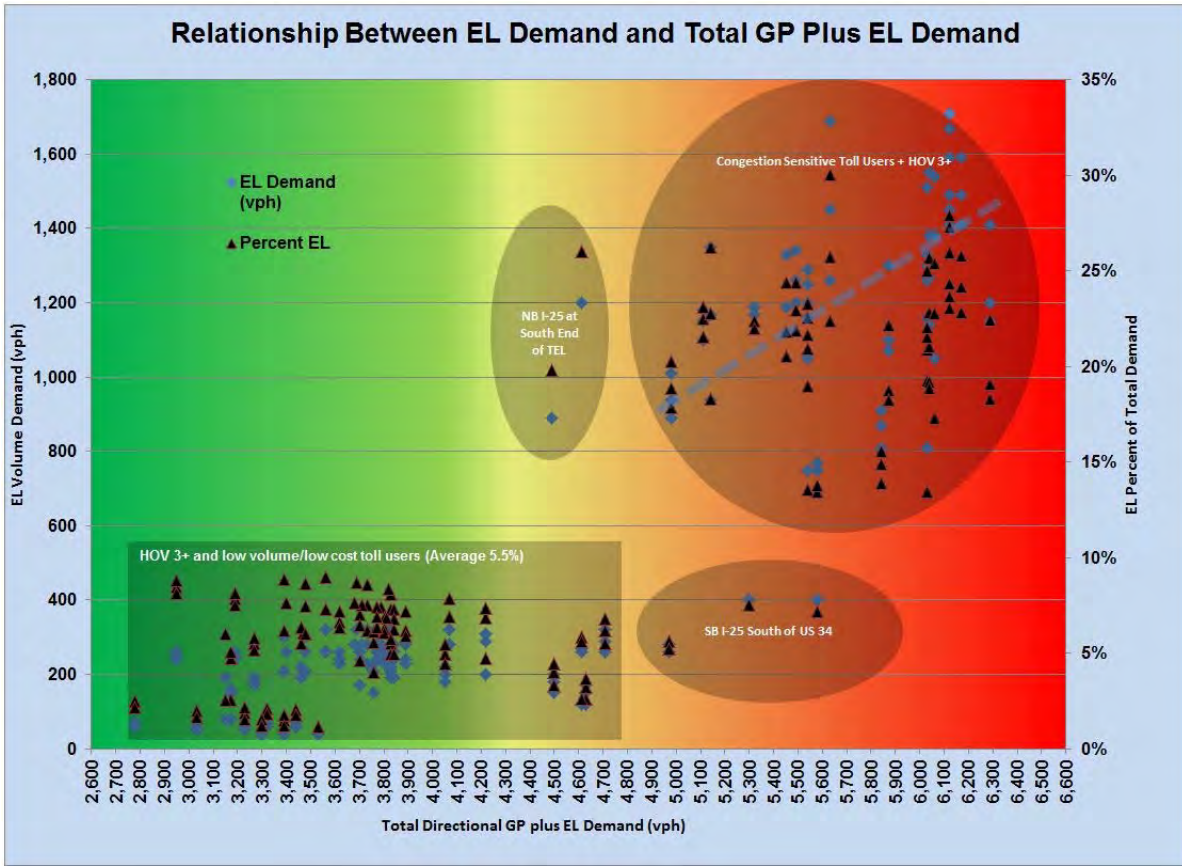


Figure 2-10 Relationship Between EL Demand and Total GP Plus EL Demand

2.5 24-Hour Traffic Distribution

Peak Period and 24-hour data was estimated using available CDOT ATR's and ADT future year forecasts. Travel demand projections over 24 hours at 15-minute time intervals were developed and applied to vehicles entering and leaving the network.

- Forecasts for each 15-minute period are reported in vehicles per hour (vph). Therefore a 15-minute vehicle demand of 1,000 vph translates into 250 vehicles over a 15 minute period $(1,000 \text{ vehicles/hour}) / (4 \text{ 15-minute intervals/hour})$

AM and PM peak hour interval distributions reflect a peak hour factor (PHF) of 0.95.

- For hours outside the peak hour, the CDOT's ATR south of US 34 was used for the distribution.

The distribution used was for an average Tuesday – Thursday during the first half of 2016.

The total of all 15-minute demand over the 24 hour period sum to the total forecast ADT.

- Curve smoothing was employed to try and eliminate large jumps in demand while still maintaining peak hour demands and ADT forecasts.

Traffic Analysis

Final July 21, 2017

Appendix B. FREEVAL Density and Speed Outputs

Northbound No Action

7:18 PM 7/6/2017

Segment ID	S/O SH 60	SH 60 Off	Basic										SH 402 Off	SH 402 On	Basic	US 34 Loop On	US 34 On	Basic	Basic	Basic	Basic	Crossover Off	Basic	Crossover On	Basic	SH 392 Off	SH 392 On	Basic	SH 392 On	Basic	Basic	Basic	Harmony Off	Basic	Harmony On	Overlap	CSP Off	Basic	CSP On	Basic	Basic	Basic	Basic	POE	POE On/Off	Basic	Basic	Prospect On	Basic	SH 14 Off	SH 14 Loop Off	Basic	SH 14 On	N/O SH 14			
			Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6	Seg 7	Seg 8	Seg 9	Seg 10																																											Seg 11	Seg 12	Seg 13
#1 0:00-0:15	70.0	61.4	69.4	63.3	70.0	61.6	69.6	70.0	61.4	69.7	62.8	69.6	70.0	61.2	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.4	69.6	62.8	69.6	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.2	69.5	61.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.3	69.9	70.0	63.5	68.5	61.4	61.3	68.1	62.9	70.0			
#2 0:15-0:30	70.0	61.4	69.4	63.4	70.0	61.6	69.6	70.0	61.4	69.7	62.9	69.6	70.0	61.3	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.3	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.5	69.9	70.0	63.5	68.5	61.5	61.4	68.1	62.9	70.0	
#3 0:30-0:45	70.0	61.4	69.4	63.4	70.0	61.6	69.6	70.0	61.4	69.7	62.9	69.6	70.0	61.3	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.3	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.5	69.9	70.0	63.5	68.5	61.5	61.4	68.1	62.9	70.0	
#4 0:45-1:00	70.0	61.4	69.4	63.4	70.0	61.6	69.6	70.0	61.4	69.7	62.9	69.6	70.0	61.3	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.3	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.5	69.9	70.0	63.5	68.5	61.5	61.4	68.1	62.9	70.0	
#5 1:00-1:15	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.3	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.8	69.9	70.0	63.5	68.5	61.5	61.4	68.1	62.9	70.0	
#6 1:15-1:30	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.9	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#7 1:30-1:45	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.9	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#8 1:45-2:00	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	68.0	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#9 2:00-2:15	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	68.0	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#10 2:15-2:30	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	68.0	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#11 2:30-2:45	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	68.0	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#12 2:45-3:00	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	68.0	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#13 3:00-3:15	70.0	61.5	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.4	69.0	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.6	69.6	63.5	69.9	70.0	70.0	61.4	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.9	69.9	70.0	63.5	68.5	61.5	61.5	68.1	62.9	70.0	
#14 3:15-3:30	70.0	61.4	69.4	63.4	70.0	61.6	69.6	70.0	61.5	69.7	62.9	69.6	70.0	61.3	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.3	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.7	69.9	70.0	63.5	68.5	61.5	61.4	68.1	62.9	70.0	
#15 3:30-3:45	70.0	61.4	69.4	63.4	70.0	61.6	69.6	70.0	61.4	69.7	62.9	69.6	70.0	61.3	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.3	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.5	69.9	70.0	63.5	68.5	61.5	61.4	68.1	62.9	70.0	
#16 3:45-4:00	70.0	61.4	69.4	63.4	70.0	61.6	69.6	70.0	61.4	69.7	62.9	69.6	70.0	61.3	68.9	62.9	63.4	69.3	69.9	70.0	70.0	61.5	69.6	62.9	69.6	70.0	70.0	70.0	61.5	69.6	63.5	69.9	70.0	70.0	61.3	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.5	69.9	70.0	63.5	68.5	61.5	61.4	68.1	62.9	70.0	
#17 4:00-4:15	70.0	61.2	69.4	63.3	70.0	61.5	69.6	70.0	61.3	69.7	62.8	69.6	70.0	61.0	68.9	62.8	63.3	69.2	69.9	70.0	70.0	61.4	69.6	62.8	69.6	70.0	70.0	70.0	61.4	69.6	63.4	69.9	70.0	70.0	61.1	69.5	63.1	61.6	61.6	68.7	62.8	69.9	61.6	68.0	68.6	69.1	66.5	69.9	70.0	63.5	68.5	61.3	61.2	68.1	62.9	70.0	
#18 4:15-4:30	70.0	61.1	69.4	63.2	70.0	61.5	69.6	70.0	61.1	69.7	62.7	69.6	70.0	61.0	68.8	62.8	63.3	69.2	69.9	70.0	70.0	61.2	69.6	62.7	69.6	70.0	70.0	70.0	61.3	69.6	63.4	69.9	70.0	70.0	61.0	69.5	63.0	61.6	61.6	68.7	62.7	69.9	61.6	68.0	68.6	69.1	65.8	69.8	70.0	63.4	68.5	61.2	61.0	68.1	62.9	70.0	
#19 4:30-4:45	70.0	61.0	69.4	63.1	70.0	61.4	69.6	70.0	61.0	69.7	62.7	69.6	70.0	61.0	68.7	62.7	63.2	69.2	69.9	70.0	70.0	61.1	69.6	62.6	69.6	70.0	70.0	70.0	61.2	69.6	63.2	69.9	70.0	70.0	61.0	69.5	62.9	61.6	61.6	68.7	62.7	69.9	61.6	68.0	68.6	69.1	64.8	69.8	70.0	63.4	68.5	61.1	61.0	68.0	62.9	70.0	
#20 4:45-5:00	70.0	60.8	69.4	62.9	70.0	61.3	69.5	70.0	61.0	69.7	62.5	69.6	70.0	61.0	68.7	62.5	62.8	69.2	69.9	70.0	70.0	61.0	69.6	62.5	69.6	70.0	70.0	70.0	61.1	69.6	63.1	69.9	70.0	70.0	61.0	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.5	69.9	70.0	63.5	68.5	61.4	61.4	68.1	62.9	70.0	
#21 5:00-5:15	70.0	60.6	69.3	62.6	70.0	61.3	69.5	70.0	61.0	69.7	62.3	69.6	70.0	61.0	68.7	62.3	62.8	69.2	69.9	70.0	70.0	61.0	69.6	62.3	69.6	70.0	70.0	70.0	61.0	69.6	63.2	69.9	70.0	70.0	61.0	69.5	63.1	61.7	61.7	68.7	62.9	69.9	61.6	68.0	68.6	69.1	67.1	69.9	70.0	63.5	68.5	61.4	61.3	68.1	62.9	70.0	
#22 5:15-5:30	70.0	60.3	69.3	62.1	70.0	61.2	69.5	70.0	61.0	69.7	62.0	69.6	70.0	61.0	68.6	62.0	62.5	69.2	69.9	70.0	70.0	61.0	69.6	62.0	69.6																																

Segment ID	S/O SH 14	SH 14 Off	Basic	SH 14 Loop On/Off	Basic	SH 14 On	Basic	Prospect Off	Basic	Prospect On	Overlap	POE Off	Basic	POE On	Basic	Basic	Harmony Off	Basic	Harmony On	Basic	Basic	SH 392 Off	Basic	SH 392 On	Basic	Basic	Basic	Basic	Crossoffs	Basic	Crossroad On	Basic	Basic	SH 404 Off	Basic	Basic	SH 404 On	Basic	Basic	SH 402 Off	Basic	SH 402 On	Basic	CR 16 Off	Basic	CSP Off	Basic	SH 60 Off	Basic	SH 60 On	N/O SH 60	N/O SH 60					
																																																					Seg. 1	Seg. 2	Seg. 3	Seg. 4	Seg. 5
Total Density (veh/mi/In) by Analysis Period	1.1	0.9	1.1	0.9	1.3	1.3	1.3	1.3	1.8	1.5	1.5	2.8	2.1	1.5	2.1	0.8	1.8	0.6	2.7	1.8	2.7	0.7	2.5	3.6	2.9	2.0	2.9	2.9	1.7	2.4	2.1	2.1	1.6	1.6	2.1	2.2	2.0	2.2	2.3	4.6	5.0	2.8	1.9	2.8	3.2	2.5	5.2	1.9	3.3	2.7	2.7	2.4	2.5	2.6	2.6		
#2 0:15-0:30	1.3	0.7	1.0	0.8	1.2	1.3	1.3	1.2	1.8	1.4	1.4	2.7	2.1	1.5	2.1	0.8	1.8	0.6	2.7	1.9	2.7	0.7	2.6	3.8	3.1	2.1	3.1	2.1	3.1	1.9	2.4	2.1	2.1	1.7	1.7	2.2	2.3	2.2	2.4	5.1	5.6	3.3	2.3	3.3	3.0	5.8	2.4	4.0	3.4	3.1	3.3	3.2	3.2				
#3 0:30-0:45	1.2	0.6	1.0	0.8	1.1	1.3	1.3	1.2	1.7	1.4	1.4	2.7	2.0	1.4	2.1	0.7	1.7	0.7	2.8	1.9	2.8	0.8	2.6	3.9	3.2	2.2	3.2	2.2	3.2	2.0	2.5	2.2	2.2	1.7	1.7	2.2	2.4	2.2	2.3	2.4	5.2	5.7	3.4	2.3	3.4	3.9	3.1	6.0	2.5	4.2	3.5	3.6	3.2	3.4	3.4		
#4 0:45-1:00	1.0	0.5	0.8	0.7	0.9	1.2	1.2	1.2	1.2	1.7	1.4	1.4	2.6	2.0	1.4	2.0	0.6	1.7	0.7	2.8	2.0	2.8	0.8	2.7	4.0	3.3	2.3	3.3	2.3	3.3	2.1	2.5	2.2	2.2	1.7	1.7	2.3	2.4	2.2	2.4	2.4	5.2	5.8	3.5	2.4	3.5	4.0	3.1	6.1	2.5	4.2	3.6	3.7	3.3	3.5	3.5	
#5 1:00-1:15	1.1	0.5	0.9	0.7	1.0	1.3	1.3	1.3	1.8	1.4	1.4	1.5	2.7	2.1	1.5	2.1	0.8	1.8	1.0	3.1	2.1	3.1	1.1	2.9	4.3	3.6	2.5	3.6	2.5	3.6	2.5	2.8	2.4	2.4	1.9	1.9	2.5	2.7	2.4	2.6	2.6	5.4	6.1	3.8	2.6	3.8	4.3	3.4	6.4	2.7	4.6	3.9	4.1	3.6	3.9	3.8	
#6 1:15-1:30	1.4	0.9	1.2	0.9	1.3	1.5	1.5	1.5	2.2	1.7	1.7	3.1	2.5	1.7	2.5	1.2	2.2	1.5	3.5	2.4	3.5	1.7	3.4	4.9	4.1	2.8	4.1	2.8	4.1	3.1	3.2	2.8	2.8	2.1	2.1	2.8	3.0	2.8	2.9	3.0	5.9	6.6	4.2	2.9	4.2	4.9	3.8	6.9	3.0	5.2	4.4	4.6	4.1	4.5	4.3		
#7 1:30-1:45	1.8	1.4	1.6	1.2	1.7	1.9	1.9	1.9	1.8	2.7	2.0	2.0	3.7	3.0	2.1	3.0	1.9	2.6	2.1	4.1	2.8	4.1	2.3	3.9	5.6	4.7	3.2	4.7	3.2	4.7	3.9	3.7	3.2	3.2	2.4	2.4	3.2	3.4	3.1	3.3	3.5	6.4	7.2	4.8	3.3	4.8	5.6	4.3	7.6	3.5	5.9	5.0	5.4	4.7	5.1	4.9	4.9
#8 1:45-2:00	2.5	2.2	2.3	1.7	2.4	2.4	2.4	2.4	3.4	2.6	2.6	4.6	3.8	2.7	3.9	2.9	3.4	3.1	5.0	3.4	5.0	3.4	4.8	6.6	5.7	3.9	5.6	3.9	5.7	5.0	4.6	3.8	3.8	2.9	2.9	3.8	4.1	3.8	4.0	4.3	7.3	8.2	5.7	3.9	5.7	6.6	5.1	8.6	4.1	7.1	5.9	6.5	5.6	6.1	5.8	5.8	
#9 2:00-2:15	3.2	3.1	3.0	2.1	3.1	2.9	2.9	2.9	4.2	3.2	3.2	5.6	4.7	3.2	4.7	3.9	4.1	4.0	5.8	4.0	5.8	4.5	5.7	7.6	6.6	4.6	6.5	4.6	6.6	6.1	5.4	4.3	4.3	3.4	3.4	4.4	4.7	4.3	4.7	5.0	8.2	9.1	6.6	4.8	6.6	7.7	6.0	9.6	4.8	8.1	6.8	7.6	6.4	7.1	6.7	6.7	
#10 2:15-2:30	3.9	3.9	3.7	2.6	3.8	3.5	3.5	3.4	4.9	3.8	3.8	6.5	5.5	3.9	5.5	4.9	4.8	5.0	6.7	4.7	6.7	5.5	6.5	8.6	7.5	5.3	7.5	5.3	7.5	7.3	6.3	4.9	4.9	3.9	3.9	5.0	5.4	5.0	5.3	5.8	9.1	10.1	7.4	5.2	7.5	8.8	6.8	10.6	5.4	9.3	7.7	8.6	7.3	8.0	7.6		
#11 2:30-2:45	4.6	4.7	4.4	3.1	4.5	4.0	4.0	4.0	4.0	5.7	4.3	4.3	7.2	6.2	4.3	6.2	5.7	5.3	5.8	7.4	5.1	7.4	6.3	7.2	9.5	8.3	5.8	8.2	5.8	8.3	8.2	6.9	5.4	5.4	4.2	4.2	5.5	5.9	5.4	5.9	6.4	9.7	10.8	8.1	5.6	8.2	9.6	7.4	11.4	5.9	10.1	8.4	9.5	8.0	8.8	8.3	
#12 2:45-3:00	5.3	5.6	5.0	3.6	5.2	4.6	4.6	4.6	4.5	6.4	4.9	4.9	8.2	7.1	5.0	7.1	6.8	6.0	6.7	8.3	5.8	8.3	7.4	8.1	10.6	9.3	6.5	9.2	6.5	9.2	9.3	7.8	6.0	6.0	4.7	4.7	6.1	6.5	6.0	6.6	7.2	10.6	11.8	9.0	6.3	9.1	10.7	8.2	12.4	6.6	11.3	9.3	10.6	8.9	9.2	9.2	
#13 3:00-3:15	6.0	6.4	5.7	4.1	5.9	5.1	5.1	5.1	5.0	7.2	5.5	5.5	9.0	7.8	5.5	7.8	7.7	6.6	7.6	9.1	6.4	9.1	8.4	8.9	11.5	10.2	7.1	10.1	7.1	10.1	10.4	8.5	6.6	6.6	5.2	5.2	6.6	7.1	6.6	7.2	11.8	12.4	9.8	6.9	9.9	11.7	8.9	13.4	7.2	12.3	10.2	11.6	9.6	10.7	10.1	10.1	
#14 3:15-3:30	6.7	7.2	6.4	4.6	6.5	5.7	5.7	5.7	5.6	8.0	6.3	6.2	10.2	8.9	6.2	8.9	9.0	7.5	8.8	10.2	7.2	10.2	9.7	9.9	12.8	11.3	8.0	11.3	8.0	11.3	11.8	9.6	7.3	7.3	5.8	5.8	7.4	7.9	7.3	8.1	8.8	12.4	13.8	10.9	7.7	10.9	13.0	9.9	14.6	8.0	13.7	11.3	13.0	10.7	11.9	11.2	11.2
#15 3:30-3:45	7.4	8.1	7.0	5.1	7.2	6.2	6.2	6.2	6.2	8.8	7.0	6.9	11.3	9.8	7.0	9.8	10.1	8.3	10.0	11.2	7.9	11.2	11.0	10.9	14.0	12.4	8.8	12.4	8.8	12.4	13.1	10.5	8.0	8.0	6.3	6.3	8.0	8.6	8.0	8.9	9.6	13.4	14.9	11.9	8.4	11.9	14.1	10.8	15.7	8.8	15.0	12.3	14.2	11.6	13.0	12.1	12.1
#16 3:45-4:00	8.1	8.9	7.7	5.6	7.9	6.8	6.8	6.8	6.8	9.6	7.8	7.7	12.5	10.9	7.8	10.9	11.4	9.3	11.3	12.4	8.8	12.4	12.4	12.0	15.4	13.6	9.8	13.6	9.7	13.6	14.6	11.6	8.8	8.8	7.0	7.0	8.8	9.4	8.8	9.8	10.5	14.4	16.1	13.0	9.2	13.0	15.5	11.8	17.1	9.8	16.5	13.5	15.6	12.8	14.3	13.3	13.3
#17 4:00-4:15	8.8	9.8	8.3	6.1	8.6	7.4	7.4	7.4	7.5	10.3	8.7	8.6	13.8	12.0	8.6	12.0	12.7	10.2	12.5	13.6	9.8	13.6	13.8	13.1	16.7	14.9	10.8	14.8	10.7	14.8	16.1	12.6	9.5	9.5	7.6	7.6	9.6	10.2	9.5	10.7	11.4	15.5	17.2	14.0	10.1	14.1	16.7	13.8	18.4	10.7	16.5	14.5	17.0	13.8	15.6	14.5	14.5
#18 4:15-4:30	9.4	10.6	8.8	6.6	9.3	8.0	8.0	8.0	8.1	11.2	9.5	9.3	14.9	13.0	9.4	13.0	13.9	11.0	13.8	14.7	10.6	14.7	15.2	14.1	18.0	16.1	11.6	16.0	11.6	16.0	17.5	13.6	10.2	10.2	8.2	8.2	10.3	11.0	10.3	11.6	12.2	16.2	18.3	15.1	10.9	15.1	18.0	14.8	14.9	16.8	15.6	15.6					
#19 4:30-4:45	10.1	11.4	9.4	7.1	10.0	8.6	8.6	8.6	8.7	11.9	10.5	10.3	16.4	14.2	10.4	14.2	15.4	12.0	15.3	16.1	11.7	16.1	17.8	15.3	19.5	17.5	12.8	17.4	12.8	17.5	19.1	14.7	11.0	11.0	9.0	9.0	11.1	11.8	11.1	12.7	13.2	17.5	19.6	16.3	11.9	16.3	19.4	14.8	21.2	11.7	21.2	17.0	20.0	16.1	18.2	16.9	16.9
#20 4:45-5:00	10.8	12.3	9.9	7.5	10.6	9.2	9.2	9.2	9.4	12.8	11.5	11.2	17.7	15.4	11.3	15.4	16.8	13.1	16.8	17.6	12.8	17.6	18.5	16.5	21.0	19.1	13.8	19.0	13.8	19.1	20.8	15.9	11.9	11.9	9.7	9.7	11.9	12.7	11.9	13.8	14.1	18.6	20.9	17.6	12.8	17.6	20.8	15.9	22.7	13.8	22.9	18.7	21.6	17.4	19.6	18.4	18.4
#21 5:00-5:15	11.5	13.1	10.4	8.2	11.3	9.9	9.9	9.9	10.1	13.5	12.7	12.4	19.4	16.8	12.5	16.8	18.5	14.3	18.5	19.4	14.2	19.4	20.3	18.0	22.7	21.0	15.2	20.8	15.2	20.9	22.6	17.2	12.8	12.8	10.6	10.6	12.8	13.7	12.8	15.0	15.2	19.8	22.3	19.0	13.9	19.1	23.3	17.1	24.3	15.1	24.9	20.5	23.3	18.9	21.1	20.1	20.1
#22 5:15-5:30	12.2	13.9	10.9	8.7	12.0	10.5	10.5	10.5	10.8	14.3	13.8	13.4	20.7	18.1	13.4	18.2	19.9	15.3	20.0	21.2	15.3	21.2	22.0	19.3	24.1	22.7	16.3	22.6	16.3	22.7	24.2	18.4	13.5	13.5	11.3	11.3	13.2	13.6	14.5	13.6	16.1	16.0	20.8	23.4	20.4	14.8	20.5	23.6	22.1	24.8	20.3	22.5	21.7	21.7			
#23 5:30-5:45	12.9	14.8	11.4	9.3	12.7	11.2	11.2	11.2	11.6	15.3	14.6	14.1	21.8	19.3	14.2	19.3	21.0	16.1	21.3	22.9	16.3	22.9	23.5																																		

Northbound Accel-Decel GP

7:18 PM 7/6/2017













Table with columns for Segment ID, S/O SH 60, SH 60 Off, Basic, SH 60 On, Basic, CR 16 Off, Basic, SH 402 Off, Basic, SH 402 On, Basic, US 34 Off, Basic, US 34 Loop On, US 34 On, Basic, Crossroad s Off, Basic, Crossroad s On, Basic, SH 392 Off, Basic, SH 392 On, Basic, Harmon y Off, Basic, Harmon y On, Overlap, CSP Off, Basic, CSP On, Basic, POE Off, Basic, POE On/Prospect On/Off, Basic, Prospect On, Basic, SH 14 Off, Basic, SH 14 Loop Off, Basic, SH 14 On, Basic, N/O SH 14. Rows include segment IDs like #1 000-015, #2 015-030, #3 030-045, etc.

Appendix C. Interchange Intersection LOS Outputs

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 392

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














												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (veh/h)	0	870	450	260	1050	0	0	0	0	580	0	360
Future Volume (veh/h)	0	870	450	260	1050	0	0	0	0	580	0	360
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	946	0	283	1141	0				630	0	0
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1298	581	608	2441	0				825	0	333
Arrive On Green	0.00	0.37	0.00	0.09	0.23	0.00				0.23	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	946	0	283	1141	0				630	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	20.8	0.0	6.7	25.1	0.0				14.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.8	0.0	6.7	25.1	0.0				14.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1298	581	608	2441	0				825	0	333
V/C Ratio(X)	0.00	0.73	0.00	0.47	0.47	0.00				0.76	0.00	0.00
Avail Cap(c_a), veh/h	0	1298	581	608	2441	0				1064	0	440
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.83	0.83	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	24.6	0.0	30.7	20.5	0.0				32.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.6	0.0	0.5	0.1	0.0				2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	16.2	0.0	10.6	17.7	0.0				12.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	28.3	0.0	31.2	20.6	0.0				34.7	0.0	0.0
LnGrp LOS		C		C	C					C		
Approach Vol, veh/h		946			1424						630	
Approach Delay, s/veh		28.3			22.7						34.7	
Approach LOS		C			C						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	29.1	37.0		23.9		66.1						
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0						
Max Green Setting (Gmax), s	18.0	* 31		25.0		54.0						
Max Q Clear Time (g_c+I1), s	8.7	22.8		16.9		27.1						
Green Ext Time (p_c), s	4.7	3.0		2.0		7.7						
Intersection Summary												
HCM 2010 Ctrl Delay				27.0								
HCM 2010 LOS				C								
Notes												

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 392

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










												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1240	0	0	1040	860	270	0	300	0	0	0
Future Volume (veh/h)	210	1240	0	0	1040	860	270	0	300	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	228	1348	0	0	1130	0	293	0	0			
Adj No. of Lanes	1	2	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	392	2420	0	0	1962	878	392	0	175			
Arrive On Green	0.16	1.00	0.00	0.00	0.55	0.00	0.11	0.00	0.00			
Sat Flow, veh/h	1774	3632	0	0	3632	1583	3548	0	1583			
Grp Volume(v), veh/h	228	1348	0	0	1130	0	293	0	0			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1774	0	1583			
Q Serve(g_s), s	4.9	0.0	0.0	0.0	18.8	0.0	7.2	0.0	0.0			
Cycle Q Clear(g_c), s	4.9	0.0	0.0	0.0	18.8	0.0	7.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	392	2420	0	0	1962	878	392	0	175			
V/C Ratio(X)	0.58	0.56	0.00	0.00	0.58	0.00	0.75	0.00	0.00			
Avail Cap(c_a), veh/h	458	2552	0	0	1962	878	635	0	283			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.77	0.77	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	9.4	0.0	0.0	0.0	13.1	0.0	38.8	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.2	0.0	0.0	1.2	0.0	2.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	4.3	0.1	0.0	0.0	14.5	0.0	6.7	0.0	0.0			
LnGrp Delay(d),s/veh	10.5	0.2	0.0	0.0	14.4	0.0	41.7	0.0	0.0			
LnGrp LOS	B	A			B		D					
Approach Vol, veh/h		1576			1130			293				
Approach Delay, s/veh		1.7			14.4			41.7				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		66.0			11.6	54.4		14.4				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		64.9			10.5	49.9		16.1				
Max Q Clear Time (g_c+I1), s		2.0			6.9	20.8		9.2				
Green Ext Time (p_c), s		22.7			0.3	16.5		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay				10.4								
HCM 2010 LOS				B								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 392

07/14/2017




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	1360	200	310	1610	0	0	0	0	860	0	330
Future Volume (veh/h)	0	1360	200	310	1610	0	0	0	0	860	0	330
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1478	0	337	1750	0				935	0	0
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1612	721	537	2707	0				1025	0	422
Arrive On Green	0.00	0.46	0.00	0.51	1.00	0.00				0.29	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	1478	0	337	1750	0				935	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	35.1	0.0	6.4	0.0	0.0				22.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.1	0.0	6.4	0.0	0.0				22.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1612	721	537	2707	0				1025	0	422
V/C Ratio(X)	0.00	0.92	0.00	0.63	0.65	0.00				0.91	0.00	0.00
Avail Cap(c_a), veh/h	0	1612	721	537	2707	0				1025	0	422
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.43	0.43	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	22.9	0.0	17.3	0.0	0.0				30.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.7	0.0	1.0	0.2	0.0				12.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	26.4	0.0	7.9	0.2	0.0				18.8	0.0	0.0
LnGrp Delay(d),s/veh	0.0	32.7	0.0	18.3	0.2	0.0				43.0	0.0	0.0
LnGrp LOS		C		B	A					D		
Approach Vol, veh/h		1478			2087						935	
Approach Delay, s/veh		32.7			3.2						43.0	
Approach LOS		C			A						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	27.9	45.0		29.0		72.9						
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0						
Max Green Setting (Gmax), s	11.0	* 39		24.0		55.0						
Max Q Clear Time (g_c+I1), s	8.4	37.1		24.9		2.0						
Green Ext Time (p_c), s	1.7	1.3		0.0		17.3						
Intersection Summary												
HCM 2010 Ctrl Delay				21.1								
HCM 2010 LOS				C								
Notes												

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 392













07/14/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1930	0	0	1420	1020	500	0	330	0	0	0
Future Volume (veh/h)	290	1930	0	0	1420	1020	500	0	330	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	315	2098	0	0	1543	0	543	0	0			
Adj No. of Lanes	1	2	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	344	2458	0	0	1860	832	619	0	276			
Arrive On Green	0.24	1.00	0.00	0.00	0.53	0.00	0.17	0.00	0.00			
Sat Flow, veh/h	1774	3632	0	0	3632	1583	3548	0	1583			
Grp Volume(v), veh/h	315	2098	0	0	1543	0	543	0	0			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1774	0	1583			
Q Serve(g_s), s	8.4	0.0	0.0	0.0	33.0	0.0	13.4	0.0	0.0			
Cycle Q Clear(g_c), s	8.4	0.0	0.0	0.0	33.0	0.0	13.4	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	344	2458	0	0	1860	832	619	0	276			
V/C Ratio(X)	0.91	0.85	0.00	0.00	0.83	0.00	0.88	0.00	0.00			
Avail Cap(c_a), veh/h	387	2544	0	0	1860	832	643	0	287			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.26	0.26	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	17.8	0.0	0.0	0.0	18.0	0.0	36.2	0.0	0.0			
Incr Delay (d2), s/veh	8.3	0.8	0.0	0.0	4.5	0.0	12.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	10.5	0.5	0.0	0.0	24.0	0.0	12.2	0.0	0.0			
LnGrp Delay(d),s/veh	26.1	0.8	0.0	0.0	22.4	0.0	49.0	0.0	0.0			
LnGrp LOS	C	A			C		D					
Approach Vol, veh/h		2413			1543			543				
Approach Delay, s/veh		4.1			22.4			49.0				
Approach LOS		A			C			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		67.0			15.2	51.8		20.2				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		64.7			12.9	47.3		16.3				
Max Q Clear Time (g_c+I1), s		2.0			10.4	35.0		15.4				
Green Ext Time (p_c), s		46.1			0.3	11.4		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay					15.8							
HCM 2010 LOS					B							
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 2: SB Ramps & SH 392






















07/14/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖↗	↑↑					↖	↗	↗
Traffic Volume (veh/h)	0	650	540	290	1090	0	0	0	0	100	0	390
Future Volume (veh/h)	0	650	540	290	1090	0	0	0	0	100	0	390
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	707	0	315	1185	0				109	0	0
Adj No. of Lanes	0	2	1	2	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2465	1103	433	3052	0				240	0	76
Arrive On Green	0.00	0.70	0.00	0.13	0.86	0.00				0.07	0.00	0.00
Sat Flow, veh/h	0	3632	1583	3442	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	707	0	315	1185	0				109	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1721	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	7.6	0.0	8.8	6.9	0.0				3.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.6	0.0	8.8	6.9	0.0				3.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2465	1103	433	3052	0				240	0	76
V/C Ratio(X)	0.00	0.29	0.00	0.73	0.39	0.00				0.45	0.00	0.00
Avail Cap(c_a), veh/h	0	2465	1103	654	3052	0				319	0	111
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.82	0.82	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.8	0.0	42.1	1.4	0.0				44.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	1.9	0.1	0.0				1.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	6.7	0.0	7.4	6.0	0.0				2.7	0.0	0.0
LnGrp Delay(d),s/veh	0.0	6.1	0.0	44.0	1.5	0.0				46.2	0.0	0.0
LnGrp LOS		A		D	A					D		
Approach Vol, veh/h		707			1500						109	
Approach Delay, s/veh		6.1			10.4						46.2	
Approach LOS		A			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.6	73.6		9.8		90.2						
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0						
Max Green Setting (Gmax), s	18.0	59.0		7.0		82.0						
Max Q Clear Time (g_c+I1), s	10.8	9.6		5.0		8.9						
Green Ext Time (p_c), s	0.8	13.1		0.1		13.6						
Intersection Summary												
HCM 2010 Ctrl Delay			10.8									
HCM 2010 LOS			B									
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 392

07/14/2017













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (veh/h)	240	1110	0	0	980	850	400	0	520	0	0	0
Future Volume (veh/h)	240	1110	0	0	980	850	400	0	520	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	261	1207	0	0	1065	0	435	0	0			
Adj No. of Lanes	1	2	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	437	2550	0	0	2106	942	514	0	230			
Arrive On Green	0.16	1.00	0.00	0.00	0.60	0.00	0.14	0.00	0.00			
Sat Flow, veh/h	1774	3632	0	0	3632	1583	3548	0	1583			
Grp Volume(v), veh/h	261	1207	0	0	1065	0	435	0	0			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1774	0	1583			
Q Serve(g_s), s	5.8	0.0	0.0	0.0	17.4	0.0	11.9	0.0	0.0			
Cycle Q Clear(g_c), s	5.8	0.0	0.0	0.0	17.4	0.0	11.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	437	2550	0	0	2106	942	514	0	230			
V/C Ratio(X)	0.60	0.47	0.00	0.00	0.51	0.00	0.85	0.00	0.00			
Avail Cap(c_a), veh/h	480	2637	0	0	2106	942	585	0	261			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.96	0.96	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	8.2	0.0	0.0	0.0	11.7	0.0	41.7	0.0	0.0			
Incr Delay (d2), s/veh	1.7	0.1	0.0	0.0	0.9	0.0	10.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	5.2	0.1	0.0	0.0	13.5	0.0	10.8	0.0	0.0			
LnGrp Delay(d),s/veh	9.8	0.1	0.0	0.0	12.6	0.0	51.7	0.0	0.0			
LnGrp LOS	A	A			B		D					
Approach Vol, veh/h		1468			1065			435				
Approach Delay, s/veh		1.9			12.6			51.7				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		76.5			12.5	64.0		19.0				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		74.5			10.5	59.5		16.5				
Max Q Clear Time (g_c+I1), s		2.0			7.8	19.4		13.9				
Green Ext Time (p_c), s		19.4			0.3	16.8		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay				13.0								
HCM 2010 LOS				B								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 392




















07/14/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	820	320	340	1300	0	0	0	0	420	0	230
Future Volume (veh/h)	0	820	320	340	1300	0	0	0	0	420	0	230
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	891	0	370	1413	0				457	0	0
Adj No. of Lanes	0	2	1	2	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2013	901	495	2664	0				629	0	249
Arrive On Green	0.00	0.57	0.00	0.14	0.75	0.00				0.18	0.00	0.00
Sat Flow, veh/h	0	3632	1583	3442	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	891	0	370	1413	0				457	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1721	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	14.5	0.0	10.3	16.4	0.0				12.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.5	0.0	10.3	16.4	0.0				12.2	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2013	901	495	2664	0				629	0	249
V/C Ratio(X)	0.00	0.44	0.00	0.75	0.53	0.00				0.73	0.00	0.00
Avail Cap(c_a), veh/h	0	2013	901	757	2664	0				923	0	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.67	0.67	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	12.4	0.0	41.1	5.1	0.0				38.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	1.5	0.1	0.0				1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	11.7	0.0	8.0	11.7	0.0				10.2	0.0	0.0
LnGrp Delay(d),s/veh	0.0	13.1	0.0	42.6	5.2	0.0				40.5	0.0	0.0
LnGrp LOS		B		D	A					D		
Approach Vol, veh/h		891			1783						457	
Approach Delay, s/veh		13.1			13.0						40.5	
Approach LOS		B			B						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.4	60.9		20.7		79.3						
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0						
Max Green Setting (Gmax), s	21.0	39.0		24.0		65.0						
Max Q Clear Time (g_c+I1), s	12.3	16.5		14.2		18.4						
Green Ext Time (p_c), s	1.1	13.1		1.6		18.4						
Intersection Summary												
HCM 2010 Ctrl Delay				17.0								
HCM 2010 LOS				B								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 392
























07/14/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1030	0	0	1180	470	460	0	380	0	0	0
Future Volume (veh/h)	210	1030	0	0	1180	470	460	0	380	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	228	1120	0	0	1283	0	500	0	0			
Adj No. of Lanes	1	2	0	0	2	1	2	0	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	330	2298	0	0	1829	818	583	0	260			
Arrive On Green	0.08	0.65	0.00	0.00	0.52	0.00	0.16	0.00	0.00			
Sat Flow, veh/h	1774	3632	0	0	3632	1583	3548	0	1583			
Grp Volume(v), veh/h	228	1120	0	0	1283	0	500	0	0			
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1774	0	1583			
Q Serve(g_s), s	5.0	14.6	0.0	0.0	24.7	0.0	12.3	0.0	0.0			
Cycle Q Clear(g_c), s	5.0	14.6	0.0	0.0	24.7	0.0	12.3	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	330	2298	0	0	1829	818	583	0	260			
V/C Ratio(X)	0.69	0.49	0.00	0.00	0.70	0.00	0.86	0.00	0.00			
Avail Cap(c_a), veh/h	450	2536	0	0	1829	818	631	0	281			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.84	0.84	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	15.5	8.1	0.0	0.0	16.5	0.0	36.6	0.0	0.0			
Incr Delay (d2), s/veh	2.3	0.1	0.0	0.0	2.3	0.0	10.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	5.8	11.0	0.0	0.0	18.3	0.0	11.2	0.0	0.0			
LnGrp Delay(d),s/veh	17.8	8.2	0.0	0.0	18.8	0.0	47.4	0.0	0.0			
LnGrp LOS	B	A			B		D					
Approach Vol, veh/h		1348			1283			500				
Approach Delay, s/veh		9.9			18.8			47.4				
Approach LOS		A			B			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		62.9			11.9	51.0		19.3				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		64.5			13.5	46.5		16.0				
Max Q Clear Time (g_c+I1), s		16.6			7.0	26.7		14.3				
Green Ext Time (p_c), s		19.7			0.4	12.6		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay				19.5								
HCM 2010 LOS				B								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 1: West Frontage Road & SH 68 (Harmony Road)













07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	3215	95	150	3875	100	50	50	100	25	10	50
Future Volume (veh/h)	190	3215	95	150	3875	100	50	50	100	25	10	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	207	3495	103	163	4212	109	54	54	109	27	11	54
Adj No. of Lanes	1	3	1	1	4	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	205	3403	1047	224	4449	114	226	174	136	184	153	118
Arrive On Green	0.08	0.67	0.66	0.09	0.69	0.69	0.04	0.09	0.09	0.03	0.08	0.07
Sat Flow, veh/h	1774	5085	1583	1774	6474	166	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	207	3495	103	163	3114	1207	54	54	109	27	11	54
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1602	1834	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	11.0	87.0	2.3	7.4	74.9	78.3	3.6	3.5	8.8	1.8	0.7	3.5
Cycle Q Clear(g_c), s	11.0	87.0	2.3	7.4	74.9	78.3	3.6	3.5	8.8	1.8	0.7	3.5
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	3403	1047	224	3302	1260	226	174	136	184	153	118
V/C Ratio(X)	1.01	1.03	0.10	0.73	0.94	0.96	0.24	0.31	0.80	0.15	0.07	0.46
Avail Cap(c_a), veh/h	205	3403	1047	224	3302	1260	226	244	195	205	244	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	21.5	4.3	55.4	18.1	18.6	51.4	55.0	58.3	52.4	55.1	39.0
Incr Delay (d2), s/veh	64.7	22.8	0.2	1.1	0.8	2.6	0.5	1.0	14.2	0.4	0.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	19.9	85.0	1.9	6.9	35.6	43.2	3.2	3.4	7.8	1.6	0.7	2.9
LnGrp Delay(d),s/veh	110.9	44.3	4.5	56.5	18.9	21.2	51.9	56.0	72.5	52.8	55.3	41.8
LnGrp LOS	F	F	A	E	B	C	D	E	E	D	E	D
Approach Vol, veh/h		3805			4484			217				92
Approach Delay, s/veh		46.9			20.9			63.3				46.6
Approach LOS		D			C			E				D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.3	91.0	6.5	16.2	14.0	93.3	8.0	14.7				
Change Period (Y+Rc), s	5.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	5.0	86.0	4.0	16.0	10.0	82.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	9.4	89.0	3.8	10.8	13.0	80.3	5.6	5.5				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	1.6	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			33.7									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 68 (Harmony Road)

07/13/2017























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	2070	1270	220	3155	0	0	0	0	180	0	970
Future Volume (veh/h)	0	2070	1270	220	3155	0	0	0	0	180	0	970
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2250	0	237	3429	0				194	0	0
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2704	1185	251	3030	0				292	0	118
Arrive On Green	0.00	0.76	0.00	0.10	1.00	0.00				0.08	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	2250	0	237	3429	0				194	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	53.6	0.0	8.8	111.3	0.0				6.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	53.6	0.0	8.8	111.3	0.0				6.9	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2704	1185	251	3030	0				292	0	118
V/C Ratio(X)	0.00	0.83	0.00	0.94	1.13	0.00				0.67	0.00	0.00
Avail Cap(c_a), veh/h	0	2704	1185	251	3030	0				846	0	365
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.29	0.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.9	0.0	41.0	0.0	0.0				57.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	7.7	59.6	0.0				2.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	30.5	0.0	10.4	44.5	0.0				6.3	0.0	0.0
LnGrp Delay(d),s/veh	0.0	10.9	0.0	48.7	59.6	0.0				60.5	0.0	0.0
LnGrp LOS		B		D	F					E		
Approach Vol, veh/h		2250			3666						194	
Approach Delay, s/veh		10.9			58.9						60.5	
Approach LOS		B			E						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	103.3		14.7		115.3						
Change Period (Y+Rc), s	4.0	6.0		5.0		6.0						
Max Green Setting (Gmax), s	8.0	77.0		30.0		89.0						
Max Q Clear Time (g_c+I1), s	10.8	55.6		8.9		113.3						
Green Ext Time (p_c), s	0.0	21.4		0.8		0.0						
Intersection Summary												
HCM 2010 Ctrl Delay				41.3								
HCM 2010 LOS				D								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

3: NB Ramps & SH 68 (Harmony Road)

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 		 					
Traffic Volume (veh/h)	640	1610	0	0	2035	270	1340	0	200	0	0	0
Future Volume (veh/h)	640	1610	0	0	2035	270	1340	0	200	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900			
Adj Flow Rate, veh/h	688	1750	0	0	2212	290	1441	0	215			
Adj No. of Lanes	2	2	0	0	2	1	2	1	0			
Peak Hour Factor	0.93	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	477	2232	0	0	1633	731	1059	0	487			
Arrive On Green	0.14	0.63	0.00	0.00	0.46	0.46	0.31	0.00	0.30			
Sat Flow, veh/h	3442	3632	0	0	3632	1583	3442	0	1583			
Grp Volume(v), veh/h	688	1750	0	0	2212	290	1441	0	215			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1583	1721	0	1583			
Q Serve(g_s), s	18.0	46.9	0.0	0.0	60.0	15.7	40.0	0.0	14.2			
Cycle Q Clear(g_c), s	18.0	46.9	0.0	0.0	60.0	15.7	40.0	0.0	14.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	477	2232	0	0	1633	731	1059	0	487			
V/C Ratio(X)	1.44	0.78	0.00	0.00	1.35	0.40	1.36	0.00	0.44			
Avail Cap(c_a), veh/h	477	2232	0	0	1633	731	1059	0	487			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	56.0	17.5	0.0	0.0	35.0	23.1	45.0	0.0	36.5			
Incr Delay (d2), s/veh	200.8	0.2	0.0	0.0	163.5	1.6	168.5	0.0	0.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	38.3	25.0	0.0	0.0	119.4	11.6	78.8	0.0	10.5			
LnGrp Delay(d),s/veh	256.8	17.7	0.0	0.0	198.5	24.7	213.5	0.0	37.1			
LnGrp LOS	F	B			F	C	F		D			
Approach Vol, veh/h		2438			2502			1656				
Approach Delay, s/veh		85.2			178.3			190.6				
Approach LOS		F			F			F				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		86.0			22.0	64.0		44.0				
Change Period (Y+Rc), s		5.0			5.0	6.0		5.0				
Max Green Setting (Gmax), s		81.0			17.0	58.0		39.0				
Max Q Clear Time (g_c+I1), s		48.9			20.0	62.0		42.0				
Green Ext Time (p_c), s		17.5			0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay					147.0							
HCM 2010 LOS					F							

HCM 2010 Signalized Intersection Summary
 1: West Frontage Road & SH 68 (Harmony Road)

07/13/2017













Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	5185	85	100	4460	50	50	25	225	60	30	130
Future Volume (veh/h)	50	5185	85	100	4460	50	50	25	225	60	30	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	54	5575	91	108	4796	54	54	27	242	65	32	140
Adj No. of Lanes	1	3	1	1	4	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	3560	1086	533	6276	70	243	226	181	235	226	181
Arrive On Green	0.04	0.70	0.69	0.27	0.95	0.95	0.04	0.12	0.11	0.04	0.12	0.11
Sat Flow, veh/h	1774	5085	1583	1774	6582	74	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	54	5575	91	108	3495	1355	54	27	242	65	32	140
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1602	1850	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	1.3	98.0	3.9	2.3	17.4	17.8	3.7	1.8	16.0	4.5	2.1	10.7
Cycle Q Clear(g_c), s	1.3	98.0	3.9	2.3	17.4	17.8	3.7	1.8	16.0	4.5	2.1	10.7
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	3560	1086	533	4582	1764	243	226	181	235	226	181
V/C Ratio(X)	0.43	1.57	0.08	0.20	0.76	0.77	0.22	0.12	1.34	0.28	0.14	0.77
Avail Cap(c_a), veh/h	133	3560	1086	533	4582	1764	243	226	181	235	226	181
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.09	0.09	0.09	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	21.0	15.5	37.4	0.6	0.6	51.3	54.8	62.0	51.6	55.0	47.4
Incr Delay (d2), s/veh	2.3	256.2	0.2	0.0	0.1	0.3	0.5	0.2	184.3	0.6	0.3	18.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.6	233.3	3.1	4.0	8.1	9.4	3.3	1.7	29.3	4.0	2.0	9.5
LnGrp Delay(d),s/veh	35.9	277.2	15.7	37.5	0.7	0.9	51.8	55.1	246.3	52.3	55.3	66.0
LnGrp LOS	D	F	B	D	A	A	D	E	F	D	E	E
Approach Vol, veh/h		5720			4958			323			237	
Approach Delay, s/veh		270.7			1.5			197.8			60.8	
Approach LOS		F			A			F			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	44.0	102.0	8.0	21.0	7.5	138.5	8.0	21.0				
Change Period (Y+Rc), s	6.0	* 6	4.0	5.0	4.0	6.0	4.0	5.0				
Max Green Setting (Gmax), s	4.0	* 96	4.0	16.0	4.0	97.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	4.3	100.0	6.5	18.0	3.3	19.8	5.7	12.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	73.6	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay	145.4											
HCM 2010 LOS	F											
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 68 (Harmony Road)




















07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	4030	1440	210	3510	0	0	0	0	310	0	1100
Future Volume (veh/h)	0	4030	1440	210	3510	0	0	0	0	310	0	1100
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	4333	0	219	3774	0				323	0	0
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	0.93	0.93	0.96	0.96	0.93	0.93				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2640	1170	140	2893	0				445	0	176
Arrive On Green	0.00	0.75	0.00	0.07	1.00	0.00				0.13	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	4333	0	219	3774	0				323	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	104.4	0.0	7.0	114.4	0.0				12.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	104.4	0.0	7.0	114.4	0.0				12.3	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2640	1170	140	2893	0				445	0	176
V/C Ratio(X)	0.00	1.64	0.00	1.56	1.30	0.00				0.73	0.00	0.00
Avail Cap(c_a), veh/h	0	2640	1170	140	2893	0				811	0	339
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.09	0.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.8	0.0	54.3	0.0	0.0				58.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	288.7	0.0	256.4	137.3	0.0				2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	266.9	0.0	27.1	96.0	0.0				10.2	0.0	0.0
LnGrp Delay(d),s/veh	0.0	306.5	0.0	310.8	137.3	0.0				61.2	0.0	0.0
LnGrp LOS		F		F	F					E		
Approach Vol, veh/h		4333			3993						323	
Approach Delay, s/veh		306.5			146.8						61.2	
Approach LOS		F			F						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	10.0	108.4		21.6		118.4						
Change Period (Y+Rc), s	4.0	5.0		6.0		5.0						
Max Green Setting (Gmax), s	6.0	89.0		30.0		99.0						
Max Q Clear Time (g_c+I1), s	9.0	106.4		14.3		116.4						
Green Ext Time (p_c), s	0.0	0.0		1.3		0.0						
Intersection Summary												
HCM 2010 Ctrl Delay			223.6									
HCM 2010 LOS			F									
Notes												

User approved volume balancing among the lanes for turning movement.
























HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 68 (Harmony Road)

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	3760	0	0	2270	230	1450	0	320	0	0	0
Future Volume (veh/h)	580	3760	0	0	2270	230	1450	0	320	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900			
Adj Flow Rate, veh/h	604	4043	0	0	2441	240	1510	0	333			
Adj No. of Lanes	2	2	0	0	2	1	2	1	0			
Peak Hour Factor	0.96	0.93	0.93	0.93	0.93	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	492	2225	0	0	1618	724	1082	0	498			
Arrive On Green	0.19	0.84	0.00	0.00	0.46	0.46	0.31	0.00	0.31			
Sat Flow, veh/h	3442	3632	0	0	3632	1583	3442	0	1583			
Grp Volume(v), veh/h	604	4043	0	0	2441	240	1510	0	333			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1583	1721	0	1583			
Q Serve(g_s), s	20.0	88.0	0.0	0.0	64.0	13.6	44.0	0.0	25.7			
Cycle Q Clear(g_c), s	20.0	88.0	0.0	0.0	64.0	13.6	44.0	0.0	25.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	492	2225	0	0	1618	724	1082	0	498			
V/C Ratio(X)	1.23	1.82	0.00	0.00	1.51	0.33	1.40	0.00	0.67			
Avail Cap(c_a), veh/h	492	2225	0	0	1618	724	1082	0	498			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	56.7	11.5	0.0	0.0	38.0	24.3	48.0	0.0	42.2			
Incr Delay (d2), s/veh	104.6	368.0	0.0	0.0	232.2	1.2	183.9	0.0	3.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	29.6	263.6	0.0	0.0	150.1	10.3	87.3	0.0	17.3			
LnGrp Delay(d),s/veh	161.3	379.5	0.0	0.0	270.2	25.5	231.9	0.0	45.6			
LnGrp LOS	F	F			F	C	F		D			
Approach Vol, veh/h		4647			2681			1843				
Approach Delay, s/veh		351.1			248.3			198.2				
Approach LOS		F			F			F				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		92.0			24.0	68.0		48.0				
Change Period (Y+Rc), s		5.0			5.0	6.0		5.0				
Max Green Setting (Gmax), s		87.0			19.0	62.0		43.0				
Max Q Clear Time (g_c+I1), s		90.0			22.0	66.0		46.0				
Green Ext Time (p_c), s		0.0			0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay					290.3							
HCM 2010 LOS					F							

HCM 2010 Signalized Intersection Summary
 1: West Frontage Road & SH 68 (Harmony Road)

07/13/2017













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	2515	95	150	3060	100	50	50	100	25	10	50
Future Volume (veh/h)	190	2515	95	150	3060	100	50	50	100	25	10	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	207	2734	103	163	3326	109	54	54	109	27	11	54
Adj No. of Lanes	1	3	1	1	4	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	406	3005	921	362	3620	118	225	151	114	183	121	89
Arrive On Green	0.19	0.59	0.58	0.16	0.56	0.56	0.05	0.08	0.07	0.03	0.06	0.06
Sat Flow, veh/h	1774	5085	1583	1774	6423	209	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	207	2734	103	163	2481	954	54	54	109	27	11	54
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1602	1826	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	6.9	52.3	2.4	4.3	51.2	52.5	3.0	3.0	5.3	1.5	0.6	2.7
Cycle Q Clear(g_c), s	6.9	52.3	2.4	4.3	51.2	52.5	3.0	3.0	5.3	1.5	0.6	2.7
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	406	3005	921	362	2709	1029	225	151	114	183	121	89
V/C Ratio(X)	0.51	0.91	0.11	0.45	0.92	0.93	0.24	0.36	0.96	0.15	0.09	0.61
Avail Cap(c_a), veh/h	406	3005	921	362	2709	1029	225	288	230	211	288	230
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.76	0.76	0.76	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	19.9	5.9	39.2	21.7	21.9	44.2	47.8	25.5	45.8	48.4	27.9
Incr Delay (d2), s/veh	1.1	5.3	0.2	0.7	4.9	12.3	0.5	1.4	30.1	0.4	0.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.5	34.1	2.0	7.4	30.7	37.6	2.7	2.9	5.9	1.4	0.6	2.4
LnGrp Delay(d),s/veh	38.8	25.2	6.1	39.9	26.5	34.2	44.8	49.3	55.6	46.2	48.7	34.5
LnGrp LOS	D	C	A	D	C	C	D	D	E	D	D	C
Approach Vol, veh/h		3044			3598			217				92
Approach Delay, s/veh		25.5			29.2			51.3				39.6
Approach LOS		C			C			D				D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.9	69.0	6.2	12.9	24.9	66.0	8.0	11.1				
Change Period (Y+Rc), s	5.0	5.0	4.0	5.0	5.0	* 5	4.0	5.0				
Max Green Setting (Gmax), s	7.0	64.0	4.0	16.0	11.0	* 61	4.0	16.0				
Max Q Clear Time (g_c+I1), s	6.3	54.3	3.5	7.3	8.9	54.5	5.0	4.7				
Green Ext Time (p_c), s	0.1	8.4	0.0	0.6	0.3	6.1	0.0	0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			28.4									
HCM 2010 LOS			C									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 68 (Harmony Road)

























07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑↑					↖	↗	↗
Traffic Volume (veh/h)	0	1340	1300	220	2320	0	0	0	0	110	0	990
Future Volume (veh/h)	0	1340	1300	220	2320	0	0	0	0	110	0	990
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1457	0	237	2522	0				118	0	0
Adj No. of Lanes	0	2	1	1	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2774	1212	465	4406	0				216	0	82
Arrive On Green	0.00	1.00	0.00	0.13	1.00	0.00				0.06	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	5253	0				3548	0	1583
Grp Volume(v), veh/h	0	1457	0	237	2522	0				118	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1695	0				1774	0	1583
Q Serve(g_s), s	0.0	0.0	0.0	2.5	0.0	0.0				3.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.5	0.0	0.0				3.6	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2774	1212	465	4406	0				216	0	82
V/C Ratio(X)	0.00	0.53	0.00	0.51	0.57	0.00				0.55	0.00	0.00
Avail Cap(c_a), veh/h	0	2774	1212	640	4406	0				548	0	230
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.54	0.00	0.54	0.54	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	1.1	0.0	0.0				50.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.5	0.1	0.0				2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.3	0.0	1.9	0.1	0.0				3.2	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.4	0.0	1.6	0.1	0.0				52.3	0.0	0.0
LnGrp LOS		A		A	A					D		
Approach Vol, veh/h		1457			2759						118	
Approach Delay, s/veh		0.4			0.2						52.3	
Approach LOS		A			A						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	9.1	90.2		10.7		99.3						
Change Period (Y+Rc), s	4.0	6.0		5.0		6.0						
Max Green Setting (Gmax), s	16.0	63.0		16.0		83.0						
Max Q Clear Time (g_c+I1), s	4.5	2.0		5.6		2.0						
Green Ext Time (p_c), s	0.6	48.0		0.3		59.4						
Intersection Summary												
HCM 2010 Ctrl Delay				1.7								
HCM 2010 LOS				A								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 68 (Harmony Road)
























07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			  		 					
Traffic Volume (veh/h)	510	940	0	0	1190	220	1290	0	190	0	0	0
Future Volume (veh/h)	510	940	0	0	1190	220	1290	0	190	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	548	1022	0	0	1293	0	1387	0	0			
Adj No. of Lanes	2	2	0	0	3	1	3	0	1			
Peak Hour Factor	0.93	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	672	1913	0	0	1572	489	1703	0	492			
Arrive On Green	0.39	1.00	0.00	0.00	0.31	0.00	0.32	0.00	0.00			
Sat Flow, veh/h	3442	3632	0	0	5253	1583	5322	0	1583			
Grp Volume(v), veh/h	548	1022	0	0	1293	0	1387	0	0			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1695	1583	1774	0	1583			
Q Serve(g_s), s	15.7	0.0	0.0	0.0	25.9	0.0	26.4	0.0	0.0			
Cycle Q Clear(g_c), s	15.7	0.0	0.0	0.0	25.9	0.0	26.4	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	672	1913	0	0	1572	489	1703	0	492			
V/C Ratio(X)	0.82	0.53	0.00	0.00	0.82	0.00	0.81	0.00	0.00			
Avail Cap(c_a), veh/h	720	1963	0	0	1572	489	1984	0	576			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.80	0.80	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	31.8	0.0	0.0	0.0	35.2	0.0	34.4	0.0	0.0			
Incr Delay (d2), s/veh	5.6	0.2	0.0	0.0	5.0	0.0	2.4	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	11.9	0.1	0.0	0.0	18.7	0.0	19.2	0.0	0.0			
LnGrp Delay(d),s/veh	37.3	0.2	0.0	0.0	40.2	0.0	36.8	0.0	0.0			
LnGrp LOS	D	A			D		D					
Approach Vol, veh/h		1570			1293			1387				
Approach Delay, s/veh		13.2			40.2			36.8				
Approach LOS		B			D			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		63.5			25.5	38.0		39.2				
Change Period (Y+Rc), s		5.0			5.0	6.0		5.0				
Max Green Setting (Gmax), s		60.0			22.0	32.0		40.0				
Max Q Clear Time (g_c+I1), s		2.0			17.7	27.9		28.4				
Green Ext Time (p_c), s		9.6			2.8	2.3		5.8				
Intersection Summary												
HCM 2010 Ctrl Delay				29.1								
HCM 2010 LOS				C								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 1: West Frontage Road & SH 68 (Harmony Road)

07/13/2017













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	2945	85	100	3280	50	50	25	225	60	30	130
Future Volume (veh/h)	50	2945	85	100	3280	50	50	25	225	60	30	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	54	3167	91	108	3527	54	54	27	242	65	32	140
Adj No. of Lanes	1	3	1	1	4	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	2949	887	322	4584	70	346	317	253	335	327	262
Arrive On Green	0.05	0.58	0.56	0.14	0.70	0.70	0.04	0.17	0.16	0.05	0.18	0.17
Sat Flow, veh/h	1774	5085	1583	1774	6551	100	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	54	3167	91	108	2583	998	54	27	242	65	32	140
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1602	1845	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	1.3	58.0	2.4	1.2	34.9	35.4	2.5	1.2	15.2	3.0	1.4	6.7
Cycle Q Clear(g_c), s	1.3	58.0	2.4	1.2	34.9	35.4	2.5	1.2	15.2	3.0	1.4	6.7
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	169	2949	887	322	3363	1291	346	317	253	335	327	262
V/C Ratio(X)	0.32	1.07	0.10	0.34	0.77	0.77	0.16	0.09	0.96	0.19	0.10	0.53
Avail Cap(c_a), veh/h	185	2949	887	322	3363	1291	355	317	253	335	327	262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.68	0.68	0.68	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	21.0	8.5	37.0	9.7	9.8	31.8	35.0	41.6	31.6	34.6	26.5
Incr Delay (d2), s/veh	1.1	40.5	0.2	0.4	1.2	3.1	0.2	0.1	44.2	0.3	0.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	68.1	2.0	4.8	20.7	24.7	2.2	1.2	14.8	2.6	1.3	5.6
LnGrp Delay(d),s/veh	23.2	61.5	8.8	37.4	10.9	12.9	32.0	35.1	85.8	31.9	34.7	28.6
LnGrp LOS	C	F	A	D	B	B	C	D	F	C	C	C
Approach Vol, veh/h		3312			3689			323			237	
Approach Delay, s/veh		59.4			12.3			72.6			30.3	
Approach LOS		E			B			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.2	62.0	8.0	21.0	7.1	74.1	7.5	21.5				
Change Period (Y+Rc), s	6.0	* 6	4.0	5.0	4.0	6.0	4.0	5.0				
Max Green Setting (Gmax), s	4.0	* 56	4.0	16.0	4.0	57.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	3.2	60.0	5.0	17.2	3.3	37.4	4.5	8.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	17.5	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			36.0									
HCM 2010 LOS			D									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 68 (Harmony Road)

07/13/2017

























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	1760	1470	150	2310	0	0	0	0	310	0	1120
Future Volume (veh/h)	0	1760	1470	150	2310	0	0	0	0	310	0	1120
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1892	0	156	2484	0				323	0	0
Adj No. of Lanes	0	2	1	1	3	0				2	0	1
Peak Hour Factor	0.93	0.93	0.96	0.96	0.93	0.93				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2478	1093	328	3967	0				496	0	190
Arrive On Green	0.00	1.00	0.00	0.10	1.00	0.00				0.14	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	5253	0				3548	0	1583
Grp Volume(v), veh/h	0	1892	0	156	2484	0				323	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1695	0				1774	0	1583
Q Serve(g_s), s	0.0	0.0	0.0	2.3	0.0	0.0				8.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.3	0.0	0.0				8.6	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2478	1093	328	3967	0				496	0	190
V/C Ratio(X)	0.00	0.76	0.00	0.48	0.63	0.00				0.65	0.00	0.00
Avail Cap(c_a), veh/h	0	2478	1093	328	3967	0				1100	0	459
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.27	0.00	0.58	0.58	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	2.8	0.0	0.0				40.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.6	0.2	0.0				1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.4	0.0	2.0	0.1	0.0				7.7	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.6	0.0	3.4	0.2	0.0				42.1	0.0	0.0
LnGrp LOS		A		A	A					D		
Approach Vol, veh/h		1892			2640						323	
Approach Delay, s/veh		0.6			0.4						42.1	
Approach LOS		A			A						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	8.0	74.0		18.0		82.0						
Change Period (Y+Rc), s	4.0	5.0		6.0		5.0						
Max Green Setting (Gmax), s	4.0	52.0		29.0		60.0						
Max Q Clear Time (g_c+I1), s	4.3	2.0		10.6		2.0						
Green Ext Time (p_c), s	0.0	44.1		1.4		50.2						
Intersection Summary												
HCM 2010 Ctrl Delay			3.2									
HCM 2010 LOS			A									
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

3: NB Ramps & SH 68 (Harmony Road)

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			  		 					
Traffic Volume (veh/h)	530	1540	0	0	1220	230	1240	0	280	0	0	0
Future Volume (veh/h)	530	1540	0	0	1220	230	1240	0	280	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	552	1656	0	0	1312	0	1292	0	0			
Adj No. of Lanes	2	2	0	0	3	1	3	0	1			
Peak Hour Factor	0.96	0.93	0.93	0.93	0.93	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	648	2082	0	0	1831	570	1574	0	453			
Arrive On Green	0.38	1.00	0.00	0.00	0.36	0.00	0.30	0.00	0.00			
Sat Flow, veh/h	3442	3632	0	0	5253	1583	5322	0	1583			
Grp Volume(v), veh/h	552	1656	0	0	1312	0	1292	0	0			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1695	1583	1774	0	1583			
Q Serve(g_s), s	14.7	0.0	0.0	0.0	22.3	0.0	22.6	0.0	0.0			
Cycle Q Clear(g_c), s	14.7	0.0	0.0	0.0	22.3	0.0	22.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	648	2082	0	0	1831	570	1574	0	453			
V/C Ratio(X)	0.85	0.80	0.00	0.00	0.72	0.00	0.82	0.00	0.00			
Avail Cap(c_a), veh/h	654	2088	0	0	1831	570	1756	0	507			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.37	0.37	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	29.9	0.0	0.0	0.0	27.6	0.0	32.7	0.0	0.0			
Incr Delay (d2), s/veh	4.2	0.8	0.0	0.0	2.4	0.0	3.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	10.0	0.4	0.0	0.0	16.1	0.0	17.0	0.0	0.0			
LnGrp Delay(d),s/veh	34.1	0.8	0.0	0.0	30.0	0.0	35.7	0.0	0.0			
LnGrp LOS	C	A			C		D					
Approach Vol, veh/h		2208			1312			1292				
Approach Delay, s/veh		9.2			30.0			35.7				
Approach LOS		A			C			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		62.8			22.8	40.0		33.6				
Change Period (Y+Rc), s		5.0			5.0	6.0		5.0				
Max Green Setting (Gmax), s		58.0			18.0	34.0		32.0				
Max Q Clear Time (g_c+I1), s		2.0			16.7	24.3		24.6				
Green Ext Time (p_c), s		18.4			1.1	4.5		4.0				
Intersection Summary												
HCM 2010 Ctrl Delay				22.0								
HCM 2010 LOS				C								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 1: West Frontage Road & SH 68 (Harmony Road)













07/13/2017

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	2515	95	150	3060	100	50	50	100	25	10	50
Future Volume (veh/h)	190	2515	95	150	3060	100	50	50	100	25	10	50
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	207	2734	103	163	3326	109	54	54	109	27	11	54
Adj No. of Lanes	1	3	1	1	4	0	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	3169	974	321	4294	140	226	174	136	184	153	118
Arrive On Green	0.10	0.62	0.62	0.14	0.67	0.67	0.04	0.09	0.09	0.03	0.08	0.07
Sat Flow, veh/h	1774	5085	1583	1774	6423	209	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	207	2734	103	163	2481	954	54	54	109	27	11	54
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1602	1826	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	10.2	57.0	2.7	5.6	46.0	47.1	3.6	3.5	8.8	1.8	0.7	3.3
Cycle Q Clear(g_c), s	10.2	57.0	2.7	5.6	46.0	47.1	3.6	3.5	8.8	1.8	0.7	3.3
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	3169	974	321	3213	1221	226	174	136	184	153	118
V/C Ratio(X)	0.84	0.86	0.11	0.51	0.77	0.78	0.24	0.31	0.80	0.15	0.07	0.46
Avail Cap(c_a), veh/h	281	3169	974	321	3213	1221	226	244	195	205	244	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.55	0.55	0.55	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	20.0	6.1	48.2	14.8	14.9	51.4	55.0	58.3	52.4	55.1	34.4
Incr Delay (d2), s/veh	18.5	3.4	0.2	0.7	1.0	2.8	0.5	1.0	14.2	0.4	0.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.3	35.9	2.2	8.2	26.0	30.5	3.2	3.4	7.8	1.6	0.7	2.8
LnGrp Delay(d),s/veh	58.5	23.4	6.3	48.9	15.8	17.7	51.9	56.0	72.5	52.8	55.3	37.2
LnGrp LOS	E	C	A	D	B	B	D	E	E	D	E	D
Approach Vol, veh/h		3044			3598			217			92	
Approach Delay, s/veh		25.2			17.8			63.3			43.9	
Approach LOS		C			B			E			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	22.3	85.0	6.5	16.2	16.4	90.9	8.0	14.7				
Change Period (Y+Rc), s	5.0	5.0	4.0	5.0	4.0	5.0	4.0	5.0				
Max Green Setting (Gmax), s	11.0	80.0	4.0	16.0	15.0	77.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	7.6	59.0	3.8	10.8	12.2	49.1	5.6	5.3				
Green Ext Time (p_c), s	0.9	16.4	0.0	0.4	0.2	23.4	0.0	0.6				
Intersection Summary												
HCM 2010 Ctrl Delay				22.8								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 68 (Harmony Road)























07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗	↖	↑↑					↖	↗	↗
Traffic Volume (veh/h)	0	1340	1300	160	2320	0	0	0	0	110	0	990
Future Volume (veh/h)	0	1340	1300	160	2320	0	0	0	0	110	0	990
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1457	0	172	2522	0				118	0	0
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2902	1274	435	3120	0				202	0	78
Arrive On Green	0.00	1.00	0.00	0.06	1.00	0.00				0.06	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	1457	0	172	2522	0				118	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	0.0	0.0	1.7	0.0	0.0				4.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.7	0.0	0.0				4.2	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2902	1274	435	3120	0				202	0	78
V/C Ratio(X)	0.00	0.50	0.00	0.40	0.81	0.00				0.58	0.00	0.00
Avail Cap(c_a), veh/h	0	2902	1274	517	3120	0				464	0	195
HCM Platoon Ratio	1.00	2.00	2.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.56	0.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	1.0	0.0	0.0				59.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.1	0.2	0.0				2.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.3	0.0	1.2	0.1	0.0				3.9	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.4	0.0	1.1	0.2	0.0				62.5	0.0	0.0
LnGrp LOS		A		A	A					E		
Approach Vol, veh/h		1457			2694						118	
Approach Delay, s/veh		0.4			0.2						62.5	
Approach LOS		A			A						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	8.0	110.6		11.4		118.6						
Change Period (Y+Rc), s	4.0	6.0		5.0		6.0						
Max Green Setting (Gmax), s	10.0	89.0		16.0		103.0						
Max Q Clear Time (g_c+I1), s	3.7	2.0		6.2		2.0						
Green Ext Time (p_c), s	0.3	66.5		0.3		74.2						
Intersection Summary												
HCM 2010 Ctrl Delay			2.0									
HCM 2010 LOS			A									
Notes												

User approved volume balancing among the lanes for turning movement.
























HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 68 (Harmony Road)

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 		 					
Traffic Volume (veh/h)	510	940	0	0	1190	220	1290	0	190	0	0	0
Future Volume (veh/h)	510	940	0	0	1190	220	1290	0	190	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900			
Adj Flow Rate, veh/h	548	1022	0	0	1293	237	1387	0	204			
Adj No. of Lanes	2	2	0	0	2	1	2	1	0			
Peak Hour Factor	0.93	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	529	1933	0	0	1280	572	1350	0	621			
Arrive On Green	0.05	0.18	0.00	0.00	0.36	0.36	0.39	0.00	0.38			
Sat Flow, veh/h	3442	3632	0	0	3632	1583	3442	0	1583			
Grp Volume(v), veh/h	548	1022	0	0	1293	237	1387	0	204			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1583	1721	0	1583			
Q Serve(g_s), s	20.0	34.0	0.0	0.0	47.0	14.6	51.0	0.0	11.8			
Cycle Q Clear(g_c), s	20.0	34.0	0.0	0.0	47.0	14.6	51.0	0.0	11.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	529	1933	0	0	1280	572	1350	0	621			
V/C Ratio(X)	1.03	0.53	0.00	0.00	1.01	0.41	1.03	0.00	0.33			
Avail Cap(c_a), veh/h	529	1933	0	0	1280	572	1350	0	621			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.84	0.84	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	61.7	38.1	0.0	0.0	41.5	31.2	39.5	0.0	27.9			
Incr Delay (d2), s/veh	45.2	0.2	0.0	0.0	27.8	2.2	31.7	0.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	23.1	22.9	0.0	0.0	50.1	11.0	54.2	0.0	8.9			
LnGrp Delay(d),s/veh	106.9	38.4	0.0	0.0	69.3	33.4	71.2	0.0	28.2			
LnGrp LOS	F	D			F	C	F		C			
Approach Vol, veh/h		1570			1530			1591				
Approach Delay, s/veh		62.3			63.7			65.7				
Approach LOS		E			E			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		75.0			24.0	51.0		55.0				
Change Period (Y+Rc), s		5.0			5.0	6.0		5.0				
Max Green Setting (Gmax), s		70.0			19.0	45.0		50.0				
Max Q Clear Time (g_c+I1), s		36.0			22.0	49.0		53.0				
Green Ext Time (p_c), s		9.0			0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay					63.9							
HCM 2010 LOS					E							

HCM 2010 Signalized Intersection Summary
 1: West Frontage Road & SH 68 (Harmony Road)

07/13/2017













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	2945	85	100	3280	50	50	25	225	60	30	130
Future Volume (veh/h)	50	2945	85	100	3280	50	50	25	225	60	30	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	54	3167	91	108	3527	54	54	27	242	65	32	140
Adj No. of Lanes	1	3	1	1	4	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	169	2949	887	322	4584	70	346	317	253	335	327	262
Arrive On Green	0.05	0.58	0.56	0.14	0.70	0.70	0.04	0.17	0.16	0.05	0.18	0.17
Sat Flow, veh/h	1774	5085	1583	1774	6551	100	1774	1863	1583	1774	1863	1583
Grp Volume(v), veh/h	54	3167	91	108	2583	998	54	27	242	65	32	140
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1602	1845	1774	1863	1583	1774	1863	1583
Q Serve(g_s), s	1.3	58.0	2.4	1.2	34.9	35.4	2.5	1.2	15.2	3.0	1.4	6.7
Cycle Q Clear(g_c), s	1.3	58.0	2.4	1.2	34.9	35.4	2.5	1.2	15.2	3.0	1.4	6.7
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	169	2949	887	322	3363	1291	346	317	253	335	327	262
V/C Ratio(X)	0.32	1.07	0.10	0.34	0.77	0.77	0.16	0.09	0.96	0.19	0.10	0.53
Avail Cap(c_a), veh/h	185	2949	887	322	3363	1291	355	317	253	335	327	262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.39	0.39	0.39	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	21.0	8.5	37.0	9.7	9.8	31.8	35.0	41.6	31.6	34.6	26.5
Incr Delay (d2), s/veh	1.1	40.5	0.2	0.2	0.7	1.8	0.2	0.1	44.2	0.3	0.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	68.1	2.0	4.3	19.3	22.8	2.2	1.2	14.8	2.6	1.3	5.6
LnGrp Delay(d),s/veh	23.2	61.5	8.8	37.3	10.4	11.6	32.0	35.1	85.8	31.9	34.7	28.6
LnGrp LOS	C	F	A	D	B	B	C	D	F	C	C	C
Approach Vol, veh/h		3312			3689			323			237	
Approach Delay, s/veh		59.4			11.5			72.6			30.3	
Approach LOS		E			B			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	19.2	62.0	8.0	21.0	7.1	74.1	7.5	21.5				
Change Period (Y+Rc), s	6.0	* 6	4.0	5.0	4.0	6.0	4.0	5.0				
Max Green Setting (Gmax), s	4.0	* 56	4.0	16.0	4.0	57.0	4.0	16.0				
Max Q Clear Time (g_c+I1), s	3.2	60.0	5.0	17.2	3.3	37.4	4.5	8.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	17.5	0.0	1.2				
Intersection Summary												
HCM 2010 Ctrl Delay			35.7									
HCM 2010 LOS			D									
Notes												

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 68 (Harmony Road)

07/13/2017























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	1760	1470	150	2310	0	0	0	0	310	0	1120
Future Volume (veh/h)	0	1760	1470	150	2310	0	0	0	0	310	0	1120
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1892	0	156	2484	0				323	0	0
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	0.93	0.93	0.96	0.96	0.93	0.93				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2490	1098	333	2783	0				474	0	180
Arrive On Green	0.00	1.00	0.00	0.11	1.00	0.00				0.13	0.00	0.00
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	1892	0	156	2484	0				323	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	0.0	0.0	2.3	0.0	0.0				8.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	2.3	0.0	0.0				8.7	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2490	1098	333	2783	0				474	0	180
V/C Ratio(X)	0.00	0.76	0.00	0.47	0.89	0.00				0.68	0.00	0.00
Avail Cap(c_a), veh/h	0	2490	1098	364	2783	0				639	0	253
HCM Platoon Ratio	1.00	2.00	2.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.27	0.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	2.6	0.0	0.0				41.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.1	0.4	0.0				1.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.4	0.0	1.5	0.3	0.0				7.8	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.6	0.0	2.7	0.4	0.0				43.1	0.0	0.0
LnGrp LOS		A		A	A					D		
Approach Vol, veh/h		1892			2640						323	
Approach Delay, s/veh		0.6			0.5						43.1	
Approach LOS		A			A						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	8.3	74.4		17.4		82.6						
Change Period (Y+Rc), s	4.0	5.0		6.0		5.0						
Max Green Setting (Gmax), s	6.0	63.0		16.0		73.0						
Max Q Clear Time (g_c+I1), s	4.3	2.0		10.7		2.0						
Green Ext Time (p_c), s	0.1	54.0		0.7		61.6						
Intersection Summary												
HCM 2010 Ctrl Delay			3.4									
HCM 2010 LOS			A									
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

3: NB Ramps & SH 68 (Harmony Road)


















07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 		 					
Traffic Volume (veh/h)	530	1540	0	0	1220	230	1240	0	280	0	0	0
Future Volume (veh/h)	530	1540	0	0	1220	230	1240	0	280	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1900			
Adj Flow Rate, veh/h	552	1656	0	0	1312	240	1292	0	292			
Adj No. of Lanes	2	2	0	0	2	1	2	1	0			
Peak Hour Factor	0.96	0.93	0.93	0.93	0.93	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	551	1982	0	0	1274	570	1239	0	570			
Arrive On Green	0.21	0.74	0.00	0.00	0.36	0.36	0.36	0.00	0.35			
Sat Flow, veh/h	3442	3632	0	0	3632	1583	3442	0	1583			
Grp Volume(v), veh/h	552	1656	0	0	1312	240	1292	0	292			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1583	1721	0	1583			
Q Serve(g_s), s	16.0	31.6	0.0	0.0	36.0	11.4	36.0	0.0	14.6			
Cycle Q Clear(g_c), s	16.0	31.6	0.0	0.0	36.0	11.4	36.0	0.0	14.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	551	1982	0	0	1274	570	1239	0	570			
V/C Ratio(X)	1.00	0.84	0.00	0.00	1.03	0.42	1.04	0.00	0.51			
Avail Cap(c_a), veh/h	551	1982	0	0	1274	570	1239	0	570			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.50	0.50	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	39.4	9.6	0.0	0.0	32.0	24.1	32.0	0.0	25.5			
Incr Delay (d2), s/veh	27.6	1.7	0.0	0.0	33.1	2.3	37.5	0.0	0.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	17.4	19.7	0.0	0.0	42.1	9.2	42.3	0.0	10.7			
LnGrp Delay(d),s/veh	67.0	11.3	0.0	0.0	65.1	26.4	69.5	0.0	26.3			
LnGrp LOS	F	B			F	C	F		C			
Approach Vol, veh/h		2208			1552			1584				
Approach Delay, s/veh		25.2			59.1			61.5				
Approach LOS		C			E			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		60.0			20.0	40.0		40.0				
Change Period (Y+Rc), s		5.0			5.0	6.0		5.0				
Max Green Setting (Gmax), s		55.0			15.0	34.0		35.0				
Max Q Clear Time (g_c+I1), s		33.6			18.0	38.0		38.0				
Green Ext Time (p_c), s		12.3			0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				45.8								
HCM 2010 LOS				D								

HCM 2010 Signalized Intersection Summary


















2: I-25 SB Ramps & Prospect Road

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	710	680	190	2110	0	0	0	0	30	0	320
Future Volume (veh/h)	0	710	680	190	2110	0	0	0	0	30	0	320
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1748	1900	1863	1652	0				1900	1863	1863
Adj Flow Rate, veh/h	0	772	0	204	2293	0				32	0	0
Adj No. of Lanes	0	1	0	1	1	0				0	1	1
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92				0.93	0.93	0.93
Percent Heavy Veh, %	0	15	15	2	15	0				2	2	2
Cap, veh/h	0	1577	0	633	1491	0				55	0	36
Arrive On Green	0.00	0.90	0.00	1.00	1.00	0.00				0.03	0.00	0.00
Sat Flow, veh/h	0	1748	0	695	1652	0				1774	0	1583
Grp Volume(v), veh/h	0	772	0	204	2293	0				32	0	0
Grp Sat Flow(s),veh/h/ln	0	1748	0	695	1652	0				1774	0	1583
Q Serve(g_s), s	0.0	9.3	0.0	4.5	108.3	0.0				2.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.3	0.0	13.8	108.3	0.0				2.1	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1577	0	633	1491	0				55	0	36
V/C Ratio(X)	0.00	0.49	0.00	0.32	1.54	0.00				0.58	0.00	0.00
Avail Cap(c_a), veh/h	0	1577	0	633	1491	0				237	0	198
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	1.0	0.0	0.6	0.0	0.0				57.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.1	0.0	0.1	242.6	0.0				9.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	8.3	0.0	1.3	173.0	0.0				2.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	2.1	0.0	0.7	242.6	0.0				66.6	0.0	0.0
LnGrp LOS		A		A	F					E		
Approach Vol, veh/h		772			2497						32	
Approach Delay, s/veh		2.1			222.8						66.6	
Approach LOS		A			F						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				112.3		7.7		112.3				
Change Period (Y+Rc), s				5.0		5.0		5.0				
Max Green Setting (Gmax), s				95.0		15.0		95.0				
Max Q Clear Time (g_c+I1), s				11.3		4.1		110.3				
Green Ext Time (p_c), s				83.4		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				169.7								
HCM 2010 LOS				F								


















HCM 2010 Signalized Intersection Summary
 3: I-25 NB Ramps & Prospect Road

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	650	0	0	1500	150	800	140	420	0	0	0
Future Volume (veh/h)	90	650	0	0	1500	150	800	140	420	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1652	0	0	1669	1900	1863	1863	1900			
Adj Flow Rate, veh/h	97	707	0	0	1630	161	860	151	0			
Adj No. of Lanes	1	1	0	0	1	0	1	1	0			
Peak Hour Factor	0.93	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	15	0	0	15	15	2	2	2			
Cap, veh/h	163	1101	0	0	860	85	473	497	0			
Arrive On Green	0.12	1.00	0.00	0.00	0.57	0.57	0.27	0.27	0.00			
Sat Flow, veh/h	1774	1652	0	0	1495	148	1774	1863	0			
Grp Volume(v), veh/h	97	707	0	0	0	1791	860	151	0			
Grp Sat Flow(s),veh/h/ln	1774	1652	0	0	0	1643	1774	1863	0			
Q Serve(g_s), s	2.0	0.0	0.0	0.0	0.0	69.0	32.0	7.8	0.0			
Cycle Q Clear(g_c), s	2.0	0.0	0.0	0.0	0.0	69.0	32.0	7.8	0.0			
Prop In Lane	1.00		0.00	0.00		0.09	1.00		0.00			
Lane Grp Cap(c), veh/h	163	1101	0	0	0	945	473	497	0			
V/C Ratio(X)	0.59	0.64	0.00	0.00	0.00	1.90	1.82	0.30	0.00			
Avail Cap(c_a), veh/h	163	1101	0	0	0	945	473	497	0			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.00	1.00	1.00	1.00	0.00			
Uniform Delay (d), s/veh	50.2	0.0	0.0	0.0	0.0	25.5	44.0	35.1	0.0			
Incr Delay (d2), s/veh	0.5	0.3	0.0	0.0	0.0	407.1	376.3	0.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.8	0.1	0.0	0.0	0.0	248.0	117.2	7.3	0.0			
LnGrp Delay(d),s/veh	50.7	0.3	0.0	0.0	0.0	432.6	420.3	35.5	0.0			
LnGrp LOS	D	A				F	F	D				
Approach Vol, veh/h		804			1791			1011				
Approach Delay, s/veh		6.3			432.6			362.8				
Approach LOS		A			F			F				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		36.0		84.0			11.0	73.0				
Change Period (Y+Rc), s		5.0		5.0			5.0	5.0				
Max Green Setting (Gmax), s		31.0		79.0			6.0	68.0				
Max Q Clear Time (g_c+I1), s		34.0		2.0			4.0	71.0				
Green Ext Time (p_c), s		0.0		3.9			0.8	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				318.0								
HCM 2010 LOS				F								


















HCM 2010 Signalized Intersection Summary
 2: I-25 SB Ramps & Prospect Road

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2010	830	240	2200	0	0	0	0	140	0	200
Future Volume (veh/h)	0	2010	830	240	2200	0	0	0	0	140	0	200
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1712	1900	1712	1712	0				1900	1712	1712
Adj Flow Rate, veh/h	0	2185	865	250	2391	0				146	0	0
Adj No. of Lanes	0	1	0	1	1	0				0	1	1
Peak Hour Factor	0.92	0.92	0.96	0.96	0.92	0.92				0.96	0.96	0.96
Percent Heavy Veh, %	0	11	11	11	11	0				11	2	11
Cap, veh/h	0	856	339	157	1426	0				163	0	145
Arrive On Green	0.00	0.73	0.74	0.09	1.00	0.00				0.11	0.00	0.00
Sat Flow, veh/h	0	1168	462	1630	1712	0				1630	0	1455
Grp Volume(v), veh/h	0	0	3050	250	2391	0				146	0	0
Grp Sat Flow(s),veh/h/ln	0	0	1630	1630	1712	0				1630	0	1455
Q Serve(g_s), s	0.0	0.0	110.0	10.0	125.0	0.0				13.3	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	110.0	10.0	125.0	0.0				13.3	0.0	0.0
Prop In Lane	0.00		0.28	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	0	1195	157	1426	0				163	0	145
V/C Ratio(X)	0.00	0.00	2.55	1.60	1.68	0.00				0.90	0.00	0.00
Avail Cap(c_a), veh/h	0	0	1195	157	1426	0				163	0	145
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	19.9	58.2	0.0	0.0				66.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	700.6	270.8	304.6	0.0				41.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	497.1	32.0	207.2	0.0				12.5	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	720.5	329.0	304.6	0.0				108.1	0.0	0.0
LnGrp LOS			F	F	F					F		
Approach Vol, veh/h		3050			2641						146	
Approach Delay, s/veh		720.5			306.9						108.1	
Approach LOS		F			F						F	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			15.0	115.0		20.0		130.0				
Change Period (Y+Rc), s			5.0	5.0		5.0		5.0				
Max Green Setting (Gmax), s			10.0	110.0		15.0		125.0				
Max Q Clear Time (g_c+I1), s			12.0	112.0		15.3		127.0				
Green Ext Time (p_c), s			0.0	0.0		0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			518.0									
HCM 2010 LOS			F									













HCM 2010 Signalized Intersection Summary
 3: I-25 NB Ramps & Prospect Road

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1930	0	0	1640	70	800	0	310	0	0	0
Future Volume (veh/h)	220	1930	0	0	1640	70	800	0	310	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1712	1712	0	0	1717	1900	1712	1712	1900			
Adj Flow Rate, veh/h	229	2098	0	0	1783	73	833	0	323			
Adj No. of Lanes	1	1	0	0	1	0	1	1	0			
Peak Hour Factor	0.96	0.92	0.92	0.92	0.92	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	11	11	0	0	11	11	11	2	11			
Cap, veh/h	146	1118	0	0	928	38	478	0	427			
Arrive On Green	0.08	0.87	0.00	0.00	0.57	0.57	0.29	0.00	0.29			
Sat Flow, veh/h	1630	1712	0	0	1638	67	1630	0	1455			
Grp Volume(v), veh/h	229	2098	0	0	0	1856	833	0	323			
Grp Sat Flow(s),veh/h/ln	1630	1712	0	0	0	1705	1630	0	1455			
Q Serve(g_s), s	9.0	98.0	0.0	0.0	0.0	85.0	44.0	0.0	30.3			
Cycle Q Clear(g_c), s	9.0	98.0	0.0	0.0	0.0	85.0	44.0	0.0	30.3			
Prop In Lane	1.00		0.00	0.00		0.04	1.00		1.00			
Lane Grp Cap(c), veh/h	146	1118	0	0	0	966	478	0	427			
V/C Ratio(X)	1.57	1.88	0.00	0.00	0.00	1.92	1.74	0.00	0.76			
Avail Cap(c_a), veh/h	146	1118	0	0	0	966	478	0	427			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.09	0.09	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	67.5	9.8	0.0	0.0	0.0	32.5	53.0	0.0	48.6			
Incr Delay (d2), s/veh	259.8	394.5	0.0	0.0	0.0	418.1	342.5	0.0	7.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	29.1	283.5	0.0	0.0	0.0	273.1	117.5	0.0	19.1			
LnGrp Delay(d),s/veh	327.3	404.4	0.0	0.0	0.0	450.6	395.5	0.0	56.2			
LnGrp LOS	F	F				F	F		E			
Approach Vol, veh/h		2327			1856			1156				
Approach Delay, s/veh		396.8			450.6			300.7				
Approach LOS		F			F			F				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		48.0		102.0			13.0	89.0				
Change Period (Y+Rc), s		5.0		5.0			5.0	5.0				
Max Green Setting (Gmax), s		43.0		97.0			8.0	84.0				
Max Q Clear Time (g_c+I1), s		46.0		100.0			11.0	87.0				
Green Ext Time (p_c), s		0.0		0.0			0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				394.7								
HCM 2010 LOS				F								

HCM 2010 Signalized Intersection Summary
 2: I-25 SB Ramps & Prospect Road

07/13/2017
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	710	700	200	2150	0	0	0	0	30	0	350
Future Volume (veh/h)	0	710	700	200	2150	0	0	0	0	30	0	350
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	772	0	215	2337	0				32	0	0
Adj No. of Lanes	0	2	1	2	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92				0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2391	1016	785	3196	0				107	0	35
Arrive On Green	0.00	0.64	0.00	0.46	1.00	0.00				0.03	0.00	0.00
Sat Flow, veh/h	0	3725	1583	3442	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	772	0	215	2337	0				32	0	0
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1721	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	11.2	0.0	4.7	0.0	0.0				1.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.2	0.0	4.7	0.0	0.0				1.1	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2391	1016	785	3196	0				107	0	35
V/C Ratio(X)	0.00	0.32	0.00	0.27	0.73	0.00				0.30	0.00	0.00
Avail Cap(c_a), veh/h	0	2391	1016	785	3196	0				532	0	224
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.36	0.36	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	9.7	0.0	26.4	0.0	0.0				56.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.1	0.5	0.0				1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	9.8	0.0	3.7	0.4	0.0				1.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	10.1	0.0	26.5	0.5	0.0				58.5	0.0	0.0
LnGrp LOS		B		C	A					E		
Approach Vol, veh/h		772			2552							32
Approach Delay, s/veh		10.1			2.7							58.5
Approach LOS		B			A							E
Timer	1	2	3	4	5	6	7	8				
Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			31.4	81.0		7.6		112.4				
Change Period (Y+Rc), s			5.0	5.0		5.0		5.0				
Max Green Setting (Gmax), s			12.0	76.0		17.0		93.0				
Max Q Clear Time (g_c+I1), s			6.7	13.2		3.1		2.0				
Green Ext Time (p_c), s			4.7	3.8		0.1		33.3				
Intersection Summary												
HCM 2010 Ctrl Delay			5.0									
HCM 2010 LOS			A									
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

3: I-25 NB Ramps & Prospect Road

07/13/2017













												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (veh/h)	90	650	0	0	1510	140	840	0	160	0	0	0
Future Volume (veh/h)	90	650	0	0	1510	140	840	0	160	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	97	707	0	0	1641	0	903	0	0			
Adj No. of Lanes	2	2	0	0	2	1	2	0	1			
Peak Hour Factor	0.93	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	176	2277	0	0	2082	885	1029	0	446			
Arrive On Green	0.10	1.00	0.00	0.00	0.56	0.00	0.29	0.00	0.00			
Sat Flow, veh/h	3442	3632	0	0	3725	1583	3548	0	1583			
Grp Volume(v), veh/h	97	707	0	0	1641	0	903	0	0			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1863	1583	1774	0	1583			
Q Serve(g_s), s	3.2	0.0	0.0	0.0	41.7	0.0	29.1	0.0	0.0			
Cycle Q Clear(g_c), s	3.2	0.0	0.0	0.0	41.7	0.0	29.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	176	2277	0	0	2082	885	1029	0	446			
V/C Ratio(X)	0.55	0.31	0.00	0.00	0.79	0.00	0.88	0.00	0.00			
Avail Cap(c_a), veh/h	344	2277	0	0	2082	885	1153	0	501			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.97	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	52.6	0.0	0.0	0.0	20.9	0.0	40.6	0.0	0.0			
Incr Delay (d2), s/veh	2.6	0.3	0.0	0.0	3.1	0.0	7.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	2.9	0.2	0.0	0.0	29.8	0.0	21.8	0.0	0.0			
LnGrp Delay(d),s/veh	55.2	0.3	0.0	0.0	24.0	0.0	47.9	0.0	0.0			
LnGrp LOS	E	A			C		D					
Approach Vol, veh/h		804			1641			903				
Approach Delay, s/veh		7.0			24.0			47.9				
Approach LOS		A			C			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		38.8		81.2			10.1	71.1				
Change Period (Y+Rc), s		5.0		5.0			5.0	5.0				
Max Green Setting (Gmax), s		38.0		72.0			11.0	56.0				
Max Q Clear Time (g_c+I1), s		31.1		2.0			5.2	43.7				
Green Ext Time (p_c), s		2.7		21.8			0.1	8.9				
Intersection Summary												
HCM 2010 Ctrl Delay				26.3								
HCM 2010 LOS				C								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

2: I-25 SB Ramps & Prospect Road

07/13/2017
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑	↑↑	↑↑					↑	↑	↑
Traffic Volume (veh/h)	0	2010	860	280	2290	0	0	0	0	120	0	200
Future Volume (veh/h)	0	2010	860	280	2290	0	0	0	0	120	0	200
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2185	0	292	2489	0				125	0	0
Adj No. of Lanes	0	2	1	2	2	0				2	0	1
Peak Hour Factor	0.92	0.92	0.96	0.96	0.92	0.92				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	2391	1016	621	3057	0				188	0	84
Arrive On Green	0.00	0.64	0.00	0.36	1.00	0.00				0.05	0.00	0.00
Sat Flow, veh/h	0	3725	1583	3442	3632	0				3548	0	1583
Grp Volume(v), veh/h	0	2185	0	292	2489	0				125	0	0
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1721	1770	0				1774	0	1583
Q Serve(g_s), s	0.0	61.0	0.0	7.8	0.0	0.0				4.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	61.0	0.0	7.8	0.0	0.0				4.2	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2391	1016	621	3057	0				188	0	84
V/C Ratio(X)	0.00	0.91	0.00	0.47	0.81	0.00				0.67	0.00	0.00
Avail Cap(c_a), veh/h	0	2391	1016	621	3057	0				473	0	211
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.09	0.09	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.6	0.0	33.9	0.0	0.0				55.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.8	0.0	0.1	0.2	0.0				4.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	42.7	0.0	4.7	0.2	0.0				3.8	0.0	0.0
LnGrp Delay(d),s/veh	0.0	25.4	0.0	34.0	0.2	0.0				59.8	0.0	0.0
LnGrp LOS		C		C	A					E		
Approach Vol, veh/h		2185			2781						125	
Approach Delay, s/veh		25.4			3.8						59.8	
Approach LOS		C			A						E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs			3	4		6		8				
Phs Duration (G+Y+Rc), s			26.7	82.0		11.3		108.7				
Change Period (Y+Rc), s			5.0	5.0		5.0		5.0				
Max Green Setting (Gmax), s			12.0	77.0		16.0		94.0				
Max Q Clear Time (g_c+I1), s			9.8	63.0		6.2		2.0				
Green Ext Time (p_c), s			2.0	10.0		0.3		41.2				
Intersection Summary												
HCM 2010 Ctrl Delay			14.4									
HCM 2010 LOS			B									
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

3: I-25 NB Ramps & Prospect Road

07/13/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			 			 				
Traffic Volume (veh/h)	220	1910	0	0	1690	100	880	0	340	0	0	0
Future Volume (veh/h)	220	1910	0	0	1690	100	880	0	340	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	229	2076	0	0	1837	0	917	0	0			
Adj No. of Lanes	2	2	0	0	2	1	2	0	1			
Peak Hour Factor	0.96	0.92	0.92	0.92	0.92	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	258	2256	0	0	1843	824	991	0	442			
Arrive On Green	0.15	1.00	0.00	0.00	0.52	0.00	0.28	0.00	0.00			
Sat Flow, veh/h	3442	3632	0	0	3632	1583	3548	0	1583			
Grp Volume(v), veh/h	229	2076	0	0	1837	0	917	0	0			
Grp Sat Flow(s),veh/h/ln	1721	1770	0	0	1770	1583	1774	0	1583			
Q Serve(g_s), s	7.8	0.0	0.0	0.0	62.1	0.0	30.1	0.0	0.0			
Cycle Q Clear(g_c), s	7.8	0.0	0.0	0.0	62.1	0.0	30.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	258	2256	0	0	1843	824	991	0	442			
V/C Ratio(X)	0.89	0.92	0.00	0.00	1.00	0.00	0.93	0.00	0.00			
Avail Cap(c_a), veh/h	258	2256	0	0	1843	824	1035	0	462			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.41	0.41	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	50.5	0.0	0.0	0.0	28.7	0.0	42.0	0.0	0.0			
Incr Delay (d2), s/veh	14.4	3.4	0.0	0.0	20.2	0.0	13.3	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	6.4	1.9	0.0	0.0	45.0	0.0	23.3	0.0	0.0			
LnGrp Delay(d),s/veh	64.9	3.4	0.0	0.0	48.9	0.0	55.3	0.0	0.0			
LnGrp LOS	E	A			D		E					
Approach Vol, veh/h		2305			1837			917				
Approach Delay, s/veh		9.5			48.9			55.3				
Approach LOS		A			D			E				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4			7	8				
Phs Duration (G+Y+Rc), s		38.5		81.5			14.0	67.5				
Change Period (Y+Rc), s		5.0		5.0			5.0	5.0				
Max Green Setting (Gmax), s		35.0		75.0			9.0	61.0				
Max Q Clear Time (g_c+I1), s		32.1		2.0			9.8	64.1				
Green Ext Time (p_c), s		1.4		55.3			0.0	0.0				
Intersection Summary												
HCM 2010 Ctrl Delay				32.1								
HCM 2010 LOS				C								
Notes												

User approved volume balancing among the lanes for turning movement.

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↕			↕				↘			
Traffic Vol, veh/h	110	730	0	0	2000	0	0	0	1	0	0	0
Future Vol, veh/h	110	730	0	0	2000	0	0	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	92	92	92	93	93	93	93	92	92	92
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	118	793	0	0	2174	0	0	0	1	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	2174	0	397
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.22	-	7.02
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.26	-	3.36
Pot Cap-1 Maneuver	228	0	591
Stage 1	-	0	-
Stage 2	-	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	228	-	591
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	4.8	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	591	228	-	-
HCM Lane V/C Ratio	0.002	0.519	-	-
HCM Control Delay (s)	11.1	36.6	-	-
HCM Lane LOS	B	E	-	-
HCM 95th %tile Q(veh)	0	2.7	-	-

Intersection

Int Delay, s/veh 3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↕			↕				↘			
Traffic Vol, veh/h	210	1710	0	0	1970	0	0	0	1	0	0	0
Future Vol, veh/h	210	1710	0	0	1970	0	0	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	95	95	95	95	96	96	96	96	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	219	1800	0	0	2074	0	0	0	1	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	2074	0	900
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	3.32
Pot Cap-1 Maneuver	265	0	282
Stage 1	-	0	-
Stage 2	-	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	265	-	282
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	6.6	0	17.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	282	265	-	-
HCM Lane V/C Ratio	0.004	0.825	-	-
HCM Control Delay (s)	17.8	60.5	-	-
HCM Lane LOS	C	F	-	-
HCM 95th %tile Q(veh)	0	6.6	-	-

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↕↕			↕↕				↘			
Traffic Vol, veh/h	150	2130	0	0	2030	0	0	0	1	0	0	0
Future Vol, veh/h	150	2130	0	0	2030	0	0	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	92	92	92	93	93	93	93	92	92	92
Heavy Vehicles, %	6	6	6	6	6	6	6	6	6	6	6	6
Mvmt Flow	161	2315	0	0	2207	0	0	0	1	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	2207	0	1158
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.22	-	7.02
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.26	-	3.36
Pot Cap-1 Maneuver	221	0	183
Stage 1	-	0	-
Stage 2	-	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	221	-	183
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	3.6	0	24.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	183	221	-	-
HCM Lane V/C Ratio	0.006	0.73	-	-
HCM Control Delay (s)	24.8	55.6	-	-
HCM Lane LOS	C	F	-	-
HCM 95th %tile Q(veh)	0	4.9	-	-

HCM 2010 TWSC
3: NB Ramps & SH 14

07/14/2017

Intersection												
Int Delay, s/veh	27.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↗			↗↗				↖			
Traffic Vol, veh/h	390	1650	0	0	1950	0	0	0	1	0	0	0
Future Vol, veh/h	390	1650	0	0	1950	0	0	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	95	95	95	95	96	96	96	96	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	406	1737	0	0	2053	0	0	0	1	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	2053	0	868
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	3.32
Pot Cap-1 Maneuver	~ 270	0	296
Stage 1	-	0	-
Stage 2	-	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	~ 270	-	296
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	53.1	0	17.2
HCM LOS			C




















Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT
Capacity (veh/h)	296	~ 270	-	-
HCM Lane V/C Ratio	0.004	1.505	-	-
HCM Control Delay (s)	17.2	279.9	-	-
HCM Lane LOS	C	F	-	-
HCM 95th %tile Q(veh)	0	23.5	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 14

07/14/2017




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	790	820	690	2280	0	0	0	0	50	0	470
Future Volume (veh/h)	0	790	820	690	2280	0	0	0	0	50	0	470
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1792	1792	1792	1792	0				1792	1792	1792
Adj Flow Rate, veh/h	0	859	0	742	2478	0				54	0	0
Adj No. of Lanes	0	5	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92				0.93	0.93	0.93
Percent Heavy Veh, %	0	6	6	6	6	0				6	6	6
Cap, veh/h	0	3015	485	1709	4394	0				162	0	45
Arrive On Green	0.00	0.34	0.00	1.00	1.00	0.00				0.05	0.00	0.00
Sat Flow, veh/h	0	8962	1524	3312	5055	0				3414	0	1524
Grp Volume(v), veh/h	0	859	0	742	2478	0				54	0	0
Grp Sat Flow(s),veh/h/ln	0	1792	1524	1656	1631	0				1707	0	1524
Q Serve(g_s), s	0.0	7.7	0.0	0.0	0.0	0.0				1.7	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.7	0.0	0.0	0.0	0.0				1.7	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3015	485	1709	4394	0				162	0	45
V/C Ratio(X)	0.00	0.28	0.00	0.43	0.56	0.00				0.33	0.00	0.00
Avail Cap(c_a), veh/h	0	3015	485	1709	4394	0				590	0	235
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.43	0.43	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	26.8	0.0	0.0	0.0	0.0				50.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.1	0.2	0.0				1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	6.9	0.0	0.0	0.2	0.0				1.5	0.0	0.0
LnGrp Delay(d),s/veh	0.0	27.0	0.0	0.1	0.2	0.0				51.9	0.0	0.0
LnGrp LOS		C		A	A					D		
Approach Vol, veh/h		859			3220							54
Approach Delay, s/veh		27.0			0.2							51.9
Approach LOS		C			A							D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	60.8	41.0		8.2		101.8						
Change Period (Y+Rc), s	5.0	6.0		5.0		* 5						
Max Green Setting (Gmax), s	42.0	35.0		17.0		* 84						
Max Q Clear Time (g_c+I1), s	2.0	9.7		3.7		2.0						
Green Ext Time (p_c), s	29.1	4.2		0.1		45.3						
Intersection Summary												
HCM 2010 Ctrl Delay			6.4									
HCM 2010 LOS			A									
Notes												

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 14




















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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	730	0	0	2000	120	970	0	880	0	0	0
Future Volume (veh/h)	110	730	0	0	2000	120	970	0	880	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1792	1792	0	0	1792	1792	1792	1792	1792			
Adj Flow Rate, veh/h	118	793	0	0	2174	129	1043	0	0			
Adj No. of Lanes	2	3	0	0	5	1	3	0	1			
Peak Hour Factor	0.93	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	6	6	0	0	6	6	6	6	6			
Cap, veh/h	120	1779	0	0	2242	443	1327	0	395			
Arrive On Green	0.07	0.73	0.00	0.00	0.29	0.29	0.26	0.00	0.00			
Sat Flow, veh/h	3312	5055	0	0	7958	1524	5121	0	1524			
Grp Volume(v), veh/h	118	793	0	0	2174	129	1043	0	0			
Grp Sat Flow(s),veh/h/ln	1656	1631	0	0	1542	1524	1707	0	1524			
Q Serve(g_s), s	3.9	7.2	0.0	0.0	30.6	7.2	20.8	0.0	0.0			
Cycle Q Clear(g_c), s	3.9	7.2	0.0	0.0	30.6	7.2	20.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	120	1779	0	0	2242	443	1327	0	395			
V/C Ratio(X)	0.98	0.45	0.00	0.00	0.97	0.29	0.79	0.00	0.00			
Avail Cap(c_a), veh/h	120	1779	0	0	2242	443	2887	0	859			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.88	0.88	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	51.0	10.5	0.0	0.0	38.5	30.2	37.9	0.0	0.0			
Incr Delay (d2), s/veh	70.7	0.2	0.0	0.0	13.1	1.7	1.1	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	5.3	5.6	0.0	0.0	21.0	5.9	15.2	0.0	0.0			
LnGrp Delay(d),s/veh	121.7	10.7	0.0	0.0	51.6	31.9	39.0	0.0	0.0			
LnGrp LOS	F	B			D	C	D					
Approach Vol, veh/h		911			2303			1043				
Approach Delay, s/veh		25.1			50.5			39.0				
Approach LOS		C			D			D				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		44.0			8.0	36.0		32.5				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		40.0			4.0	32.0		62.0				
Max Q Clear Time (g_c+I1), s		9.2			5.9	32.6		22.8				
Green Ext Time (p_c), s		22.3			0.0	0.0		5.7				
Intersection Summary												
HCM 2010 Ctrl Delay				42.2								
HCM 2010 LOS				D								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 2: SB Ramps & SH 14

07/14/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1890	1050	1060	1890	0	0	0	0	30	0	410
Future Volume (veh/h)	0	1890	1050	1060	1890	0	0	0	0	30	0	410
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	1989	0	1104	1989	0				31	0	0
Adj No. of Lanes	0	5	1	2	3	0				2	0	1
Peak Hour Factor	0.95	0.95	0.96	0.96	0.95	0.95				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	4005	649	1400	4510	0				153	0	37
Arrive On Green	0.00	0.43	0.00	0.81	1.00	0.00				0.04	0.00	0.00
Sat Flow, veh/h	0	9314	1583	3442	5253	0				3548	0	1583
Grp Volume(v), veh/h	0	1989	0	1104	1989	0				31	0	0
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1721	1695	0				1774	0	1583
Q Serve(g_s), s	0.0	15.5	0.0	16.7	0.0	0.0				0.8	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.5	0.0	16.7	0.0	0.0				0.8	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4005	649	1400	4510	0				153	0	37
V/C Ratio(X)	0.00	0.50	0.00	0.79	0.44	0.00				0.20	0.00	0.00
Avail Cap(c_a), veh/h	0	4005	649	1400	4510	0				213	0	63
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.57	0.57	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	20.7	0.0	7.1	0.0	0.0				46.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	1.8	0.0	0.0				0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	12.7	0.0	11.1	0.0	0.0				0.8	0.0	0.0
LnGrp Delay(d),s/veh	0.0	21.1	0.0	8.9	0.0	0.0				46.8	0.0	0.0
LnGrp LOS		C		A	A					D		
Approach Vol, veh/h		1989			3093						31	
Approach Delay, s/veh		21.1			3.2						46.8	
Approach LOS		C			A						D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	45.7	47.0		7.3		92.7						
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0						
Max Green Setting (Gmax), s	39.0	* 41		4.0		85.0						
Max Q Clear Time (g_c+I1), s	18.7	17.5		2.8		2.0						
Green Ext Time (p_c), s	16.2	12.1		0.0		39.5						
Intersection Summary												
HCM 2010 Ctrl Delay			10.4									
HCM 2010 LOS			B									
Notes												




















User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary

3: NB Ramps & SH 14




















07/14/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1710	0	0	1970	320	980	0	900	0	0	0
Future Volume (veh/h)	210	1710	0	0	1970	320	980	0	900	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	219	1800	0	0	2074	333	1021	0	0			
Adj No. of Lanes	2	3	0	0	5	1	2	1	1			
Peak Hour Factor	0.96	0.95	0.95	0.95	0.95	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	286	2253	0	0	2563	507	1186	623	529			
Arrive On Green	0.17	0.89	0.00	0.00	0.32	0.32	0.33	0.00	0.00			
Sat Flow, veh/h	3442	5253	0	0	8271	1583	3548	1863	1583			
Grp Volume(v), veh/h	219	1800	0	0	2074	333	1021	0	0			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1583	1774	1863	1583			
Q Serve(g_s), s	6.1	13.8	0.0	0.0	23.8	18.1	26.9	0.0	0.0			
Cycle Q Clear(g_c), s	6.1	13.8	0.0	0.0	23.8	18.1	26.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	286	2253	0	0	2563	507	1186	623	529			
V/C Ratio(X)	0.77	0.80	0.00	0.00	0.81	0.66	0.86	0.00	0.00			
Avail Cap(c_a), veh/h	379	2390	0	0	2563	507	1597	838	712			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.61	0.61	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	40.8	4.0	0.0	0.0	31.2	29.3	31.1	0.0	0.0			
Incr Delay (d2), s/veh	4.1	1.2	0.0	0.0	2.9	6.5	3.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	5.3	9.0	0.0	0.0	16.3	13.6	19.9	0.0	0.0			
LnGrp Delay(d),s/veh	44.9	5.1	0.0	0.0	34.1	35.8	34.9	0.0	0.0			
LnGrp LOS	D	A			C	D	C					
Approach Vol, veh/h		2019			2407			1021				
Approach Delay, s/veh		9.5			34.3			34.9				
Approach LOS		A			C			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		48.3			12.3	36.0		37.4				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		47.0			11.0	32.0		45.0				
Max Q Clear Time (g_c+I1), s		15.8			8.1	25.8		28.9				
Green Ext Time (p_c), s		27.8			0.2	6.1		4.5				
Intersection Summary												
HCM 2010 Ctrl Delay				25.2								
HCM 2010 LOS				C								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary
 2: SB Ramps & SH 14

07/14/2017


























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2230	1140	590	2460	0	0	0	0	50	0	750
Future Volume (veh/h)	0	2230	1140	590	2460	0	0	0	0	50	0	750
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1792	1792	1792	1792	0				1792	1792	1792
Adj Flow Rate, veh/h	0	2424	0	634	2674	0				54	0	0
Adj No. of Lanes	0	5	1	2	3	0				2	0	1
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92				0.93	0.93	0.93
Percent Heavy Veh, %	0	6	6	6	6	0				6	6	6
Cap, veh/h	0	4182	677	1179	4297	0				188	0	50
Arrive On Green	0.00	0.47	0.00	0.71	1.00	0.00				0.06	0.00	0.00
Sat Flow, veh/h	0	8962	1524	3312	5055	0				3414	0	1524
Grp Volume(v), veh/h	0	2424	0	634	2674	0				54	0	0
Grp Sat Flow(s),veh/h/ln	0	1792	1524	1656	1631	0				1707	0	1524
Q Serve(g_s), s	0.0	17.8	0.0	8.0	0.0	0.0				1.4	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.8	0.0	8.0	0.0	0.0				1.4	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	4182	677	1179	4297	0				188	0	50
V/C Ratio(X)	0.00	0.58	0.00	0.54	0.62	0.00				0.29	0.00	0.00
Avail Cap(c_a), veh/h	0	4182	677	1179	4297	0				721	0	288
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.69	0.69	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	0.0	9.5	0.0	0.0				40.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.3	0.5	0.0				0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	13.8	0.0	6.1	0.3	0.0				1.2	0.0	0.0
LnGrp Delay(d),s/veh	0.0	18.1	0.0	9.8	0.5	0.0				41.6	0.0	0.0
LnGrp LOS		B		A	A					D		
Approach Vol, veh/h		2424			3308							54
Approach Delay, s/veh		18.1			2.3							41.6
Approach LOS		B			A							D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	36.0	46.0		8.0		82.0						
Change Period (Y+Rc), s	5.0	6.0		5.0		* 5						
Max Green Setting (Gmax), s	17.0	40.0		17.0		* 64						
Max Q Clear Time (g_c+I1), s	10.0	19.8		3.4		2.0						
Green Ext Time (p_c), s	6.5	14.1		0.1		41.5						
Intersection Summary												
HCM 2010 Ctrl Delay			9.3									
HCM 2010 LOS			A									
Notes												

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 14

07/14/2017




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	 			  		 	 				
Traffic Volume (veh/h)	150	2130	0	0	2030	80	1020	0	440	0	0	0
Future Volume (veh/h)	150	2130	0	0	2030	80	1020	0	440	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1792	1792	0	0	1792	1792	1792	1792	1792			
Adj Flow Rate, veh/h	161	2315	0	0	2207	86	1097	0	0			
Adj No. of Lanes	2	3	0	0	5	1	3	0	1			
Peak Hour Factor	0.93	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	6	6	0	0	6	6	6	6	6			
Cap, veh/h	227	2619	0	0	3254	643	1379	0	410			
Arrive On Green	0.14	1.00	0.00	0.00	0.42	0.42	0.27	0.00	0.00			
Sat Flow, veh/h	3312	5055	0	0	7958	1524	5121	0	1524			
Grp Volume(v), veh/h	161	2315	0	0	2207	86	1097	0	0			
Grp Sat Flow(s),veh/h/ln	1656	1631	0	0	1542	1524	1707	0	1524			
Q Serve(g_s), s	4.2	0.0	0.0	0.0	20.9	3.1	17.9	0.0	0.0			
Cycle Q Clear(g_c), s	4.2	0.0	0.0	0.0	20.9	3.1	17.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	227	2619	0	0	3254	643	1379	0	410			
V/C Ratio(X)	0.71	0.88	0.00	0.00	0.68	0.13	0.80	0.00	0.00			
Avail Cap(c_a), veh/h	294	2719	0	0	3254	643	1821	0	542			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.60	0.60	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	38.0	0.0	0.0	0.0	21.0	15.9	30.6	0.0	0.0			
Incr Delay (d2), s/veh	3.3	2.3	0.0	0.0	1.2	0.4	1.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	3.6	1.0	0.0	0.0	14.0	2.5	13.5	0.0	0.0			
LnGrp Delay(d),s/veh	41.2	2.3	0.0	0.0	22.2	16.4	32.5	0.0	0.0			
LnGrp LOS	D	A			C	B	C					
Approach Vol, veh/h		2476			2293			1097				
Approach Delay, s/veh		4.8			22.0			32.5				
Approach LOS		A			C			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		52.2			10.2	42.0		28.2				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		50.0			8.0	38.0		32.0				
Max Q Clear Time (g_c+I1), s		2.0			6.2	22.9		19.9				
Green Ext Time (p_c), s		43.7			0.1	14.6		4.3				
Intersection Summary												
HCM 2010 Ctrl Delay				16.7								
HCM 2010 LOS				B								
Notes												

User approved volume balancing among the lanes for turning movement.

HCM 2010 Signalized Intersection Summary

2: SB Ramps & SH 14

07/14/2017




























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	2010	1310	950	1980	0	0	0	0	30	0	880
Future Volume (veh/h)	0	2010	1310	950	1980	0	0	0	0	30	0	880
Number	5	2	12	1	6	16				7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	1863	1863
Adj Flow Rate, veh/h	0	2116	0	990	2084	0				31	0	0
Adj No. of Lanes	0	5	1	2	3	0				2	0	1
Peak Hour Factor	0.95	0.95	0.96	0.96	0.95	0.95				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	3881	607	1112	4186	0				214	0	43
Arrive On Green	0.00	0.42	0.00	0.65	1.00	0.00				0.06	0.00	0.00
Sat Flow, veh/h	0	9314	1583	3442	5253	0				3548	0	1583
Grp Volume(v), veh/h	0	2116	0	990	2084	0				31	0	0
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1721	1695	0				1774	0	1583
Q Serve(g_s), s	0.0	10.3	0.0	14.4	0.0	0.0				0.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.3	0.0	14.4	0.0	0.0				0.5	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	3881	607	1112	4186	0				214	0	43
V/C Ratio(X)	0.00	0.55	0.00	0.89	0.50	0.00				0.15	0.00	0.00
Avail Cap(c_a), veh/h	0	3881	607	1112	4186	0				355	0	106
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.36	0.36	0.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.2	0.0	9.7	0.0	0.0				26.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	3.6	0.0	0.0				0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	9.1	0.0	9.4	0.0	0.0				0.5	0.0	0.0
LnGrp Delay(d),s/veh	0.0	13.8	0.0	13.3	0.0	0.0				27.0	0.0	0.0
LnGrp LOS		B		B	A					C		
Approach Vol, veh/h		2116			3074						31	
Approach Delay, s/veh		13.8			4.3						27.0	
Approach LOS		B			A						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	24.4	29.0		6.6		53.4						
Change Period (Y+Rc), s	6.0	* 6		5.0		6.0						
Max Green Setting (Gmax), s	17.0	* 23		4.0		45.0						
Max Q Clear Time (g_c+I1), s	16.4	12.3		2.5		2.0						
Green Ext Time (p_c), s	0.2	7.7		0.0		27.9						
Intersection Summary												
HCM 2010 Ctrl Delay			8.3									
HCM 2010 LOS			A									
Notes												

User approved volume balancing among the lanes for turning movement.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary
 3: NB Ramps & SH 14

07/14/2017

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			   		 		 			
Traffic Volume (veh/h)	390	1650	0	0	1950	120	980	0	570	0	0	0
Future Volume (veh/h)	390	1650	0	0	1950	120	980	0	570	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	406	1737	0	0	2053	125	1021	0	0			
Adj No. of Lanes	2	3	0	0	5	1	2	1	1			
Peak Hour Factor	0.96	0.95	0.95	0.95	0.95	0.96	0.96	0.96	0.96			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	459	2543	0	0	2403	475	1182	621	528			
Arrive On Green	0.27	1.00	0.00	0.00	0.30	0.30	0.33	0.00	0.00			
Sat Flow, veh/h	3442	5253	0	0	8271	1583	3548	1863	1583			
Grp Volume(v), veh/h	406	1737	0	0	2053	125	1021	0	0			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1602	1583	1774	1863	1583			
Q Serve(g_s), s	6.8	0.0	0.0	0.0	14.5	3.6	16.2	0.0	0.0			
Cycle Q Clear(g_c), s	6.8	0.0	0.0	0.0	14.5	3.6	16.2	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	459	2543	0	0	2403	475	1182	621	528			
V/C Ratio(X)	0.88	0.68	0.00	0.00	0.85	0.26	0.86	0.00	0.00			
Avail Cap(c_a), veh/h	459	2543	0	0	2403	475	1301	683	581			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.57	0.57	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	21.6	0.0	0.0	0.0	19.8	16.0	18.7	0.0	0.0			
Incr Delay (d2), s/veh	11.5	0.4	0.0	0.0	4.1	1.3	5.8	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(95%),veh/ln	6.3	0.2	0.0	0.0	11.3	3.1	13.6	0.0	0.0			
LnGrp Delay(d),s/veh	33.1	0.4	0.0	0.0	23.9	17.3	24.6	0.0	0.0			
LnGrp LOS	C	A			C	B	C					
Approach Vol, veh/h		2143			2178			1021				
Approach Delay, s/veh		6.6			23.5			24.6				
Approach LOS		A			C			C				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		34.0			12.0	22.0		24.0				
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0				
Max Green Setting (Gmax), s		30.0			8.0	18.0		22.0				
Max Q Clear Time (g_c+I1), s		2.0			8.8	16.5		18.2				
Green Ext Time (p_c), s		24.4			0.0	1.5		1.8				
Intersection Summary												
HCM 2010 Ctrl Delay				16.9								
HCM 2010 LOS				B								
Notes												

User approved volume balancing among the lanes for turning movement.

Attachment G: CDOT Mitigation Tracking Table

Colorado Department of Transportation Mitigation Commitment Monitoring and Reporting

Mitigation Category	Activity Triggering Mitigation	Location of Activity Triggering Mitigation	Impact from NEPA Document	Commitment From Mitigation Table In Source Document Use Exact Wording from Table in Source Document	Source Document of Mitigation Commitment and Page Number	Location of Mitigation(s) in Plan Sheets/Specs Include All Page Numbers that Apply	Date Mitigation Completed (or Anticipated)	Name of Person Completing Mitigation	Agency Coordination Required? Yes or No	Name of Each Agency	Comments	Status
Social Conditions	Operations during construction.	Within impacted areas of I-25 construction	During construction, detours, traffic delays, and temporary noise and visual impacts may occur.	Develop a Traffic Management Plan that identifies a construction-related traffic control plan, work zone management strategies, and contingency plans.	North I-25 ROD 1 Revision 1 Table 5 page 20							
Social Conditions	Construction activities.	Within impacted areas of I-25 construction	During construction, detours, traffic delays, and temporary noise and visual impacts may occur.	Stage construction activities and vary work hours to minimize disruption to traffic and local businesses. Throughout the construction phase, preserve access for each affected business.	North I-25 ROD 1 Revision 1 Table 5 page 20							
Social Conditions	Construction activities.	Within impacted areas of I-25 construction	During construction, detours, traffic delays, and temporary noise and visual impacts may occur.	Mitigation for construction-related impacts to minority and low-income populations could include the provision of reduced price bus passes during construction, acceptable access modifications, and translated information on construction processes and alternate modes available during construction and pre-opening day.	North I-25 ROD 1 Revision 1 Table 5 page 20							
Social Conditions	Construction activities.	Within impacted areas of I-25 construction	During construction, detours, traffic delays, and temporary noise and visual impacts may occur.	Ways to make tolling more equitable will be sought. For example, payment options will be considered to enable the broadest opportunity for all economic groups to use toll facilities. Alternate payment options will be provided so that persons who do not have a credit card can still participate in the tolled express lanes. Toll replenishment using cash or employer-based payroll deductions could also be included in the tolling program.	North I-25 ROD 1 Revision 1 Table 5 page 20							
Social Conditions	Construction activities.	Within impacted areas of I-25 construction	During construction, detours, traffic delays, and temporary noise and visual impacts may occur.	A context sensitive approach to project design and mitigation is encouraged to ensure that project elements enhance the community.	North I-25 ROD 1 Revision 1 Table 5 page 20							
Economic Conditions	Operation of detours during construction.	Within impacted areas of I-25 construction	During construction, access to local businesses may be temporarily disrupted or a minor delay may occur that could negatively impact the performance of some businesses. Conditions will improve or return to normal after construction is complete	New access will be provided for properties where existing accesses are removed. To avoid disruption of business activities during construction, the new access will be provided before the existing access is removed.	North I-25 ROD 1 Revision 1 Table 6 page 21							
Economic Conditions	Operation of detours during construction.	Within impacted areas of I-25 construction	During construction, access to local businesses may be temporarily disrupted or a minor delay may occur that could negatively impact the performance of some businesses. Conditions will improve or return to normal after construction is complete	A traffic control plan will be developed to minimize interference to traffic flow from construction equipment and activities. CDOT will provide advance notice to emergency service providers, local businesses, rail operators, and residents with regard to road delays, access, and special construction activities. Such notifications will be accomplished through radio and public announcements, newspaper notices, on-site signage, and CDOT's website.	North I-25 ROD 1 Revision 1 Table 6 page 21							
Economic Conditions	Operations during construction.	Within impacted areas of I-25 construction	During construction, access to local businesses may be temporarily disrupted or a minor delay may occur that could negatively impact the performance of some businesses. Conditions will improve or return to normal after construction is complete	To minimize disruption to traffic and local businesses, construction activities will be staged and work hours varied. Throughout the construction stage, access will be preserved for each affected business.	North I-25 ROD 1 Revision 1 Table 6 page 21							
Right-of-Way	Acquisitions of property required for construction.	Within impacted areas of I-25 construction	Approximately 125 acres of property will be acquired from 89 properties along the corridor. The ROD1 Revision 1 Selected Alternative would partially acquire right-of-way from 86 properties and fully acquire three properties.	For any person(s) whose real property interests may be impacted by this project, the acquisition of those property interests will comply fully with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). The Uniform Act is a federally mandated program that applies to all acquisitions of real property or displacements of persons resulting from Federal or federally assisted programs or projects. It was created to provide for and ensure the fair and equitable treatment of all such persons.	North I-25 ROD 1 Revision 1 Table 8 page 22							
Right-of-Way	Acquisitions of property required for construction.	Within impacted areas of I-25 construction	Approximately 125 acres of property will be acquired from 89 properties along the corridor. The ROD1 Revision 1 Selected Alternative would partially acquire right-of-way from 86 properties and fully acquire three properties.	To further ensure that the provisions contained within this act are applied "uniformly," CDOT requires Uniform Act compliance on any project for which it has oversight responsibility regardless of the funding source. Additionally, the Fifth Amendment of the United States Constitution provides that private property may not be taken for a public use without payment of "just compensation." All impacted owners will be provided notification of the acquiring agency's intent to acquire an interest in their property including a written offer letter of just compensation specifically describing those property interests. A ROW Specialist will be assigned to each property owner to assist them with this process.	North I-25 ROD 1 Revision 1 Table 8 page 22							
Right-of-Way	Acquisitions of property required for construction.	Within impacted areas of I-25 construction	Approximately 125 acres of property will be acquired from 89 properties along the corridor. The ROD1 Revision 1 Selected Alternative would partially acquire right-of-way from 86 properties and fully acquire three properties.	In certain situations, it may also be necessary to acquire improvements that are located within a proposed acquisition parcel. In those instances where the improvements are occupied, it becomes necessary to "relocate" those individuals from the subject property (residential or business) to a replacement site. The Uniform Act provides for numerous benefits to these individuals to assist them both financially and with advisory services related to relocating their residence or business operation. Although the benefits available under the Uniform Act are far too numerous and complex to discuss in detail in this document, they are available to both owner occupants and tenants of either residential or business properties. In some situations, only personal property must be moved from the real property and this is also covered under the relocation program. As soon as feasible, any person scheduled to be displaced shall be furnished with a general written description of the displacing Agency's relocation program which provides at a minimum, detailed information related to eligibility requirements, advisory services and assistance, payments, and the appeal process. It shall also provide notification that the displaced person(s) will not be required to move without at least 90 days advance written notice. For residential relocatees, this notice cannot be provided until a written offer to acquire the subject property has been presented, and at least one comparable replacement dwelling has been made available. Relocation benefits will be provided to all eligible persons regardless of race, color, religion, sex or national origin. Benefits under the Act, to which each eligible owner or tenant may be entitled, will be determined on an individual basis and explained to them in detail by an assigned Right-of-Way Specialist.	North I-25 ROD 1 Revision 1 Table 8 page 22							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	An air quality mitigation plan will be prepared describing all feasible measures to reduce air quality emissions from the project. CDOT staff will review and endorse construction mitigation plans prior to work on a project site.	North I-25 ROD 1 Revision 1 Table 9 page 25							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	Acceptable options for reducing emissions could include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, and after-treatment products.	North I-25 ROD 1 Revision 1 Table 9 page 25							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	The contractor will ensure that all construction equipment is properly tuned and maintained.	North I-25 ROD 1 Revision 1 Table 9 page 25							

Colorado Department of Transportation Mitigation Commitment Monitoring and Reporting

Mitigation Category	Activity Triggering Mitigation	Location of Activity Triggering Mitigation	Impact from NEPA Document	Commitment From Mitigation Table In Source Document Use Exact Wording from Table in Source Document	Source Document of Mitigation Commitment and Page Number	Location of Mitigation(s) in Plan Sheets/Specs Include All Page Numbers that Apply	Date Mitigation Completed (or Anticipated)	Name of Person Completing Mitigation	Agency Coordination Required? Yes or No	Name of Each Agency	Comments	Status
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	Idling time will be minimized to 10 minutes—to save fuel and reduce emissions.	North I-25 ROD 1 Revision 1 Table 9 page 25							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	Hauling and trucking operations will be consolidated as much as possible to reduce fuel	North I-25 ROD 1 Revision 1 Table 9 page 25							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	An operational water truck will be on site at all times. Water will be applied to control dust	North I-25 ROD 1 Revision 1 Table 9 page 25							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	There will be no open burning of removed vegetation. Removed vegetation will be chipped	North I-25 ROD 1 Revision 1 Table 9 page 25							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	Existing power sources or clean fuel generators will be used rather than temporary power	North I-25 ROD 1 Revision 1 Table 9 page 25							
Air Quality	Construction activities.	Within impacted areas of I-25 construction	Construction activities may be a source of temporary air quality impacts from fugitive dust or equipment emissions.	Obstructions of through-traffic lanes will be minimized. A flag person will be provided to	North I-25 ROD 1 Revision 1 Table 9 page 25							
Noise	Traffic during construction	Within impacted areas of I-25 construction	Construction noise	To minimize construction noise levels, typical best practices should be incorporated into construction contracts where it is appropriate to do so.	North I-25 ROD 1 Revision 1 Table 11 page 28							
Noise	Traffic during construction	Within impacted areas of I-25 construction	Construction noise	Notifying neighbors in advance when construction noise may occur and its expected duration so that they may plan appropriately.	North I-25 ROD 1 Revision 1 Table 11 page 28							
Noise	Traffic during construction	Within impacted areas of I-25 construction	Construction noise	Managing construction activities to keep noisy activities as far from sensitive receptors as possible.	North I-25 ROD 1 Revision 1 Table 11 page 28							
Noise	Traffic during construction	Within impacted areas of I-25 construction	Construction noise	Ensuring exhaust systems on equipment are in good working order. Equipment would be maintained on a regular basis, and equipment may be subject to inspection by the construction project manager to ensure maintenance	North I-25 ROD 1 Revision 1 Table 11 page 28							
Noise	Traffic during construction	Within impacted areas of I-25 construction	Construction noise	Locating stationary equipment as far from sensitive receptors as possible.	North I-25 ROD 1 Revision 1 Table 11 page 28							
Noise	Traffic during construction	Within impacted areas of I-25 construction	Construction noise	Performing construction activities in noise sensitive areas during hours that are least disturbing to adjacent and nearby residents.	North I-25 ROD 1 Revision 1 Table 11 page 28							
Water Quality	Runoff for roadways.	Within impacted areas of I-25 construction	Increased impervious surface area	Extended detention basins have been identified as the primary structural BMP for this project. Roadway drainage improvements will be designed to minimize these impacts and impacts to adjacent properties, and to comply with local, state and federal drainage and floodplain requirements. Typical roadway drainage improvements include bridges, culverts, storm sewers, outfalls to existing drainageways, water quality detention basins. The ROD1 Revision 1 Selected Alternative would provide permanent water quality treatment with a capacity to treat 90 percent of the new impervious area.	North I-25 ROD 1 Revision 1 Table 12 page 30							
Water Quality	Runoff from construction.	Within impacted areas of I-25 construction	Potential for temporary water quality impacts during construction	If lead paint is present, this material must not be allowed to flake off and enter receiving waters. (Section 402, Clean Water Act, CDPHE Regulation 61).	North I-25 ROD 1 Revision 1 Table 12 page 30							
Water Quality	Runoff from construction.	Within impacted areas of I-25 construction	Potential for temporary water quality impacts during construction	If cranes and other equipment are used for bridge demolition within a river or streambank area, the equipment will be kept out of the river as much as practicable, or per compliance with Section 404 permit, and all work shall minimize temporary impacts to the river. The creation of a crane pad is necessary if cranes or other equipment cannot be kept out of the river.	North I-25 ROD 1 Revision 1 Table 12 page 30							
Water Quality	Runoff from construction.	Within impacted areas of I-25 construction	Potential for temporary water quality impacts during construction	There is a potential for sediment to enter streams from land disruption and subsequent erosion. Therefore, BMPs such as protecting existing vegetation, placing structural BMPs, and limiting access areas will be implemented in compliance with the CDPHE general construction permit. Stormwater management plans must be developed during design and implemented during construction, and updated as needed to keep the project in compliance with the CDPS-SCP permit for the site.	North I-25 ROD 1 Revision 1 Table 12 page 30							
Water Quality	Runoff from construction.	Within impacted areas of I-25 construction	Potential for temporary water quality impacts during construction	Caissons used to create bridge piers could require groundwater dewatering. A discharge permit and a treatment strategy may be needed before dewatering activities can occur.	North I-25 ROD 1 Revision 1 Table 12 page 30							
Water Quality	Runoff from construction.	Within impacted areas of I-25 construction	Potential for impacts during demolition of structures	If other regulated materials are present within or on structures, they must be removed and appropriately recycled or disposed of prior to demolition activities. Typical materials include containerized regulated liquids such as paints, solvents, oil, grease, chemicals, pesticides, and herbicides, and chlorofluorocarbon (CFC) containing equipment (equipment must be emptied before equipment is removed) [Colorado Hazardous Waste Regulations (6 Colorado Code of Regulations [CCR] 1007-3)].	North I-25 ROD 1 Revision 1 Table 12 page 30							
Water Quality	Runoff from construction.	Within impacted areas of I-25 construction	Potential for impacts along the Cache la Poudre River	Senate Bill 40 (SB40) certification from the Colorado Division of Parks and Wildlife (CPW) is required when construction occurs in "any streams or its banks or tributaries". This permit coordination will include identification of measures to protect existing riparian areas, such as mitigating stormwater runoff or replacing riparian vegetation (on a 1:1 basis for trees and a square footage basis for shrubs).	North I-25 ROD 1 Revision 1 Table 12 page 30							
Water Quality	Runoff from construction.	Within impacted areas of I-25 construction	Potential for impacts during construction	The status of groundwater well use will have to be determined prior to construction activities to identify if active wells are present. Active wells in the final right-of-way will need to be relocated and non-active wells would need to be plugged, sealed, and abandoned. If groundwater is encountered during activities associated with excavations for caisson/retaining walls, the discharge of groundwater is authorized if the following conditions are met and then a dewatering permit is not required: A Construction Stormwater Permit has been obtained; The source is groundwater and/or groundwater combined with stormwater that does not contain pollutants in concentrations exceeding the State groundwater standards in Regulations 5 CCR 1002-41 and 42; The discharge is in accordance with the CDPHE-WQCD Water Quality Policy-27, Low-Risk Discharges—September 2009; The source is identified in the SWMP; Dewatering BMPs are included in the SWMP, and These discharges do not leave the site as surface runoff or to surface waters	North I-25 ROD 1 Revision 1 Table 12 page 30							

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Wetlands and Waters of the U.S.	Construction near or inside wetlands and jurisdictional open water.	Within impacted areas of I-25 construction	Permanent impacts totaling an estimated 5.33 acres	All impacted wetlands and jurisdictional open waters will be mitigated in accordance with the USACE mitigation policies, and the conditions of the USACE Section 404 permit. Impacts to wetlands were previously permitted for in accordance with the North I-25 EIS Section 404 permit (NWO-2004-80110-DEN). The Clean Water Act Individual Section 404 permit permitted 16.08 acres of permanent impacts to wetlands and other waters of the U.S. and 2.06 acres of temporary impacts to wetlands and other waters of the U.S. As of February 2017, the individual projects from the FEIS Preferred Alternative have permanently impacted 0.37 acres of wetlands and other waters of the U.S. and 0.23 acres of temporary impacts. Mitigation has been created at St Vrain State Park to offset the total impact acreage to wetlands in the North I-25 EIS regional study area.	North I-25 ROD 1 Revision 1 Table 13 page 31							
Wetlands and Waters of the U.S.	Construction near or inside wetlands and jurisdictional open water.	Within impacted areas of I-25 construction	Permanent impacts totaling an estimated 5.33 acres	During construction, BMPs will be used to avoid indirect construction impacts to wetlands. Materials and equipment will be stored a minimum of 50 feet from wetlands, drainages, and ditches that could carry toxics materials into wetlands. Construction fencing and appropriate sediment control BMPs will be used to mark wetland boundaries and sensitive habitats during construction.	North I-25 ROD 1 Revision 1 Table 13 page 31							
Wetlands and Waters of the U.S.	Construction near or inside wetlands and jurisdictional open water.	Within impacted areas of I-25 construction	Permanent impacts totaling an estimated 5.33 acres	Sediment and erosion control will be required to be placed during all phases of construction and will remain in place until all disturbed areas have reached 70 percent of preconstruction vegetative cover.	North I-25 ROD 1 Revision 1 Table 13 page 31							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	Floodway or Floodplain Encroachment	All encroachment in the floodway portion of the floodplain will be designed with compensatory conveyance, certified to cause no rise in the BFE, and documented in an approved floodplain development permit to the local agency administering NFIP standards in the affected reach.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	Floodway or Floodplain Encroachment	CLOMRs may be required pre-construction, and LOMRs post-construction using certified as-built information from ground survey.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	Floodway or Floodplain Encroachment	All encroachment in the flood fringe portion of the floodplain will be documented in an approved floodplain development permit to the local agency administering NFIP standards in the affected reach.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	100-year Cache la Poudre River Flow Splits	All flow split discharges and BFEs shall be maintained in their current effective condition determined by federal, state, and local governing agencies.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	100-year Cache la Poudre River Flow Splits	Evidence of maintaining flow splits or mitigating changes shall be documented in an approved CLOMR, floodplain development permit, and no-rise certification prior to construction.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	100-year Cache la Poudre River Flow Splits	Evidence of NFIP compliance shall be documented in an approved LOMR, floodplain development permit, and no-rise recertification after construction, and supported by certified as-built ground survey information.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	100-year Cache la Poudre River Flow Splits	The 100-year FEMA design flows will be used for freeboard determinations, scour design, and to ensure that flow velocities are acceptable. The 500-year design flows will be used to further assess the scour design and set the depths of piles or caissons. The design will consider the maximum allowable backwater as allowed by FEMA. Degradation, aggregation, and scour are to be determined. Adequate counter measures will be selected using criteria established by the National Cooperative Highway Research Program Report 568 (TRB, 2006).	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	100-year Cache la Poudre River Flow Splits	The design will be such that minimal disruption to the ecosystem will occur. The design will consider costs for construction and maintenance. A bridge deck drainage system that controls seepage at joints will be considered. If possible, bridge deck drains will be piped to a water quality feature before being discharged into a floodplain. The designs will comply with federal and state agencies. The designs will make every consideration towards local agency requirements and will be consistent with existing watershed and floodplain management programs.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Floodplains	Floodway or floodplain encroachment	Within impacted areas of I-25 construction	100-year Cache la Poudre River Flow Splits	Floodplain impacts would include increasing the sizes of bridges, culverts, and other drainage facilities in order to better convey floodwaters. In most cases, larger drainage structures would not disturb the existing low flow channel areas where riparian habitat is located. The overbanks adjacent to the low flow channels are generally expanded with the newer structures. In order to pass the higher flows. Enlarged overbank areas are generally revegetated with a diverse planting in order to enhance the habitat. Upstream flood risks should decrease with an enlarged drainage structure. Downstream flood risks can increase due to the improved conveyance of the stormwaters. It is CDOT policy to size a drainage structure based on FEMA flows, to obey the Natural Flow Rule of Colorado, and to hold others to the same standard (CDOT Drainage Design Manual, 2004, Sec. 2.5.2 and 12.1.1). The standard flood for CDOT and FEMA is the 100-year flood. Impacts to downstream areas must be assessed at the time of preliminary and final design by using detailed hydraulic methods. All improvements are to follow the guidelines described in Section 3.9.1 of the CDOT Drainage Design Manual.	North I-25 ROD 1 Revision 1 Table 14 page 32							
Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	Minimize the amount of disturbance and limit the amount of time that disturbed locations are allowed to be non-vegetated. The project will follow CDOT standard specifications for the amount of time that disturbed areas are allowed to be non-vegetated.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	Avoid existing trees, shrubs, and vegetation to the maximum extent possible, especially wetlands and riparian plant communities. The project team will coordinate with the CDOT landscape architect before construction to determine the types of vegetation that will be protected during construction.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	Salvage weed-free topsoil for use in seeding.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	Erosion control blankets will be used on steep, newly seeded slopes. Slopes should be roughened at all times. Implement temporary and permanent erosion control measures to limit erosion and soil loss. Wildlife-friendly erosion control blankets will be used on steep, newly seeded slopes to control erosion and to promote the establishment of vegetation. Slopes will be roughened at all times.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	Revegetate all disturbed areas with native grass and forb species. Seed, mulch, and mulch tackifier will be applied in phases throughout construction.	North I-25 ROD 1 Revision 1 Table 15 page 34							

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Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	Develop an acceptable revegetation plan with the CDOT landscape architect and with county personnel in Larimer County. The revegetation plan must also be acceptable to municipalities, such as Fort Collins and Longmont, within their jurisdictional areas.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	Senate Bill 40 (33-5-101-107, CRS 1973 as amended) requires any agency of the state to obtain wildlife certification from the CDOW when the agency plans construction in "...any stream or its bank tributaries...". In these areas, trees and shrubs are recommended to be replaced on a 1:1 basis (trees) and square-foot basis (shrubs).	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Removal of approximately 206.12 acres of riparian, woodland, agricultural, native, and various wetland vegetation communities.	The proposed project area falls within the Shortgrass Prairie Initiative, an agreement between CDOT, CDOW, FHWA, and USFWS. The initiative included a BA and mitigation measures for FHWA funding of CDOT's routine maintenance and upgrade of existing transportation corridors in eastern Colorado for a 20-year period beginning in 2003. The BA includes all of I-25 within Colorado.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	List B noxious weed species populations will need to be mitigated within the project area using appropriate herbicide treatments. An Integrated Noxious Weed Management Plan in the form of a <i>CDOT Standard Specifications for Road and Bridge Construction</i> (CDOT, 2011d) Project Special Provision 217 <i>Herbicide Treatment</i> will be incorporated into project design and implemented during construction. Specific BMPs will be required during construction to reduce the potential for introduction and spread of noxious weed species.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	Noxious weed mapping will be included in the construction documents along with appropriate weed control methods.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	Weed management measures will include removal of heavily infested topsoil, herbicide treatment of lightly infested topsoil as well as other herbicide and/or mechanical treatments, limiting disturbance areas, phased seeding with native species throughout the project, and monitoring during and after construction.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	Use of herbicides will include selection of appropriate herbicides and timing of herbicide spraying and use of a backpack sprayer in and adjacent to sensitive areas, such as wetlands and riparian areas.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	Certified weed-free hay and/of mulch will be used in all revegetated areas.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	No fertilizers will be allowed on the project site.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	Only native species will be used to revegetate sites disturbed by construction activities. Native plant species used for revegetation will be coordinated with agencies and CDOT specialists.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	Materials used for revegetating will be inspected and regulated in accordance with provisions of the Weed Free Forage Act, Title 35, Article 27.5, CRS.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	When salvaging topsoil from on-site construction locations, the potential for spread of noxious weeds will be considered. Imported topsoil must be inspected by the project's Noxious Weed Management Supervisor. If it is determined to be contaminated with weeds, or if it cannot be inspected properly, it cannot be used on the project.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Vegetation and Noxious Weeds	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Disturbance of soils due to construction activities could contribute to the spread of noxious weed species or the introduction of new weed species from outside sources	Equipment will remain on designated roadways and stay out of weed-infested areas until the areas are treated. All equipment will be cleaned of all soil and plant parts before its arrival at a project site.	North I-25 ROD 1 Revision 1 Table 15 page 34							
Fish and Wildlife	Construction activity within Migratory Bird habitat.	Within impacted areas of I-25 construction	Migratory Birds	Tree trimming and/or removal activities will be completed before birds begin to nest or after the young have fledged. In Colorado, most nesting and rearing activities occur between April 1 and August 31. However, since some birds nest as early as February, a nesting bird survey will be conducted by a biologist before any tree trimming or removal activities begin.	North I-25 ROD 1 Revision 1 Table 16 page 40							
Fish and Wildlife	Construction activity within Migratory Bird habitat.	Within impacted areas of I-25 construction	Migratory Birds	Bridge or box culvert work that may disturb nesting birds will be completed before birds begin to nest or after the young have fledged. No bridge or box culvert work will take place between April 1 and August 31. If work activities are planned between these dates, nests will be removed (before nesting begins) and appropriate measures taken to assure no new nests are constructed.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Construction activity within Migratory Bird habitat.	Within impacted areas of I-25 construction	Migratory Birds	Clearing and grubbing of vegetation that may disturb ground nesting birds will be completed before birds begin to nest or after the young have fledged. If work activities are planned between April 1 and August 31, vegetation will be removed and/or trimmed to a height of six inches or less prior to April 1. Once vegetation has been removed and/or trimmed, appropriate measures, i.e. repeated mowing/trimming, will be implemented to assure vegetation does not grow more than six inches.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Construction activity within Migratory Bird habitat.	Within impacted areas of I-25 construction	Migratory Birds	Burrowing owl surveys will be conducted prior to any work in prairie dog colonies between March 15 and October 31. If burrowing owls are present, prairie dog removal will be scheduled to occur outside this time period. If burrowing owls are found within the construction footprint during preconstruction surveys, nests will be left undisturbed and additional avoidance measures will be developed in coordination with CPW. Direct impacts to burrowing owls will be avoided by covering or destroying prairie dog burrows prior to construction (prior to March 15).	North I-25 ROD 1 Revision 1 Table 15 page 42							

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Fish and Wildlife	Construction activity within raptor habitat.	Within impacted areas of I-25 construction	Raptors	CPW has developed recommended buffer zones and seasonal restrictions for new surface occupancy within certain distances of nest sites of several raptor species. Surface occupancy is defined as human-occupied buildings and other structures such as oil and gas wells, roads, railroad tracks, or trails. The USFWS typically considers that implementation of the CDOW buffers and seasonal restrictions fulfill compliance requirements of the Migratory Bird Treaty Act for raptors.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Construction activity within raptor habitat.	Within impacted areas of I-25 construction	Raptors	A raptor nest survey (including bald eagles) will be conducted prior to project construction to identify raptor nests and nesting activity in the vicinity of the proposed project. If an active raptor nest is found on site, the recommended buffers and seasonal restrictions recommended by the CDOW (CDOW, 2008) for raptors will be established during construction to avoid nest abandonment.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Raptors	If raptor nests will be impacted by the proposed project, specific mitigation measures for impacts to nesting raptors will be developed in coordination with the CDOW and USFWS prior to construction. If disturbance of raptor nests is unavoidable, mitigation measures will include the construction of artificial nests in suitable habitat or enhancement of prey habitat. Artificial nests will be constructed in the same general area as impacts.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Temporary grading for roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Prairie Dogs	Prairie dogs are present within the limits of disturbance of the project. The prairie dogs will be removed in accordance with CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d) Project Special Provision 201 Prairie Dog Management.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Impacts to big game and movement corridors	A minimum clearance height of 10 feet and width of 20 feet for deer (. Crossing structures sized for deer will be adequate for most common wildlife. The recommended minimum culvert diameter is 48 inches for medium-sized carnivores and 36 inches for small carnivores.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Impacts to big game and movement corridors	A minimum "openness ratio" of 0.75. The "openness ratio" is defined as the height of the structure multiplied by the structure width and divided by the structure length, measured in meters.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Impacts to big game and movement corridors	Shrubs and vegetative cover will be placed at bridge underpass openings to attract wildlife and provide a "tunnel effect."	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Impacts to big game and movement corridors	For structures that periodically convey water, ledges or shelves to provide passage alternatives during high water.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Impacts to big game and movement corridors	To avoid human disturbance to wildlife movement along the Cache la Poudre River, the Poudre River Trail has been placed along the southern abutment of the I-25 bridges over the Cache la Poudre on the south side of the Cache la Poudre River channel away from the vegetated riparian area that facilitates wildlife movement along the Cache la Poudre River.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Impacts to big game and movement corridors	Avoiding the placement of lighting near the crossing structures. The Poudre River Trail does not include lighting for the trail to avoid impacts to wildlife movement at night along the Cache la Poudre River.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Impacts to big game and movement corridors	Avoid attracting wildlife to the right-of-way by keeping roadside vegetation height to a minimum.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	To offset temporary impacts to aquatic species from habitat disturbance, aquatic habitats will be restored after construction activities have ceased.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Riffle and pool complexes should be maintained and/or created.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Natural stream bottoms will be maintained.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Culverts will be partially buried and the bottom will be covered with gravel/sand and have a low gradient.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Culverts to be replaced should be replaced with one of equal or greater size.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Culverts will not have grates, impact dissipaters, or any other features that would impede fish movement.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	To avoid erosion, induced siltation, and sedimentation, sediment/erosion control BMPs shall be placed during each phase of construction. Upon completion of slope, seeding in combination with mulch/mulch tackifier or blanket shall occur within the limits set in Section 208 of CDOT specifications.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Erosion control blankets will be "wildlife friendly," consisting of 100 percent biodegradable materials.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Access points to streams during construction will be limited to minimize degradation of the banks.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	No new fish passage barriers will be created.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Fish and Wildlife	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Aquatic Resources	Existing drop structures that create a barrier to fish movements will be removed or redesigned where possible.	North I-25 ROD 1 Revision 1 Table 15 page 42							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	Mitigation will be implemented in accordance with the North I-25 Corridor Programmatic Biological Opinion (PBO) dated October 13, 2011 and March 23, 2017 consultation, which anticipated a maximum combined permanent and temporary loss of 2.07 acres of Preble's Meadow Jumping Mouse habitat based on effects of the FEIS Preferred Alternative.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	Pre-construction habitat assessments and/or surveys for PMJM will be conducted where appropriate.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	If culverts in occupied or suitable PMJM habitat are replaced or upgraded, the new culverts will incorporate ledges to facilitate small mammal passage.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	Lighting within or near PMJM habitat will incorporate current technology and standards (e.g., Dark Skies) at the time of design to reduce lighting impacts to PMJM.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	During construction, nighttime work within 0.25 mile of PMJM habitat will be minimized.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	Any inadvertent PMJM mortalities during construction will be reported as specified in current trapping guidelines. CDOT will report all relevant information within 24 hours and subsequently submit a completed Injury/Mortality Documentation Report to the Service, Ecological Services Colorado Field Office or the Services' Division of Law Enforcement in Lakewood, Colorado (telephone 720 981-2777).	North I-25 ROD 1 Revision 1 Table 18 page 46							

Colorado Department of Transportation Mitigation Commitment Monitoring and Reporting

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Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	In the unlikely event that a PMJM (dead, injured, or otherwise) is located during construction, the Colorado Field Office of the Service will be contacted immediately to identify additional measures, as appropriate, to minimize impacts to PMJM.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	The temporary impacts of the PMJM habitat in the Cache la Poudre River drainage will be restored at a 1:1 ratio. Any PMJM habitat permanently removed due to project activities will be replaced at a 3:1 ratio. If practicable the permanent habitat will be replaced in the vicinity of the impacts. Habitat impacts will be recalculated and separated into temporary or permanent and a restoration plan developed during final design. FHWA will submit to the USFWS the final plans showing the location and quantity of the impacts and mitigation.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	If the mitigation for permanent impacts cannot be completed within the CDOT ROW in the vicinity of the impacts, FHWA will work with CDOT to identify areas within CDOT ROW in the Cache la Poudre drainage and/or enter into an agreement with Fort Collins to mitigate the remainder of the impacts on the Fort Collins property located on the northeast quadrant of the I-25 and the Cache la Poudre River.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	Riprap will be mixed with finer grained material to avoid settling. The riprap will be covered with approximately 12 inches of soil and planted with woody and herbaceous vegetation and will not reduce the overall amount of habitat available to PMJM.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	1.58 acres of suitable Preble's Meadows Jumping Mouse habitat	Restoration will be conducted in accordance with the March 23, 2017 consultation with the USFWS.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Approximately 3.6 acres of riparian habitat, which is potential suitable ULTO and CBP habitat along the Cache la Poudre	Mitigation will be implemented in accordance with the North I-25 Corridor Programmatic Biological Opinion (PBO) dated October 13, 2011 and March 23, 2017 consultation.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Approximately 3.6 acres of riparian habitat, which is potential suitable ULTO and CBP habitat along the Cache la Poudre	Pre-construction habitat assessments and/or surveys for the ULTO and CBP habitat along the Cache la Poudre.	North I-25 ROD 1 Revision 1 Table 18 page 46							
Threatened, Endangered, and state sensitive species	Disturbance within wildlife movement corridors.	Within impacted areas of I-25 construction	Indirect effects on the whooping crane, least tern, piping plover, pallid sturgeon, or western prairie fringed orchid	Depletions to the Platte River system due to CDOT activities are addressed by the State of Colorado's participation in the South Platte Water Related Activities Program (SPWRAP) through the "Memorandum of Agreement for Implementation and Operation of the Colorado Portion of the Platte River Recovery Implementation Plan (PRRIP)" (SPWRAP, 2009). All water depletions are considered an adverse effect to four downstream species (whooping crane, interior least tern, piping plover, and pallid sturgeon).	North I-25 ROD 1 Revision 1 Table 18 page 46							
Visual Quality	Reconstruction of interchange	Within impacted areas of I-25 construction	Short-term impacts include disruptions during construction, while long-term impacts include increased pavement and ROW.	Mitigation measures to address visual effects of highway widening will include incorporating landscaping at interchanges and along the highway.	North I-25 ROD 1 Revision 1 Table 19 page 47							
Visual Quality	Reconstruction of interchange	Within impacted areas of I-25 construction	Short-term impacts include disruptions during construction, while long-term impacts include increased pavement and ROW.	Mitigation measures to address visual effects of structural elements will include providing architectural interest or color into retaining walls and sound walls, and reducing the effect of overpasses by providing architectural detailing of the railings and other features.	North I-25 ROD 1 Revision 1 Table 19 page 47							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	A Materials Management Plan (MMP), as required by Section 250.03 of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d), will be prepared for areas with known soil and groundwater contamination. Construction specifications will be written to include review of the MMP by the CDOT Regional Environmental Manager.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	If dewatering is necessary, groundwater brought to the surface will be managed according to Section 107.25 of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d) and permitted by the CDPHE's Water Quality Control Division.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	Relocation of overhead electrical utility lines and pole-mounted transformers will be conducted in accordance with any easement agreement between CDOT and/or private landowners.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	All wells within the proposed construction area will be abandoned and plugged according to CDOT Section 202.02 in Standard Specifications for Road and Bridge Construction (CDOT, 2011d) and in conformance with the Colorado Department of Natural Resources Division of Water Resources State Engineer Water Well Construction Rules, specifically Rule 16.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	If contaminated soil is encountered and a responsible party is not identified, CDOT will be responsible for the cleanup in accordance with state and federal regulations. A MMP and a Health and Safety Plan, as required by Section 250.03 of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d), also is recommended for use when oil and gas facilities are encountered.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	Prior to demolition of any structures, an asbestos, lead-based paint, and miscellaneous hazardous materials survey will be conducted at each parcel, where applicable. Regulated materials abatement will be conducted in accordance with Section 250, Environmental, Health, and Safety Management, of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011d) and relevant Occupational Health and Safety (OSHA) regulatory details.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	Lead-based paint may need to be removed prior to demolition if the lead is leachable at concentrations greater than regulatory levels. Where lead-based painted surfaces will be removed via torching, additional health and safety monitoring requirements are applicable.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Hazardous Materials	Encountering hazardous materials during construction.	Within impacted areas of I-25 construction	Potential for hazardous materials to be unearthed during construction	If abandoned landfills or coal mines are present below and/or within 1,000 feet of construction activities, the Health and Safety Plan will need to include provisions for assessing and monitoring air quality at all utility trenches, drainage structures, and similar underground construction (i.e., caissons) areas prior to and during intrusive activities to ensure worker safety.	North I-25 ROD 1 Revision 1 Table 23 page 55							
Parks and Recreational Resources	Operations during construction	Within impacted areas of I-25 construction	Impacts to the Arapaho Bend Natural Area	Coordination with the local agencies having jurisdiction at the resources is ongoing. Any impacts incurred at these resources as a result of proposed improvements would be discussed with the local jurisdictional agencies to determine the appropriate mitigation.	North I-25 ROD 1 Revision 1 Table 25 page 57							
Parks and Recreational Resources	Operations during construction	Within impacted areas of I-25 construction	Impacts to the Arapaho Bend Natural Area	All ground disturbing and debris generating construction processes will be contained by erosion and sediment control BMPs designed as part of approved stabilization and stormwater management plans. All disturbed areas will be returned to their original contour, vegetation and landscape appearance in cooperation with and direction from the resource jurisdictional authorities.	North I-25 ROD 1 Revision 1 Table 25 page 57							

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Farmlands	Operations during construction, including grading for roadways, bridges and/or walls.	Within impacted areas of I-25 construction	Impacts to 0.8 acres of farmland of local importance, 2.8 acres of farmland of statewide importance, and 78.9 acres of prime farmlands (82.5 acres total).	Representatives from the Larimer County USDA-NRCS office was contacted to discuss mitigation measures. The USDA-NRCS Larimer County office recommended keeping construction materials, tools, and vehicles within the proposed ROW to reduce impacts and consideration of converting non-prime farmland before impacting prime farmland. The less encroachment onto agricultural land will result in less impact to farmlands. During final design of the project, the conversion of non-prime farmland will be considered before converting prime farmland to minimize overall impacts to prime	North I-25 ROD 1 Revision 1 Table 26 page 58							
Energy Impacts	Operations post-construction	Within impacted areas of I-25 construction	Increased VMT and Energy Consumption	Reduce daily vehicle miles of travel through effective improvements to the roadways. These measures all work to increase travel efficiency and save energy.	North I-25 ROD 1 Revision 1 Table 30 page 59							
Public Safety and Security Impacts	Operations during construction	Within impacted areas of I-25 construction	Potential for increased theft during the construction phase	Potential losses at construction sites will be mitigated through fencing and on-site security provided by contractors. All construction contractors will be responsible for safety at their respective sites and be required to follow all Occupational Safety and Health Administration (OSHA) requirements applicable to construction site safety. Each contractor's site safety plans will be approved by the appropriate agencies or a construction management consultant, if chosen. The appropriate agencies will provide a site safety officer to monitor site safety.	North I-25 ROD 1 Revision 1 Table 31 page 60							
Public Safety and Security Impacts	Operations during construction and post-construction	Within impacted areas of I-25 construction	Potential for modest increases to police services in response to increases in crime.	Local police will be encouraged to use the park and ride lots when they need to fill out paperwork in order to increase their visibility.	North I-25 ROD 1 Revision 1 Table 31 page 60							
Construction	Operations during construction.	Within impacted areas of I-25 construction	Construction noise	Implement construction BMPs.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Use noise blankets on equipment and quiet-use generators.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Combine noisy operations to occur in the same time period.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Use alternative construction methods, such as sonic or vibratory pile-driving in sensitive areas, when possible.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	In residential areas, construction activities will be minimized during the evening, nighttime, weekends, and holidays when receptors are usually in these areas.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Nighttime construction will be desirable (e.g., commercial areas where businesses may be disrupted during daytime hours) or necessary to avoid major traffic disruption.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	The major noise source on construction sites is typically diesel motors; therefore, all engines will use commercially available effective mufflers and enclosures, as possible.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Modern equipment will be used with improved noise muffling and all equipment items will be evaluated to ensure that they have the manufacturers' recommended noise abatement measure, such as mufflers, engine covers, and engine vibration isolators intact and operational. Generally, newer equipment would create less operational noise than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise-control devices (e.g., mufflers and shrouding).	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	The use of impact pile driving will be avoided near noise-sensitive areas, where possible. Alternative foundation preparation technologies will be used, such as vibratory pile driving or cast in drilled hole.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Temporary barriers will be used and relocated, as required, to protect sensitive receptors from excessive construction noise. Noise barriers should be made of heavy plywood or moveable insulated sound blankets.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Plans will be made to conduct truck loading, unloading, and hauling operations so that noise will be kept to a minimum.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	Frequent updates of all construction activities will be provided to the public.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction operations near sensitive noise receptors and/or residential areas.	Within impacted areas of I-25 construction	Construction noise	A community noise and vibration monitoring plan and a noise and vibration control plan will be prepared before initiating any construction.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Restricted access to businesses	Use enhanced signing.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Restricted access to businesses	Use alternate access enhancements.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Restricted access to businesses	Use advertising/public relations.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Restricted access to businesses	Do not close multiple interchanges concurrently.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Limit detours.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Place detours on major arterial streets and ensure no local street detours are implemented.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Schedule construction during periods of least traffic.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Use geometric enhancements including wider lanes and better visibility.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Limit construction vehicles to major arterials.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Enforce speed restrictions; provide adequate space for enforcement; make prime contractor accountable.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Use courtesy patrol.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Use enhanced signing.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Phase construction to limit traffic in neighborhoods.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Comply with AASHTO guidance and Manual on Uniform Traffic Control Devices.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Coordinate work activities to ensure they do not coincide with sporting, school, or special events.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Implement advanced traffic diversion.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Use intelligent management systems and variable message signs to advise/redirect traffic. Work with RTD to offer enhanced operations during peak construction.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Develop traffic management plans.	North I-25 ROD 1 Revision 1 Table 32 page 65							

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Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Maintain access to local businesses/residents.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Detours and delays	Coordinate with emergency service providers to minimize delay and ensure access to properties.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Pedestrian/Bicycle Mobility	Provide well-defined detours for pedestrians/bicyclists.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Pedestrian/Bicycle Mobility	Enhance safety through the use of adequate signing, fencing, and lighting.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Pedestrian/Bicycle Mobility	Implement a public relations program.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Pedestrian/Bicycle Mobility	Comply with American Disability Act requirements.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Operation of detours during construction.	Within impacted areas of I-25 construction	Pedestrian/Bicycle Mobility	Construct new bike/pedestrian overpass as a detour before old is demolished.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Use wetting/chemical inhibitors for dust control.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Provide early investigation of subsurface conditions.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Prepare a well-defined materials handling plan.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction Activities	Within impacted areas of I-25 construction	Fugitive dust emissions	Employ educated contractor with trained personnel.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Temporary water quality impacts during construction.	Within impacted areas of I-25 construction	Fugitive dust emissions	Require prompt and safe disposal of waste products.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Runoff from construction.	Within impacted areas of I-25 construction	Fugitive dust emissions	Implement water quality BMPs.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Runoff from construction.	Within impacted areas of I-25 construction	Fugitive dust emissions	Prepare well-defined stormwater management plan.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction Activities	Within impacted areas of I-25 construction	Fugitive dust emissions	Conduct monitoring.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Institute resource reuse and allocation.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Ensure regulatory compliance.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Cover trucks hauling soil and other materials.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Stabilize and cover stockpile areas.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Minimize offsite tracking of mud, debris, hazardous material, and noxious weeds by washing construction equipment in contained areas.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Avoid impacts to wetlands or other areas of important habitat value in addition to those impacted by the project itself.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Runoff for roadway and construction.	Within impacted areas of I-25 construction	Fugitive dust emissions	Control and prevent concrete washout and construction wastewater. As projects are designed, ensure that proper specifications are adhered to and reviewed to ensure adequacy in the prevention of water pollution by concrete washout.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction of roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Fugitive dust emissions	Store equipment and materials in designated areas only.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction of roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Fugitive dust emissions	Promptly remove any unused detour pavement or signs.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Runoff for roadway and construction..	Within impacted areas of I-25 construction	Fugitive dust emissions	Follow CDOT Standard Specifications for Road and Bridge Construction (2005), including sections regarding water quality control, erosion control, and environmental health and safety.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Prepare or revegetate exposed areas as soon as possible after construction.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Remove soil and other materials from paved streets.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Incorporate recommendations as appropriate from the Regional Air Quality Council (RAQC) report, Reducing Diesel Emissions in the Denver Area (RAQC, 2002).	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Operate equipment mainly during off-peak hours.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction activities involving earth moving and storage of fill and rock products.	Within impacted areas of I-25 construction	Fugitive dust emissions	Limit equipment idling time.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction of roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Fugitive dust emissions	Use recycled materials for project activities to the extent allowed by good practice and CDOT construction specifications.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Construction of roadway, bridges or frontage road improvements.	Within impacted areas of I-25 construction	Fugitive dust emissions	Use construction equipment that use ultra-low sulfur fuels to the extent practicable.	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Runoff from construction.	Within impacted areas of I-25 construction	Water Quality	BMPs used will be consistent with the MS4 permitting requirements, as well as practices mentioned in CDOT's Erosion Control and Stormwater Quality Guide (CDOT, 2002).	North I-25 ROD 1 Revision 1 Table 32 page 65							
Construction	Runoff from construction.	Within impacted areas of I-25 construction	Water Quality	Section 107.25 of CDOT's Standard Specifications for Road and Bridge Construction (CDOT, 2011d) deals with contractor's requirements for water quality control.	North I-25 ROD 1 Revision 1 Table 32 page 65							

Attachment H: USFWS Consultation



U.S. Department
of Transportation
**Federal Highway
Administration**

Colorado Division

March 23, 2017

12300 W. Dakota Ave., Ste. 180
Lakewood, Colorado 80228
720-963-3000

Alison Michael
CDOT U.S. Fish and Wildlife Service (USFWS) Liaison
Colorado Field Office
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**SUBJECT: USFWS North I-25 Programmatic Biological Opinion (PBO) Terms and
Conditions Reporting Project: North I-25 Environmental Impact Statement
Revised Record of Decision 1 (ROD1) Project #: FHWA-CO-EIS-08-01-F; IM
0253-179**

Dear Ms. Michael:

The Federal Highway Administration (FHWA) submits this letter addressing the Terms and Conditions outlined in the North I-25 Corridor PBO dated October 13, 2011. This letter replaces the letter that was submitted January 11, 2017. This consultation is provided based on the alternative that FHWA has identified for selection in the North I-25 Revised ROD1 between SH 392 and SH 14. This project is planned to be delivered using a design build procurement. The design builder will be required to continue to minimize impacts to the species listed in the tables below. This consultation is the site-specific consultation that is represented in the Programmatic Biological Assessment (PBA) and PBO and will suffice through the design build project as long as the impacts are no higher than what is identified in this consultation, the nature of the action does not change substantially, and no new species or critical habitat is identified.

The first Term and Condition from the North I-25 Biological Opinion reads:

As individual projects are proposed under the programmatic consultation, FHWA will provide the Service with project-specific information that includes 1) a description of the proposed action, including specific proposed conservation measures, and the area to be affected, 2) the species that may be affected and their known proximity to the project area, 3) results of habitat assessments and species surveys, 4) an updated baseline of the specific project area, 5) a description of how the action may affect the species, 6) a determination of effects, 7) a cumulative total of incidental take that has occurred to date under the consultation, 8) a description of any additional actions or effects not considered in the programmatic consultation, and 9) a description of the conservation measures or mitigation activities already implemented and their effectiveness.

1) Description of the Proposed Action

FHWA and Colorado Department of Transportation (CDOT) identified a Preferred Alternative for the corridor in the Final Environmental Impact Statement (FEIS). FHWA documented the decision for Phase I of the Preferred Alternative in the ROD1. FHWA is modifying only the selection of the continuous acceleration/deceleration lanes on I-25 between State Highway (SH) 392 and SH 14 in ROD1. Instead of the continuous acceleration/deceleration lanes, FHWA will be adding a continuous Express Lanes between SH 392 and SH14. This was evaluated as part of the FEIS Preferred Alternative (Figure 1). This project includes replacing the bridges over the Cache la Poudre River. In addition, FHWA will be constructing a portion of the Poudre River Trail (10-ft wide concrete trail) within the CDOT right-of-way on the south side of the Cache la Poudre River. The Poudre River Trail has not been constructed east or west of this segment, but will be constructed at a later date by other parties. This portion of the Poudre River Trail was not included in the FEIS.

The cross-section of the facility will comprise the 12-foot inside shoulder, 12-foot express lane, 4-foot buffer, two 12-foot general purpose lanes, and a 12-foot outside shoulder in both directions. The center median will vary between a median barrier and 52-feet. In addition, auxillary lanes will be added between the port of entry approximately 0.7 miles south of Prospect Road and SH14.

2) Species that may be Affected and Proximity to the Project Area

The Service provided a list of species potentially occurring in the regional study area on July 14, 2005. These species and potential effects from this project are listed in Table 1.

Table 1. Effects Determination for Federally Threatened and Endangered Species

Common Name	Scientific Name	Federal Listing Status	Effects Determination
Least Tern	<i>Sternula antillarum</i>	Threatened	Likely To Adversely Affect (LTAA)*
Piping Plover	<i>Charadrius melodus</i>	Threatened	LTAA*
Western prairie fringed orchid	<i>Platanthera praeclara</i>	Threatened	LTAA*
Whooping Crane	<i>Grus Americana</i>	Endangered	LTAA*
Pallid sturgeon	<i>Scaphirhynchus melodus</i>	Endangered	LTAA*
Preble's meadow jumping mouse (PMJM)	<i>Zapus hudsonius preblei</i>	Threatened	LTAA
Colorado butterfly plant (CBP)	<i>Gaura neomexicana coloradensis</i>	Threatened	Not Likely to Adversely Affect (NLTA)
Ute ladies' -tresses orchid (ULTO)	<i>Spiranthes diluvialis</i>	Threatened	NLTA
Black-footed ferret	<i>Mustela nigripes</i>	Endangered	No Effect, Block Cleared

*Effects to Platte River species are addressed through the South Platte Programmatic Biological Assessment (SPPBA) dated February 22, 2012. Water used for this project will be reported to the USFWS at year's end after completion of the project per the South Platte Programmatic Biological Opinion (SPPBO).

An Information for Planning and Conservation (IPaC) search identified six additional species with potential to occur in the project area that were not evaluated in the FEIS (shown in Table 2).

Table 2: Newly Identified Species

Species	Federal Status
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	Threatened
Greenback cutthroat trout (<i>Oncorhynchus clarki stomias</i>)	Threatened
North Park phacelia (<i>Phacelia formosula</i>)	Endangered
Arapahoe snowfly (<i>Arsapnia arapahoe</i>)	Candidate
Canada lynx (<i>Lynx canadensis</i>)	Threatened
North American wolverine (<i>Gulo gulo luscus</i>)	Proposed Threatened

3) Results of Habitat assessments and Species Surveys

On August 15, 2016, a general field reconnaissance was conducted at the Cache la Poudre River to review site conditions and identify any changed conditions for the PMJM, ULTO, and CBP compared to the FEIS.

Based on the conditions of the site at the time of inspection and upon available known occurrence and trapping data for the surrounding areas, it was determined that this site presents marginally suitable habitat not likely to support a resident population of PMJM, but may provide connectivity to upstream and downstream habitat for PMJM.

In the FEIS PBA, CDOT determined that the Cache la Poudre was suitable habitat for PMJM and that 1.16 acres would be impacted. This number has changed to 1.58 acres. The FHWA is assuming that the PMJM is present in this location. Although this area has been regularly trapped, there have been few if any mice caught since the 2013 floods. The habitat at this location has degraded due to the 2013 flood event, which was subsequent to FHWA formal consultation. This small increase (0.42 acres) of degraded habitat is not significant.

It was determined that habitat suitable for ULTO was not present and marginally suitable habitat exists for CBP. No individual plants were observed during site surveys. The site visit supports the finding in the PBA.

4) Updated Baseline of the Specific Project Area

The project area around the Cache la Poudre River was affected by the 2013 flood event since the FEIS. In addition, this area has experienced additional land development. The impacts described in the FEIS and PBA are consistent with this latest change. The project will have impacts to wetlands and riparian habitat at the Cache la Poudre bridge, which has been identified as having suitable habitat for PMJM. Additionally, there will be impacts within the 100-year floodplain, which may affect ULTO and CBP habitat. The project area is entirely within the Block Clearance Zone for black-footed ferret.

5) Description of How the Action May Affect the Species

The total amount of permanent impacts to PMJM habitat at the Cache la Poudre is 1.58 acres. A very small amount of this (0.03 acres) is expected to be permanent impacts. There is a low likelihood of occurrence for ULTO and CBP at the Cache la Poudre. No impacts to the black-footed ferret. Effects to Platte River species located downstream from the project (i.e., Least Tern, Piping Plover, western prairie fringed orchid, Whooping Crane and pallid sturgeon) are addressed through the SPPBA dated February 22, 2012, that estimates total water usage until 2019. The water used for this project will be reported to the USFWS at the year's end after the completion of the project per the SPPBO.

Table 3: Potential Effects to Newly Identified Species

Species	Federal Status	Potential Effects
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	Threatened	None; there are no mature or old-growth forests suitable for the species within the project area.
Greenback cutthroat trout (<i>Oncorhynchus clarki stomias</i>)	Threatened	None; there are no coldwater streams or rivers within the project area.
North Park phacelia (<i>Phacelia formosula</i>)	Endangered	None; the project does not meet elevational requirements (8,000–8,300 feet above mean sea level (AMSL)).
Arapahoe snowfly (<i>Arsapnia arapahoe</i>)	Candidate	None; there are no coldwater streams or rivers within the project area.
Canada lynx (<i>Lynx canadensis</i>)	Threatened	None; the project area does not meet preferred elevations in Colorado (a minimum 8,000 feet AMSL), does not have the preferred vegetative cover with complex structural components for denning or transients, and does not have the preferred prey base (i.e., snowshoe hare) for the species.
North American wolverine (<i>Gulo gulo luscus</i>)	Proposed Threatened	None; while wolverines can cover great distances and be found in a variety of habitats, the project area does not have the preferred vegetative cover, such as dense riparian areas, for transients and does not have the consistent, deep snowpack for denning.

6) Determination of Effects

Impacts of the ROD1 Revision project will be consistent with the FEIS analysis, resulting in **Likely to Adversely Affect** determinations for Preble's meadow jumping mouse. The project will Not Likely Adversely Affect the Colorado butterfly plant, Ute ladies'-tresses orchid, or black-footed ferret, consistent with the analysis in the FEIS. In addition, the project will have **No Effect** to the Mexican spotted owl, greenback cutthroat trout, North Park phacelia, Arapahoe snowfly, Canada lynx, or North American wolverine, for reasons indicated in Table 3.

7) Cumulative Total of Incidental Take

This is the sixth project to proceed to construction under the PBO. There has been no incidental take to date of federally listed threatened or endangered species.

8) Description of Additional Actions or Effects

No additional actions or effects would occur as a result of this project.

9) Description of Conservation Measures or Mitigation Activities Already Implemented

The following conservation measures from the PBO for PMJM will be implemented for this project during the design phase of the project.

Conservation Measures

- Pre-construction habitat assessments and/or surveys for the CPB will be conducted during the survey season just prior to construction, or in accordance with the USFWS survey protocol at the time of construction.
- Pre-construction habitat assessments and/or trapping surveys for PMJM will be conducted where appropriate.
- If culverts in occupied or suitable PMJM habitat are replaced or upgraded, the new culverts will incorporate ledges to facilitate small mammal passage.
- Lighting within or near PMJM habitat will incorporate current technology and standards (e.g., Dark Skies) at the time of design to reduce lighting impacts to PMJM.
- During construction, nighttime work within 0.25 mile of PMJM habitat will be minimized.
- Any inadvertent PMJM mortalities during construction will be reported as specified in current trapping guidelines. CDOT will report all relevant information within 24 hours and subsequently submit a completed Injury/Mortality Documentation Report to the Service, Ecological Services Colorado Field Office or the Service's Division of Law Enforcement in Lakewood, Colorado (telephone 720 981-2777).
- In the unlikely event that a PMJM (dead, injured, or otherwise) is located during construction, the Colorado Field Office of the Service will be contacted immediately to identify additional measures, as appropriate, to minimize impacts to PMJM.

The second of the two Terms and Conditions from the Programmatic Biological Opinion reads:

During site-specific consultation, CDOT and FHWA will develop revegetation success criteria in coordination with the Service and will monitor revegetated sites to ensure that those success criteria are achieved.

Below is the success criteria that will be used for the mitigation areas for impacts described in this consultation.

FHWA shall monitor the revegetation of all temporarily disturbed areas for at least three (3) growing seasons following habitat restoration and enhancement activities, or until

such time that FHWA and the Service determine that revegetation was successful. Success criteria are:

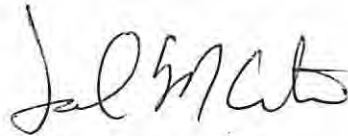
- 80 percent shrub and willow cover on areas where riprap was placed and covered with soil
- 70 percent foliar cover of native species on seeded areas
- Noxious weed cover in revegetated and restored areas will not be greater than 5 percent of that occurring in the nearby area
- Monitoring reports will be provided annually to the Service by December 1

Revegetation will occur in accordance with CDOT Standard for Roadway Construction (2011) Sections 208, 212, 213 and 216.

In addition, attached is the mitigation plan for temporary and permanent impacts to PMJM habitat in the Cache la Poudre drainage.

If you have any questions, please contact the Major Project Oversight Manager, Monica Pavlik, at 720-963-3012.

Sincerely yours,

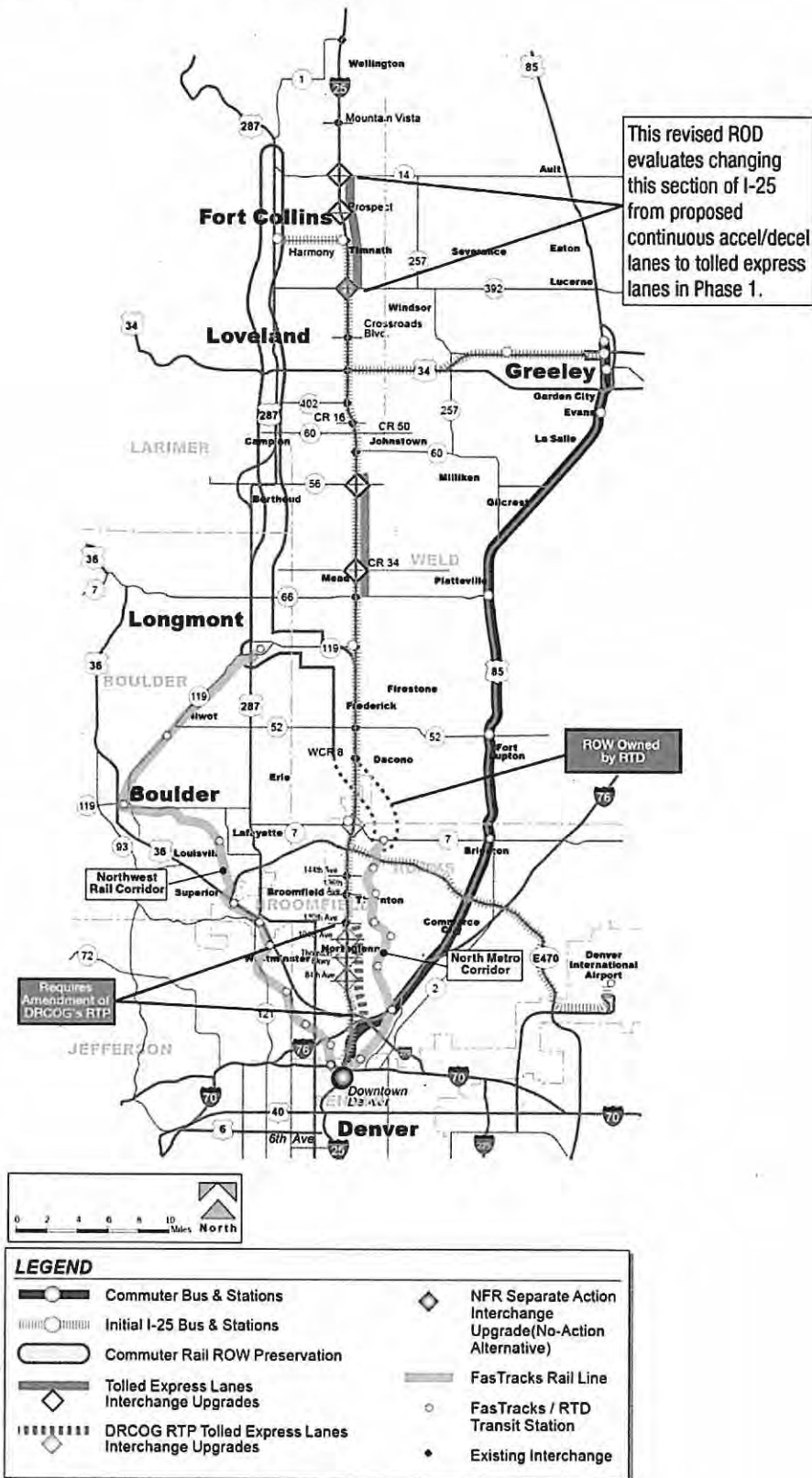


John M. Cater, P.E.
Division Administrator

Attachment (2)

cc: Carol Parr, R4 NEPA Program and Environmental Manager
Jeff Peterson, CDOT T&E/Wildlife Coordinator

Summary of Revised ROD1 Actions



Mitigation Plan

The temporary impacts of the PMJM habitat in the Cache la Poudre River drainage will be restored at a 1:1 ratio. Any PMJM habitat permanently removed due to project activities will be replaced at a 3:1 ratio. If practicable the permanent habitat will be replaced in the vicinity of the impacts. Habitat impacts will be recalculated and separated into temporary or permanent and a restoration plan will be developed when we have final design. FHWA will submit to the USFWS the final plans showing the location and quantity of the impacts and mitigation.

If the mitigation for permanent impacts cannot be completed within the CDOT ROW in the vicinity of the impacts, FHWA will work with CDOT to identify areas within CDOT ROW in the Cache la Poudre drainage and/or enter into an agreement with Fort Collins to mitigate the remainder of the impacts on the Fort Collins property located on the northeast quadrant of the I-25 and the Cache la Poudre River.

Riprap will be mixed with finer grained material to avoid settling. The riprap will be covered with approximately 12 inches of soil and planted with woody and herbaceous vegetation and will not reduce the overall amount of habitat available to PMJM.

Restoration will include the planting of several species of shrubs and willows as indicated in Table 1. In general, shrubs will be planted at a rate of approximately 10-feet on center. All shrubs will be 5 gallon containerized nursery stock.

Table 1: Shrub and Willow Plant List, Spacing and Total Number Planted

Common Name	Scientific Name	Spacing
Chokecherry	<i>Prunus virginiana</i>	10 feet on center
Wild Plum	<i>Prunus americana</i>	10 feet on center
Snowberry	<i>Symphoricarpos occidentalis</i>	10 feet on center
Woods Rose	<i>Rosa woodsii</i>	10 feet on center
Coyote Willow	<i>Salix exigua</i>	2 feet on center

Willow cuttings will be planted along the water's edge and where soil moisture conditions allow. To insure success, all willow plantings will be harvested from adjacent nearby stands during the spring and planted immediately after collection. Willows will be planted at a rate of 2-feet on center.

A native grass and forb seed mix will also be applied (Tables 2 and 3). Seed mixes will be applied using techniques used for CDOT revegetation projects and will follow all CDOT Standard Specifications.

Table 2: Proposed Grass and Forb Seed Mix to be Applied in Wetland and Riparian Areas.

Common Name	Scientific Name	Application Rate Pounds pls/Acre
big bluestem	<i>Andropogon gerardii</i>	1.8
Nebraska sedge	<i>Carex nebraskaensis</i>	0.6
Canada wildrye	<i>Elymus Canadensis</i>	0.6
scratch grass	<i>Muhlenbergia asperifolia</i>	0.6
Switchgrass (NE-28, BlkwI)	<i>Panicum virgatum</i>	1.8
Western wheatgrass (ROSANA)	<i>Pascopyrum smithii</i>	0.6
alkaligrass	<i>Puccinellia airoides</i>	0.6
little bluestem (PASTURA, BLAZE)	<i>Schizachyrium scoparium</i>	0.6
Indiangrass (CHEYENNE, HOLT)	<i>Sorghastrum nutans</i>	0.6
prairie cordgrass	<i>Spartina pectinata</i>	1.8
alkali sacaton	<i>Sporobolus airoides</i>	1.8
Sand dropseed	<i>Sporobolus cryptandrus</i>	0.6
	TOTAL	12.0 lbs pls/acre

Table 3. Proposed Grass and Forb Seed Mix to be Applied in Upland Areas.

Common Name	Scientific Name	Application Rate Pounds pls/Acre
Western wheatgrass	<i>Pascopyrum smithii</i> "Arriba"	8.0
Sideoats grama	<i>Bouteloua curtipendula</i> "Vaughn"	3.0
Thickspike wheatgrass	<i>Elymus lanceolatus</i>	3.0
Blue grama	<i>Bouteloua gracilis</i> "Hachita"	1.5
Little bluestem	<i>Schizachyrium scoparium</i> "Pastura"	1.5
Prairie junegrass	<i>Koeleria macrantha</i>	0.2
Oats	<i>Avena sativa</i>	3.0
Purple prairie clover	<i>Dalea purpureum</i> var. <i>purpureum</i>	0.5
Beebalm	<i>Monarda fistulosa</i>	0.2
Gaillardia	<i>Gaillardia aristata</i>	1.0
Smooth blue aster	<i>Symphotrichum laeve</i>	0.5
	TOTAL	22.4 lbs pls/acre



United States Department of the Interior



FISH AND WILDLIFE SERVICE Colorado Ecological Services

IN REPLY REFER TO:
FWS/R6/ES CO

Front Range:
Post Office Box 25486
Mail Stop 65412
Denver, Colorado 80225-0486

Western Slope:
445 W. Gunnison Avenue
Suite 240
Grand Junction, Colorado 81501-5711

TAILS: 06E24000-2017-I-0347

April 7, 2017

John Cater, Division Administrator
Federal Highway Administration
12300 West Dakota Avenue, Suite 180
Lakewood, Colorado 80228

Dear Mr. Cater:

On March 28, 2017, the U.S. Fish and Wildlife Service (Service) received your March 23, 2017, report regarding constructing the preferred alignment identified in the North I-25 Revised ROD1 between SH392 and SH14 in Larimer County, Colorado, and its effects to the threatened Preble's meadow jumping mouse (*Zapus hudsonius preblei*), Ute ladies'-tresses orchid (*Spiranthes diluvialis*), and Colorado butterfly plant (*Gaura neomexicana* ssp. *coloradensis*). The project will be constructed by the Colorado Department of Transportation (CDOT) with funding from the Federal Highway Administration. Our review was performed consistent with our authority under the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*). Critical habitat for these species has not been designated within the project boundaries; therefore, none will be affected.

On October 13, 2011, we issued our programmatic biological opinion regarding the impacts of improving I-25 between Denver and Fort Collins, Colorado, on several listed species (ES/LK-6-CO-12-F-001; TAILS 65412-2011-F-0658). In that opinion, we concurred that the project is likely to adversely affect the Preble's meadow jumping mouse and is not likely to adversely affect the Ute ladies'-tresses orchid or the Colorado butterfly plant because at the time we did not believe that habitat or populations of either of these species occurred within the project area. However, because the project was not expected to be constructed for many years, surveys for these two plant species or their habitat would be conducted during site-specific analysis and if any habitats or plants were identified, additional consultation may become necessary.

On January 11, 2017, we received a letter from CDOT requesting our review of their determination that the project complies with the Terms and Conditions outlined in the programmatic biological opinion, and on February 6, 2017, we responded that we had no concerns with the project because no change in impact was anticipated since our programmatic biological opinion and because all conservation measures would still be implemented.

The current request replaces the January 11, 2017, request and provides more information on the project description as well as survey efforts along the corridor. FHWA is now proposing to add continuous express lanes instead of the continuous acceleration/deceleration lanes on I-25 between SH392 and SH14 as originally intended. This project also includes replacing the bridges over the Cache la Poudre River, and constructing a portion of the Poudre River Trail within CDOT right-of-way, which was not previously considered. The area of disturbance is expected to exceed that analyzed in the programmatic biological opinion by 0.42 acre; however, for the reasons given below, we do not expect this will be significant and will not result in additional take. The total amount of impact is expected to be 1.58 acres, 0.03 of which will be permanent.

Surveys conducted on August 15, 2016, determined that habitat at the site was degraded during the 2013 flood event and that the site offers marginally suitable habitat for the Preble's meadow jumping mouse, but may provide connectivity to upstream and downstream habitats. The Cache la Poudre River corridor has been trapped extensively in the project area and the Preble's meadow jumping mouse has not been captured. No individuals of either the Ute ladies'-tresses orchid or the Colorado butterfly plant were observed during site reconnaissance.

Your letter also provided a summary of conservation measures that will be implemented as well as revegetation success criteria and a mitigation plan for temporary and permanent impacts to Preble's meadow jumping mouse habitat along the Cache la Poudre River. The mitigation plan calls for mitigating all temporary impacts on-site and mitigating for permanent impacts on-site as well as off-site. Because of the degraded condition of the habitat at the site, the low likelihood that the Preble's meadow jumping mouse occurs there, and the small amount of additional impact, which is almost entirely temporary, we do not expect any additional take of the Preble's meadow jumping mouse due to the change in project description. In addition, we expect the site to provide better connectivity after project completion due to implementation of conservation measures.

Given your habitat and project descriptions, as well as your mitigation plan, the Service agrees that the project complies with the Terms and Conditions outlined in the programmatic biological opinion (ES/LK-6-CO-12-F-001; TAILS 65412-2011-F-0658) and continues to concur with your determination that the impacts resulting from the proposed project will not jeopardize the continued existence of the Preble's meadow jumping mouse nor are they likely to adversely affect the Ute ladies'-tresses orchid or the Colorado butterfly plant. Further, no critical habitat has been designated in the project area; therefore, none will be affected.

Please note that reinitiation of consultation will be required if:

1. New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this consultation;
2. The action is subsequently modified in a manner that causes an adverse effect to the listed species or critical habitat that was not considered in this consultation; or
3. A new species is listed or critical habitat designated that may be affected by the action.

If the proposed project has not commenced within one year, please contact the Colorado Field Office to request an extension. We appreciate your submitting this report to our office for review and comment. If the Service can be of further assistance, please contact Alison Deans Michael of my staff at (303) 236-4758.

Sincerely,



Dana L. DeBerry

Colorado and Nebraska Field Offices Supervisor

cc: FHWA (Monica Pavlik)
CDOT, HQ (Jeff Peterson)
CDOT, R4 (Carol Parr)
Michael

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APPENDIX B: AGENCY COORDINATION



COLORADO
Department of Transportation
Division of Transportation Development

Environmental Programs Branch
4201 E. Arkansas Ave., Shumate Bldg.
Denver, CO 80222-3400
(303) 757-9281

January 17, 2017

Mr. Paul Lee, Transportation Planner
Planning and Policy Program, Air Pollution Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246

SUBJECT: CDOT Project IM 0253-221, North I-25, SH 392 to SH 14 ROD 1 (Revision 2)

Dear Mr. Lee:

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) are preparing a Record of Decision (ROD) for the project referenced above. The purpose of the project is to implement transportation solutions for an important component of the regional I-25 transportation network to enhance east-west and north-south mobility. Transportation conformity requirements under 40 CFR Part 93 apply to this undertaking. CDOT requests your concurrence on air quality, as described below. An air quality technical report for the project is attached.

CDOT and FHWA documented the selection of Phase I of the Preferred Alternative for the North I-25 corridor in ROD 1 in 2011 (Figure 1). The original Phase I involved numerous infrastructure improvements, including installation of one continuous acceleration/deceleration lane in each direction on I-25 between SH 392 and SH 14 in Larimer County. Those lanes were to be added to the current two travel lanes in each direction.

Through ROD 1 Revision 2, FHWA is modifying only the prior selection of the accel/decel lanes for Phase I. CDOT has received a TIGER Discretionary Grant for the project from the US Department of Transportation, which is the reason for revisiting and accelerating the proposed improvements. The accel/decel lanes are being replaced with one Express Lane in each travel direction. In addition, one continuous accel/decel lane will be added in each travel direction from the I-25 Port of Entry to SH 14, for a fourth lane in direction in that segment. The Express Lanes were included in the full Preferred Alternative for the project, but were not included in the initial Phase I elements.

No interchanges or intersections will be affected, but relatively minor re-alignment of I-25 frontage road segments will occur. Cross sections of the proposed new I-25 configuration are shown in Figure 2.

I-25 between SH 392 and SH 14 is primarily a rural, but developing, corridor. The area along I-25 from SH 392 to SH 14 is subject to conformity requirements of the *Revised Carbon Monoxide Maintenance Plan, Fort Collins Attainment/Maintenance Area* and the *Denver Metropolitan Area and North Front Range 8-Hour Ozone State Implementation Plan*. Evaluations were completed to evaluate for potential exceedances of the relevant National Ambient Air Quality Standards (NAAQS) associated with the project.

Regional Conformity

Reconstruction of I-25 between SH 392 and SH 14 is included in the North Front Range Metropolitan Planning Organization's fiscally-constrained *2040 Regional Transportation Plan* and in the 2016-2019

Transportation Improvement Program under the North I-25 design-build project. Therefore, regional conformity for the proposed improvements has been demonstrated.

Local Conformity

The Fort Collins carbon monoxide plan is a Limited Maintenance Plan, which allows for a less rigorous approach in general. Nevertheless, CDOT performed carbon monoxide hot spot analysis on a study area intersection (Harmony Road at the southbound I-25 ramps), which is predicted to function at level of service E or worse, to review potential localized air quality impacts of the planned project. The worst-case modeled 1-hour and 8-hour average carbon monoxide concentrations were 9.0 parts per million (ppm) and 6.2 ppm, respectively, for the completed project conditions. These results are compared to a one-hour NAAQS of 35 ppm and an 8-hour NAAQS of 9 ppm. Because modeling of the worst-case conditions resulted in values below the respective NAAQS, the project will not cause or contribute to an exceedance, worsen an existing exceedance, or delay timely attainment of the carbon monoxide NAAQS. The proposed project is not expected to interfere with the Fort Collins Maintenance Plan or its attainment goals.

Ozone is a regional pollutant and is not evaluated at the local level, so no further information is provided for ozone.

Other Air Quality Considerations

A quantitative mobile source air toxic (MSAT) analysis was previously prepared in support of ROD 1. Through that, it was concluded (and concurred with by your office in correspondence dated September 12, 2011) that “The North I-25 Preferred Alternative Phase I will provide air quality benefits from improved interchange operations, from less congestion and idling emissions and from increased transit routing and ridership.” The proposed I-25 Express Lanes project would result in no change in predicted daily vehicle miles of travel (VMT) on I-25 relative to No Action (the same numbers of vehicles will be traveling the same I-25 segments), so the previous MSAT findings for ROD 1 remain valid. Moreover, emissions will likely be lower than present levels in 2040 as a result of national control programs projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050. Based on the earlier findings and predicted 2040 average daily traffic volumes on I-25 of less than 140,000 in the corridor, a qualitative evaluation of MSATs was prepared for the I-25 Express Lanes as an update and is in the attached technical report.

Daily VMT on I-25 between SH 392 and SH 14 represents approximately 0.484 percent of estimated 2040 total Colorado travel activity. The Express Lanes project is not expected to change overall VMT compared to Phase I, but is expected to improve I-25 traffic operations and efficiency compared to No Action and thereby reduce vehicle emissions. As a result, FHWA estimates that the proposed project could result in a potential small decrease in global carbon dioxide emissions in 2040 of less than one hundred-thousandth of one percent, and an equivalent percentage decrease in Colorado’s share of global emissions in 2040.

Summary

The I-25 ROD 1 Revision 2 project conforms to the State Implementation Plan’s purpose of “eliminating or reducing the severity and number of violations” of the NAAQS and “achieving expeditious attainment of the NAAQS.” The project will not:

- cause or contribute to any new violation of any standard in any area;
- increase the frequency or severity of any existing violation of any standard in any area; or
- delay timely attainment of any standard or other milestones in any area.

If you concur with the results of the air quality analysis and the conclusions regarding conformity for this project, please sign below and return this letter to CDOT Air Quality and Noise Program Manager Rose

Mr. Paul Lee
January 17, 2017
Page 3

Waldman by February 1, 2017. If you have questions or concerns regarding this correspondence or the attached report, please contact Ms. Waldman at (303) 757-9016 or rose.waldman@state.co.us.

Very truly yours,



Jane Hann, Manager
Environmental Programs Branch

Attachment: December 2016 Air Quality Technical Report

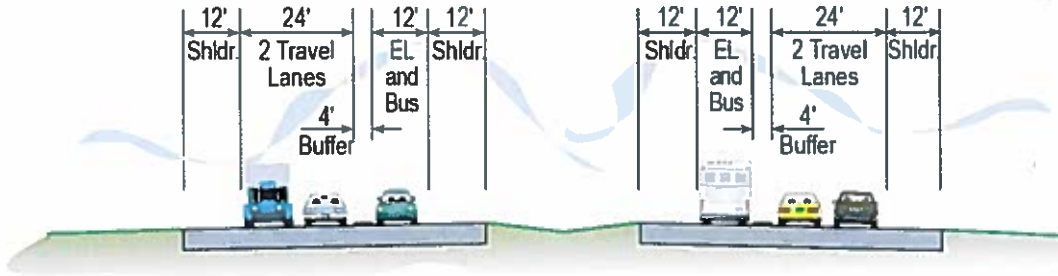
cc: Carol Parr, CDOT Region 4 Planning and Environmental Manager

I Concur: _____ Date _____
Paul Lee, Transportation Planner

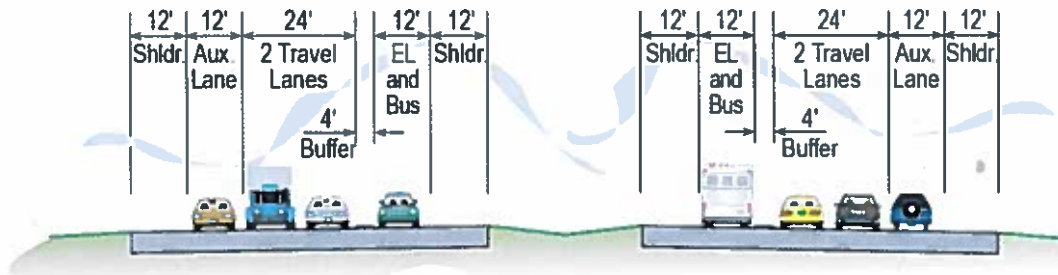
Figure 1. Summary of ROD 1 Revision 2 Actions—North I-25 Phase I Improvements



Figure 2. Proposed ROD 1 Revision 2 I-25 Cross-sections



**I-25 Record of Decision 1 Revision 2
SH 392 to Port of Entry**



**I-25 Record of Decision 1 Revision 2
Port of Entry to SH 14**



December 14, 2016

MEMORANDUM

To: Carol Parr, Colorado Department of Transportation Region 4
Monica Pavlik, Federal Highway Administration

From: Dale Tischmak

Re: North I-25 Revised Record of Decision 1 (SH 392 to SH 14) Air Quality Evaluation
FHU Reference No. 113319-11

The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA) are preparing a North I-25 Revised Record of Decision (ROD) 1 for Interstate 25 (I-25) from State Highway (SH) 392 to SH 14. The purpose of the North I-25 project is to implement a transportation solution for an important component of the regional transportation network to enhance east-west and north-south mobility. This memorandum summarizes the air quality evaluations associated with proposed changes to roadway designs. Technical information for air quality was previously provided with the North I-25 Final Environmental Impact Statement (EIS) and the original ROD.

For background, FHWA and CDOT documented the selection of Phase I of the ROD 1 Selected Alternative for the North I-25 project in ROD 1 in 2011. Phase I involved numerous infrastructure improvements across the project area, including installation of a continuous acceleration/deceleration (accel/decel) lane in each travel direction on I-25 between SH 392 and SH 14 in Larimer County. The added lanes would result in three driving lanes for each I-25 travel direction.

Through Revised ROD 1, FHWA is modifying the prior selection of the accel/decel lanes for Phase I by replacement with Express Lanes (Figure 1). Express Lanes were included in the ultimate ROD 1 Selected Alternative between SH 392 and SH 14, but were planned for a later phase of construction. The initial Phase I plan consisted of one outside accel/decel lane and two inside general purpose lanes for each direction on I-25, and it will be replaced by two outside general purpose lanes and one inside buffer-separated Express Lane between SH 392 and the Port of Entry (Figure 2). This new configuration is referred to as the ROD1 Revision 2 Selected Alternative. From the Port of Entry to SH 14, the design revision will consist of one inside Express Lane, two general purpose lanes and one outside accel/decel lane (Figure 2). Only mainline I-25 will be affected by these changes; no interchanges or intersections will be affected by the change beyond updating connections to the ramps.

I-25 between SH 392 and SH 14 is primarily a rural, but developing, corridor. This area along I-25 is subject to conformity requirements of the *Revised Carbon Monoxide Maintenance Plan, Fort*

Collins Attainment/Maintenance Area and the Denver Metropolitan Area and North Front Range 8-Hour Ozone State Implementation Plan. Evaluations were completed in regard to these plans and to determine any potential exceedances of the relevant National Ambient Air Quality Standards (NAAQS) associated with this project.

REGIONAL CONFORMITY

Reconstruction of and addition of capacity to I-25 between SH 392 and SH 14 is included in the North Front Range Metropolitan Planning Organization's fiscally-constrained 2040 Regional Transportation Plan and in the 2016-2019 Transportation Improvement Program (under the North I-25 design-build project). Therefore, regional conformity for the proposed improvements has been demonstrated.

LOCAL CONFORMITY

For this project, local conformity applies to carbon monoxide. Again, Fort Collins has a Limited Maintenance Plan, which allows for a less rigorous approach in general. Associated technical guidance provides that emissions budgets may be treated as essentially non-constraining for transportation conformity because it is unreasonable to expect the area will experience so much growth that a violation of the NAAQS may result.

The proposed changes to I-25 through the Express Lanes will not affect typical carbon monoxide hot spots like congested intersections; only mainline I-25 traffic will be affected. However, nearby intersections at Harmony Road were predicted to operate at a poor level of service (LOS) for the Final EIS (LOS E in the afternoon in 2035) and were evaluated as a hot spot with CAL3QHC modeling. The evaluation was updated for Revised ROD 1. The intersections examined were Harmony Road at West Frontage Road and the I-25 southbound ramps. A "worst case" situation was modeled where the highest emissions factors (2016) were combined with the highest traffic volumes (2040 afternoon peak). These artificial conditions were purposely devised to ensure that the maximum potential carbon monoxide concentrations were considered.

The model results were compared to the carbon monoxide NAAQS, which are 35 parts per million (ppm) for one hour and 9 ppm for eight hours. Background carbon monoxide concentrations obtained from the Colorado Department of Public Health and Environment were 3 ppm and 2 ppm, respectively. The highest carbon monoxide concentrations calculated for the two Harmony Road intersections were 9.0 ppm for one hour and 6.2 ppm for eight hours—both of these values are below their respective NAAQS. The modeling output, which contains model input data, is attached.

For the reasons above, this project was determined not to cause or contribute to an exceedance of the federal carbon monoxide NAAQS and is not expected to interfere with the Fort Collins carbon monoxide maintenance plan or its attainment goals.

GREENHOUSE GASES AND CLIMATE CHANGE

Climate change is an important national and global concern. While the earth has gone through many natural changes in climate in its history, there is general agreement that the earth's climate is currently changing at an accelerated rate and will continue to do so for the foreseeable future. Anthropogenic (human-caused) greenhouse gas (GHG) emissions contribute to this rapid change.

Carbon dioxide (CO₂) makes up the largest component of these GHG emissions. Other prominent transportation GHGs include methane and nitrous oxide.

Many GHGs occur naturally. Water vapor is the most abundant GHG and makes up approximately two thirds of the natural greenhouse effect. However, the burning of fossil fuels and other human activities are adding to the concentration of GHGs in the atmosphere. Many GHGs remain in the atmosphere for time periods ranging from decades to centuries. GHGs trap heat in the earth's atmosphere. Because atmospheric concentration of GHGs continues to climb, our planet will continue to experience climate-related phenomena. For example, warmer global temperatures can cause changes in precipitation and sea levels.

To date, no national standards have been established regarding GHGs, nor has the Environmental Protection Agency (EPA) established criteria or thresholds for ambient GHG emissions pursuant to its authority to establish motor vehicle emission standards for CO₂ under the Clean Air Act. However, there is a considerable body of scientific literature addressing the sources of GHG emissions and their adverse effects on climate, including reports from the Intergovernmental Panel on Climate Change, the US National Academy of Sciences, and EPA and other Federal agencies. GHGs are different from other air pollutants evaluated in Federal environmental reviews because their impacts are not localized or regional due to their rapid dispersion into the global atmosphere, which is characteristic of these gases. The affected environment for CO₂ and other GHG emissions is the entire planet. In addition, from a quantitative perspective, global climate change is the cumulative result of numerous and varied emissions sources (in terms of both absolute numbers and types), each of which makes a relatively small addition to global atmospheric GHG concentrations. In contrast to broad scale actions such as actions involving an entire industry sector or very large geographic areas, it is difficult to isolate and understand the GHG emissions impacts for a particular transportation project. Furthermore, presently there is no scientific methodology for attributing specific climatological changes to a particular transportation project's emissions.

Under the National Environmental Policy Act (NEPA), detailed environmental analysis should be focused on issues that are significant and meaningful to decision-making. FHWA has concluded, based on the nature of GHG emissions and the exceedingly small potential GHG impacts of the alternatives, as discussed below, that the GHG emissions from the alternatives will not result in "reasonably foreseeable significant adverse impacts on the human environment" (40 CFR 1502.22(b)). The GHG emissions from the project build alternatives will be insignificant, and will not play a meaningful role in a determination of the environmentally preferable alternative or the selection of the proposed action. More detailed information on GHG emissions "is not essential to a reasoned choice among reasonable alternatives" (40 CFR 1502.22(a)) or to making a decision in the best overall public interest based on a balanced consideration of transportation, economic, social, and environmental needs and impacts (23 CFR 771.105(b)). For these reasons, no alternatives-level GHG analysis has been performed for this project.

The context in which emissions from the ROD1 Revision 2 Selected Alternative or No Action Alternative will occur, together with the expected GHG emissions contribution from the project, illustrate why the project's GHG emissions will not be significant and will not be a substantial factor

in the decision-making. The transportation sector is the second largest source of total GHG emissions in the U.S., behind electricity generation. The transportation sector was responsible for approximately 27 percent of all anthropogenic (human caused) GHG emissions in the U.S. in 2010. The majority of transportation GHG emissions are the result of fossil fuel combustion. CO₂ makes up the largest component of these GHG emissions. U.S. CO₂ emissions from the consumption of energy accounted for about 18 percent of worldwide energy consumption CO₂ emissions in 2010. U.S. transportation CO₂ emissions accounted for about 6 percent of worldwide CO₂ emissions.

While the contribution of GHGs from transportation in the U.S. as a whole is a large component of U.S. GHG emissions, as the scale of analysis is reduced the GHG contributions become quite small. Based on emissions estimates from EPA's MOVES model, and global CO₂ estimates and projections from the Energy Information Administration, CO₂ emissions from motor vehicles in the entire state of Colorado contributed less than one tenth of one percent of global emissions in 2010 (0.0348 percent). These emissions are projected to contribute an even smaller fraction (0.0261%) in 2040. For the ROD1 Revision 2 Selected Alternative, daily miles driven on I-25 between SH 392 and SH 14 represent approximately 0.484 percent of estimated 2040 total Colorado travel activity. The Express Lanes project is not expected to change overall vehicle miles traveled (VMT) compared to the original Phase I improvements, but is expected to improve I-25 traffic operations and efficiency compared to No Action and thereby reduce vehicle emissions. As a result, FHWA estimates that the proposed project could result in a potential small decrease in global carbon dioxide emissions in 2040 of less than one hundred-thousandth of one percent, and an equivalent percentage decrease in Colorado's share of global emissions in 2040. This very small change in global emissions is well within the range of uncertainty associated with future emissions estimates.

To help address the global issue of climate change, the U.S. Department of Transportation is committed to reducing GHG emissions from vehicles traveling on our nation's highways. The U.S. Department of Transportation and EPA are working together to reduce these emissions by substantially improving vehicle efficiency and shifting toward less carbon-intensive fuels. The agencies have jointly established new, more stringent fuel economy and first ever GHG emissions standards for model year 2012–2025 cars and light trucks, with an ultimate fuel economy standard of 54.5 miles per gallon for cars and light trucks by model year 2025. Further, on September 15, 2011, the agencies jointly published the first ever fuel economy and GHG emissions standards for heavy-duty trucks and buses. Increasing use of technological innovations that can improve fuel economy, such as gasoline- and diesel-electric hybrid vehicles, will improve air quality and reduce CO₂ emissions in future years.

Consistent with its view that broad-scale efforts hold the greatest promise for meaningfully addressing the global climate change problem, FHWA is engaged in developing strategies to reduce transportation's contribution to GHGs—particularly CO₂ emissions—and to assess the risks to transportation systems and services from climate change. In an effort to assist States and MPOs in performing GHG analyses, FHWA has developed a Handbook for Estimating Transportation GHG Emissions for Integration into the Planning Process. The Handbook presents methodologies reflecting good practices for the evaluation of GHG emissions at the transportation program level, and will demonstrate how such evaluation may be integrated into the transportation planning process. FHWA has also developed a tool for use at the statewide level to model a large number of

GHG reduction scenarios and alternatives for use in transportation planning, climate action plans, scenario planning exercises, and in meeting state GHG reduction targets and goals. To assist states and MPOs in assessing climate change vulnerabilities to their transportation networks, FHWA has developed a draft vulnerability and risk assessment conceptual model and has piloted it in several locations.

At the state level, there are also several programs underway in Colorado to address transportation GHGs. The Governor's Climate Action Plan, adopted in November 2007, includes measures to adopt vehicle CO₂ emissions standards and to reduce vehicle travel through transit, flex time, telecommuting, ridesharing, and broadband communications. CDOT issued a Policy Directive on Air Quality in May 2009. This Policy Directive was developed with input from a number of agencies, including the Colorado Department of Public Health and Environment, EPA, FHWA, the Federal Transit Administration, the Denver Regional Transportation District and the Denver Regional Air Quality Council. This Policy Directive and implementation document, the CDOT Air Quality Action Plan address unregulated mobile source air toxics (MSATs) and GHGs produced from Colorado's state highways, interstates, and construction activities.

As a part of CDOT's commitment to addressing MSATs and GHGs, some of CDOT's program wide activities include:

- Researching pavement durability opportunities with the goal of reducing the frequency of resurfacing and/or reconstruction projects.
- Developing air quality educational materials, specific to transportation issues, for citizens, elected officials, and schools, including development of vehicle idling reduction programs for schools and communities.
- Offering outreach to communities to integrate land use and transportation decisions to reduce growth in VMT, such as smart growth techniques, buffer zones, transit-oriented development, walkable communities, access management plans, etc.
- Committing to research additional concrete additives that would reduce the demand for cement.
- Expanding Transportation Demand Management efforts statewide to better utilize the existing transportation mobility network.
- Continuing to diversify the CDOT fleet by retrofitting diesel vehicles, specifying the types of vehicles and equipment contractors may use, purchasing low-emission vehicles, such as hybrids, and purchasing cleaner burning fuels through bidding incentives where feasible.
- Exploring congestion and/or right-lane only restrictions for motor carriers.
- Funding truck parking electrification.
- Researching additional ways to improve freight movement and efficiency statewide.
- Committing to use ultra-low sulfur diesel for non-road equipment statewide.
- Developing a low-volatile-carbon-emitting tree landscaping specification.

Even though project-level mitigation measures will not have a substantial impact on global GHG emissions because of the exceedingly small amount of GHG emissions involved, the above-

identified activities are part of a program-wide effort by FHWA and CDOT to adopt practical means to avoid and minimize environmental impacts in accordance with 40 CFR 1505.2(c).

This document does not incorporate an analysis of the GHG emissions or climate change effects of each of the alternatives because the potential change in GHG emissions is very small in the context of the affected environment. Because of the insignificance of the GHG impacts, those impacts will not be meaningful to a decision on the environmentally preferable alternative or to a choice among alternatives. As outlined above, FHWA is working to develop strategies to reduce transportation's contribution to GHGs—particularly CO₂ emissions—and to assess the risks to transportation systems and services from climate change. FHWA will continue to pursue these efforts as productive steps to address this important issue. Finally, the construction best practices described above represent practicable project-level measures that, while not substantially reducing global GHG emissions, may help reduce basis and could contribute in the long term to meaningful cumulative reduction when considered across the Federal-aid highway program.

MOBILE SOURCE AIR TOXICS

A quantitative MSAT analysis was previously prepared for Phase I in support of the Final EIS and those documents can be referenced for more information. It was concluded (and concurred with) that “The North I-25 ROD 1 Selected Alternative Phase I will provide air quality benefits from improved interchange operations, from less congestion and idling emissions and from increased transit routing and ridership.” Based on the earlier findings and predicted 2040 average daily traffic volumes on I-25 of less than 140,000 in the corridor, a qualitative evaluation of MSATs was prepared for the I-25 Express Lanes as an update.

The amount of MSATs emitted among the alternatives largely would be proportional to VMT, assuming that other variables, such as fleet mix, are the same. The proposed change from accel/decel lanes to I-25 Express Lanes is expected to result in no change in predicted daily VMT on I-25 (i.e., the same numbers of vehicles will be traveling the same I-25 segments), so the previous MSAT findings are still informative relative to No Action. I-25 is already the major inter-regional travel corridor, so the proposed improvements are unlikely to draw substantially more traffic. Because the estimated VMT for I-25 Express Lanes is expected to be the same, it is expected there would be no appreciable difference in overall MSAT emissions due to VMT from the change to I-25 Express Lanes.

Still, the No Action MSAT emissions may be somewhat higher than emissions under the proposed improvements due to more congestion on I-25. According to the U.S. Environmental Protection Agency's (EPA's) MOVES model, emissions of all the priority MSATs decrease as speed increases.

Regardless of the alternative chosen, MSAT emissions will likely be lower in 2040 than present levels as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. However, the magnitude of the EPA-projected reductions is so great (even after

accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

The I-25 Express Lanes will have the effect of moving some traffic closer to nearby homes, schools, and businesses; therefore, there may be localized areas where ambient concentrations of MSATs could be higher than the No Action Alternative. The localized increases in MSAT concentrations would likely be greatest near Kechter Road or Sable Lane. However, the magnitude and the duration of these potential increases compared to No Action cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts.

In summary, when a highway is widened, the localized level of MSAT emissions for a build alternative could be higher relative to the No Action Alternative, but this could be offset due to increases in vehicle speeds and reductions in congestion that are associated with lower MSAT emissions. However, on a regional basis, EPA's vehicle and fuel regulations, coupled with fleet turnover, will cause substantial reductions over time that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

FHWA has stated their view that information is incomplete or unavailable to credibly predict project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway improvements. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. EPA maintains the Integrated Risk Information System, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (www.epa.gov/iris). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSATs, including the Health Effects Institute (HEI). A number of HEI studies are summarized in Appendix D of FHWA's Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI Special Report 16, www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects) or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling, dispersion modeling, exposure modeling, and final determination of health impacts. Each step in the process builds on the model predictions obtained in the previous step—all are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame because such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (Special Report 16, www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel particulate matter. EPA states that with respect to diesel engine exhaust, “[t]he absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (<https://www.epa.gov/iris>).”

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by EPA as provided by the Clean Air Act to determine whether more stringent controls are required to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries.

The decision framework is a two-step process. The first step requires EPA to determine an “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million.

In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA’s approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable ([www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/\\$file/07-1053-1120274.pdf](http://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf)).

Because of the limitations in the methodologies for forecasting health impacts, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits that are better suited for quantitative analysis, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response. Therefore, project-specific health impacts due to potential changes in MSAT emissions have not been calculated.

OTHER AIR QUALITY CONSIDERATIONS

Several other technical discussions and analyses for air quality have been completed during earlier stages of the project. It was concluded this information would not be substantively affected by the proposed change to I-25 Express Lanes and is not repeated here. The prior documents include the Draft EIS (2008), the Final EIS (2011) and ROD 1 (2011), which can be reviewed for further information. Some of the technical topics included:

- Criteria pollutants
- Meteorology
- Class I areas
- Nitrogen compound dispersion and deposition (includes Rocky Mountain National Park)
- Commuter rail

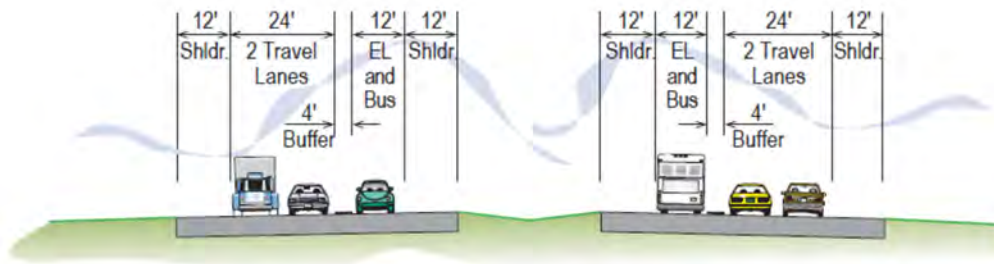
SUMMARY

This project has been determined to not cause an exceedance of any NAAQS. The proposed project will not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the NAAQS or any required interim emissions reductions or other milestones. This project complies with the transportation conformity regulations in 40 CFR 93 and with the conformity provisions of Section 176(c) of the Clean Air Act.

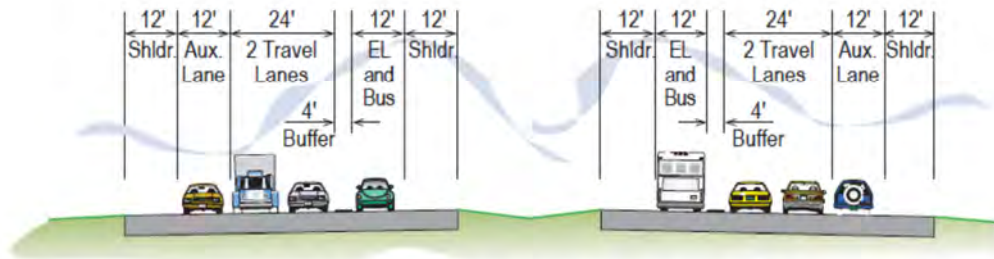
Figure 1. Summary of Revised Phase I Transportation Improvements



Figure 2. Example Road Sections for I-25 Express Lanes: SH 392 to SH 14



**I-25 Revised Record of Decision 1
SH 392 to Port of Entry**



**I-25 Revised Record of Decision 1
Port of Entry to SH 14**

CAL3QHC MODEL OUTPUT FILE

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0 Dated 13045

PAGE 1

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

The MODE flag has been set for calculating concentrations for POLLUTANT: CO

SITE & METEOROLOGICAL VARIABLES

 VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 127. CM
 U = 1.0 M/S CLAS = 4 (D) ATIM = 60. MINUTES MIXH = 1000. M AMB = 0.0 PPM

LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* LENGTH (FT)	BRG TYPE (DEG)	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. harmebapp1	* 240.0	76.0	1140.0	76.0	* 900.	90. AG	2715.	10.7	0.0	44.0		
2. harmebapp1 q	* 1109.0	76.0	-3200.5	76.0	* 4310.	270. AG	57.	100.0	0.0	24.0	1.28	218.9
3. harmeb1tturn	* 1109.0	94.0	1099.4	94.0	* 10.	270. AG	29.	100.0	0.0	12.0	0.04	0.5
4. harmebapp2	* 240.0	58.0	1140.0	58.0	* 900.	90. AG	2715.	10.7	0.0	32.0		
5. harmebapp2 q	* 1109.0	58.0	-4064.1	58.0	* 5173.	270. AG	29.	100.0	0.0	12.0	1.34	262.8
6. harmebdep/app	* 1140.0	58.0	2240.0	58.0	* 1100.	90. AG	1860.	9.6	0.0	32.0		
7. harmebdep/app2	* 1140.0	76.0	2240.0	76.0	* 1100.	90. AG	3720.	9.6	0.0	44.0		
8. harmebdep/app2 q	* 2212.0	76.0	-3652.6	76.0	* 5865.	270. AG	76.	100.0	0.0	24.0	1.43	297.9
9. harmebdep	* 2240.0	76.0	2840.0	76.0	* 600.	90. AG	4430.	7.5	0.0	44.0		
10. harmebdep2_q	* 2809.0	94.0	-7688.5	94.0	* *****	270. AG	76.	100.0	0.0	24.0	1.79	533.3
11. harmwbapp1	* 2240.0	112.0	2840.0	112.0	* 600.	90. AG	3790.	8.2	0.0	44.0		
12. harmwbquel	* 2271.0	112.0	2442.3	112.0	* 171.	90. AG	59.	100.0	0.0	24.0	0.65	8.7
13. harmwb1tturn	* 2271.0	96.0	3375.6	96.0	* 1105.	90. AG	107.	100.0	0.0	12.0	1.72	56.1
14. harmwbdep/app	* 2240.0	112.0	1140.0	112.0	* 1100.	270. AG	1567.	5.5	0.0	44.0		
15. harmwbdep/app q	* 1171.0	112.0	2813.7	112.0	* 1643.	90. AG	56.	100.0	0.0	24.0	1.09	83.4
16. harmwbdep/app2	* 2220.0	128.0	1140.0	128.0	* 1080.	270. AG	3133.	5.5	0.0	32.0		
17. harmwbdep/app2 q	* 1171.0	128.0	2823.8	128.0	* 1653.	90. AG	28.	100.0	0.0	12.0	1.09	84.0
18. harmwb1tturn2	* 1171.0	96.0	1272.3	96.0	* 101.	90. AG	108.	100.0	0.0	12.0	0.93	5.1
19. harmwbdep	* 1140.0	112.0	240.0	112.0	* 900.	270. AG	1576.	5.5	0.0	44.0		
20. harmwbdep2	* 1140.0	128.0	240.0	128.0	* 900.	270. AG	3153.	5.5	0.0	32.0		

21. pkgsbapp	*	1125.0	400.0	1125.0	100.0 *	300.	180. AG	220.	21.9	0.0	32.0		
22. pkgsbapp q	*	1125.0	159.0	1125.0	313.0 *	154.	360. AG	98.	100.0	0.0	12.0	0.81	7.8
23. pkgsbdep	*	1137.0	100.0	1137.0	-376.0 *	476.	180. AG	215.	21.9	0.0	32.0		
24. pkgsbleftturn	*	1137.0	159.0	1137.0	197.1 *	38.	360. AG	98.	100.0	0.0	12.0	0.22	1.9
25. i25sbrampdep	*	2240.0	100.0	2240.0	-876.0 *	976.	180. AG	1680.	21.9	0.0	44.0		
26. pkgnbapp	*	1155.0	-376.0	1155.0	124.0 *	500.	360. AG	300.	43.8	0.0	44.0		
27. pkgnbapp q	*	1155.0	34.0	1155.0	-61.1 *	95.	180. AG	195.	100.0	0.0	24.0	0.55	4.8
28. pkgnbdep	*	1157.0	124.0	1157.0	400.0 *	276.	360. AG	75.	21.9	0.0	32.0		
29. i25sbrampapp	*	2222.0	1124.0	2222.0	124.0 *	1000.	180. AG	1440.	8.8	0.0	32.0		
30. i25sbramp_q	*	2240.0	159.0	2240.0	938.7 *	780.	360. AG	98.	100.0	0.0	12.0	1.18	39.6
31. i25sbramp	*	2240.0	1124.0	2240.0	124.0 *	1000.	180. AG	320.	21.9	0.0	44.0		

PAGE 2

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION	*	CYCLE	RED	CLEARANCE	APPROACH	SATURATION	IDLE	SIGNAL	ARRIVAL
	*	LENGTH	TIME	LOST TIME	VOL	FLOW RATE	EM FAC	TYPE	RATE
	*	(SEC)	(SEC)	(SEC)	(VPH)	(VPH)	(gm/hr)		
2. harmebapp1 q	*	140	34	2.0	3530	1900	43.90	1	3
3. harmebltturn	*	140	35	2.0	50	1900	43.90	1	3
5. harmebapp2 q	*	140	34	2.0	1850	1900	43.90	1	3
8. harmebdep/app2 q	*	140	45	2.0	3525	1900	43.90	1	3
10. harmebdep2_q	*	140	45	2.0	4430	1900	43.90	1	3
12. harmwbquel	*	140	35	2.0	1790	1900	43.90	1	3
13. harmwbltturn	*	140	127	2.0	210	1900	43.90	1	3
15. harmwbdep/app q	*	140	33	2.0	3033	1900	43.90	1	3
17. harmwbdep/app2 q	*	140	33	2.0	1517	1900	43.90	1	3
18. harmwbltturn2	*	140	128	2.0	100	1900	43.90	1	3
22. pkgsbapp q	*	140	116	2.0	220	1900	43.90	1	3
24. pkgsbleftturn	*	140	116	2.0	60	1900	43.90	1	3
27. pkgnbapp q	*	140	116	2.0	300	1900	43.90	1	3
30. i25sbramp_q	*	140	116	2.0	320	1900	43.90	1	3

RECEPTOR LOCATIONS

 * COORDINATES (FT) *

RECEPTOR	*	X	Y	Z	*
1. Receptor 1	*	900.0	42.0	5.0	*
2. Receptor 2	*	1000.0	42.0	5.0	*
3. Receptor 3	*	1050.0	42.0	5.0	*
4. Receptor 4	*	1100.0	42.0	5.0	*
5. Receptor 5	*	1121.0	32.0	5.0	*
6. Receptor 6	*	1121.0	-43.0	5.0	*
7. Receptor 7	*	1121.0	-110.0	5.0	*
8. Receptor 8	*	1177.0	-110.0	5.0	*
9. Receptor 9	*	1177.0	-43.0	5.0	*
10. Receptor 10	*	1177.0	32.0	5.0	*
11. Receptor 11	*	1187.0	42.0	5.0	*
12. Receptor 12	*	1252.0	42.0	5.0	*
13. Receptor 13	*	1327.0	42.0	5.0	*
14. Receptor 14	*	1400.0	42.0	5.0	*
15. Receptor 15	*	2002.0	42.0	5.0	*
16. Receptor 16	*	2102.0	42.0	5.0	*
17. Receptor 17	*	2152.0	42.0	5.0	*
18. Receptor 18	*	2202.0	42.0	5.0	*
19. Receptor 19	*	2218.0	32.0	5.0	*
20. Receptor 20	*	2218.0	-43.0	5.0	*
21. Receptor 21	*	2218.0	-118.0	5.0	*
22. Receptor 22	*	2262.0	-118.0	5.0	*
23. Receptor 23	*	2262.0	-43.0	5.0	*
24. Receptor 24	*	2262.0	32.0	5.0	*
25. Receptor 25	*	2262.0	54.0	5.0	*
26. Receptor 26	*	2337.0	54.0	5.0	*
27. Receptor 27	*	2412.0	54.0	5.0	*
28. Receptor 28	*	2487.0	54.0	5.0	*
29. Receptor 29	*	2482.0	134.0	5.0	*
30. Receptor 30	*	2382.0	134.0	5.0	*
31. Receptor 31	*	2332.0	134.0	5.0	*

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16
 TIME : 22:58:39

RECEPTOR LOCATIONS

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      *                COORDINATES (FT)                *
      *                X                Y                Z                *
-----
32. Receptor 32      *                2282.0                134.0                5.0                *
33. Receptor 33      *                2262.0                144.0                5.0                *
34. Receptor 34      *                2262.0                219.0                5.0                *
35. Receptor 35      *                2262.0                294.0                5.0                *
36. Receptor 36      *                2206.0                294.0                5.0                *
37. Receptor 37      *                2206.0                219.0                5.0                *
38. Receptor 38      *                2206.0                154.0                5.0                *
39. Receptor 39      *                2196.0                144.0                5.0                *
40. Receptor 40      *                2121.0                144.0                5.0                *
41. Receptor 41      *                2046.0                144.0                5.0                *
42. Receptor 42      *                1971.0                144.0                5.0                *
43. Receptor 43      *                1381.0                144.0                5.0                *
44. Receptor 44      *                1281.0                144.0                5.0                *
45. Receptor 45      *                1231.0                144.0                5.0                *
46. Receptor 46      *                1181.0                144.0                5.0                *
47. Receptor 47      *                1173.0                169.0                5.0                *
48. Receptor 48      *                1173.0                194.0                5.0                *
49. Receptor 49      *                1173.0                244.0                5.0                *
50. Receptor 50      *                1109.0                244.0                5.0                *
51. Receptor 51      *                1109.0                194.0                5.0                *
52. Receptor 52      *                1109.0                169.0                5.0                *
53. Receptor 53      *                1099.0                144.0                5.0                *
54. Receptor 54      *                1024.0                144.0                5.0                *
55. Receptor 55      *                 949.0                144.0                5.0                *
56. Receptor 56      *                 874.0                144.0                5.0                *
  
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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

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REMARKS : In search of the angle corresponding to
          the maximum concentration, only the first
          angle, of the angles with same maximum
          concentrations, is indicated as maximum.
  
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WIND ANGLE RANGE: 0.-355.

December 14, 2016
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WIND ANGLE (DEGR)	* CONCENTRATION (PPM)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0.	*	2.8467	2.8529	2.8887	3.0442	2.7254	1.7184	1.5486	1.7779	1.9402	2.6712	2.7998	2.6460	2.5070	2.5065	2.5433
5.	*	2.7979	2.8117	2.8692	3.0392	2.8131	1.8549	1.7250	1.5456	1.7307	2.5527	2.7030	2.5956	2.4710	2.4709	2.5460
10.	*	2.7429	2.7683	2.8475	3.0086	2.8783	1.9755	1.8673	1.3264	1.5478	2.4461	2.6155	2.5343	2.4256	2.4257	2.5507
15.	*	2.7151	2.7554	2.8484	2.9826	2.9227	2.0722	1.9611	1.1558	1.4069	2.3763	2.5639	2.4918	2.4005	2.4009	2.5759
20.	*	2.7291	2.7908	2.8855	2.9760	2.9469	2.1440	1.9777	1.0530	1.3172	2.3497	2.5594	2.4825	2.4093	2.4106	2.6219
25.	*	2.7841	2.8735	2.9627	3.0133	2.9737	2.2547	1.9799	1.0120	1.3122	2.3698	2.6052	2.5121	2.4575	2.4611	2.6874
30.	*	2.8896	2.9878	3.0667	3.1058	3.0068	2.3155	1.9301	0.9857	1.3004	2.4104	2.6848	2.5800	2.5446	2.5516	2.7712
35.	*	3.0130	3.1120	3.1871	3.2308	3.0526	2.3662	1.8662	0.9840	1.3091	2.4587	2.7778	2.6646	2.6464	2.6566	2.8542
40.	*	3.1464	3.2417	3.3246	3.3818	3.1052	2.4073	1.8050	1.0020	1.3322	2.5175	2.8788	2.7616	2.7565	2.7683	2.9367
45.	*	3.3246	3.4031	3.4783	3.5832	3.2110	2.4443	1.7685	1.0499	1.3767	2.6267	3.0148	2.8959	2.8985	2.9097	3.0553
50.	*	3.5115	3.5846	3.6707	3.7861	3.2902	2.4441	1.7310	1.0829	1.4154	2.7143	3.1480	3.0401	3.0456	3.0545	3.1714
55.	*	3.7159	3.7933	3.8862	3.9892	3.3821	2.4726	1.7106	1.1155	1.4589	2.8072	3.2899	3.1977	3.2035	3.2099	3.3073
60.	*	3.9555	4.0388	4.1231	4.1996	3.4960	2.4994	1.6999	1.1478	1.5064	2.9181	3.4575	3.3847	3.3898	3.3943	3.4739
65.	*	4.2333	4.3169	4.3765	4.4165	3.6279	2.5283	1.6962	1.1737	1.5552	3.0399	3.6545	3.6016	3.6054	3.6082	3.6628
70.	*	4.5281	4.5983	4.6269	4.6281	3.7684	2.5532	1.6919	1.1698	1.5858	3.1540	3.8619	3.8254	3.8248	3.8245	3.8348
75.	*	4.8426	4.8751	4.8827	4.8472	3.9188	2.5370	1.6274	1.1036	1.5678	3.2589	4.0885	4.0628	4.0564	4.0497	3.9630
80.	*	4.8733	4.8768	4.8605	4.8164	3.8700	2.4043	1.4803	0.9418	1.4221	3.1479	4.0544	4.0328	4.0187	4.0038	3.8113
85.	*	4.5832	4.5658	4.5388	4.5105	3.5980	2.1512	1.2663	0.7119	1.1567	2.8129	3.7412	3.7204	3.6999	3.6784	3.4114
90.	*	3.9283	3.9104	3.8900	3.8981	3.0928	1.8141	1.0320	0.4704	0.8200	2.2532	3.1266	3.1090	3.0876	3.0658	2.7965
95.	*	2.9999	3.0025	3.0082	3.0603	2.4439	1.4640	0.8241	0.2789	0.5022	1.5797	2.3158	2.3024	2.2864	2.2698	2.0801
100.	*	2.0603	2.0981	2.1361	2.2390	1.8385	1.1932	0.6919	0.1670	0.2782	0.9559	1.5157	1.5094	1.5018	1.4941	1.4223
105.	*	1.3090	1.3825	1.4515	1.6048	1.4124	1.0282	0.6330	0.1234	0.1647	0.5105	0.8912	0.8907	0.8902	0.8900	0.9297
110.	*	0.8512	0.9474	1.0392	1.2392	1.2126	0.9462	0.6215	0.1152	0.1289	0.2871	0.5276	0.5303	0.5339	0.5369	0.6515
115.	*	0.5809	0.7109	0.8332	1.0555	1.1249	0.8903	0.6184	0.1151	0.1225	0.1834	0.3300	0.3356	0.3423	0.3483	0.4972
120.	*	0.4303	0.5693	0.7142	0.9713	1.1080	0.8513	0.6258	0.1089	0.1172	0.1409	0.2299	0.2378	0.2470	0.2555	0.4218
125.	*	0.3453	0.4783	0.6399	0.9345	1.1100	0.8109	0.6290	0.0961	0.1062	0.1202	0.1767	0.1865	0.1989	0.2111	0.3917
130.	*	0.2951	0.4128	0.5798	0.9142	1.1133	0.7692	0.6292	0.0805	0.0905	0.1027	0.1416	0.1514	0.1663	0.1822	0.3839
135.	*	0.2635	0.3751	0.5311	0.9105	1.1450	0.7425	0.6427	0.0683	0.0760	0.0867	0.1171	0.1238	0.1383	0.1546	0.3909
140.	*	0.2250	0.3314	0.4744	0.8751	1.1572	0.7311	0.6649	0.0595	0.0640	0.0706	0.0865	0.0909	0.1029	0.1180	0.3866
145.	*	0.1861	0.2951	0.4259	0.8324	1.1653	0.7343	0.6928	0.0607	0.0628	0.0664	0.0648	0.0647	0.0724	0.0835	0.3812
150.	*	0.1446	0.2585	0.3814	0.7835	1.1702	0.7517	0.7250	0.0720	0.0735	0.0772	0.0532	0.0462	0.0498	0.0559	0.3691
155.	*	0.1011	0.2144	0.3340	0.7222	1.1624	0.7761	0.7543	0.0965	0.0995	0.1088	0.0518	0.0322	0.0333	0.0357	0.3416
160.	*	0.0603	0.1610	0.2786	0.6454	1.1294	0.7927	0.7674	0.1409	0.1477	0.1715	0.0652	0.0203	0.0200	0.0206	0.2921
165.	*	0.0271	0.1021	0.2124	0.5550	1.0726	0.8000	0.7634	0.2120	0.2253	0.2752	0.0994	0.0110	0.0087	0.0088	0.2192
170.	*	0.0072	0.0557	0.1468	0.4484	0.9562	0.7447	0.7000	0.3228	0.3463	0.4454	0.1819	0.0098	0.0016	0.0014	0.1419
175.	*	0.0014	0.0275	0.0930	0.3399	0.7996	0.6465	0.5992	0.4628	0.4978	0.6670	0.3134	0.0229	0.0013	0.0000	0.0785
180.	*	0.0003	0.0116	0.0514	0.2337	0.6194	0.5167	0.4742	0.6126	0.6566	0.9127	0.4838	0.0502	0.0050	0.0003	0.0354

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185.	*	0.0000	0.0038	0.0236	0.1413	0.4372	0.3758	0.3422	0.7258	0.7790	1.1294	0.6725	0.0913	0.0138	0.0015	0.0123
190.	*	0.0022	0.0031	0.0109	0.0757	0.2812	0.2485	0.2263	0.8004	0.8640	1.3042	0.8496	0.1443	0.0320	0.0065	0.0045
195.	*	0.0140	0.0141	0.0164	0.0458	0.1651	0.1501	0.1379	0.8358	0.9145	1.4253	0.9951	0.2064	0.0650	0.0221	0.0091
200.	*	0.0319	0.0320	0.0326	0.0453	0.0972	0.0910	0.0848	0.8176	0.9152	1.4641	1.0826	0.2685	0.1107	0.0485	0.0197
205.	*	0.0508	0.0508	0.0509	0.0550	0.0563	0.0541	0.0516	0.7921	0.9168	1.4728	1.1326	0.3209	0.1558	0.0824	0.0312

PAGE 5

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
210.	*	0.0685	0.0685	0.0685	0.0695	0.0352	0.0345	0.0337	0.7572	0.9145	1.4497	1.1476	0.3661	0.1947	0.1190	0.0421
215.	*	0.0849	0.0849	0.0849	0.0850	0.0253	0.0251	0.0249	0.7208	0.9161	1.4100	1.1412	0.4068	0.2255	0.1535	0.0523
220.	*	0.1013	0.1013	0.1013	0.1013	0.0214	0.0211	0.0211	0.6841	0.9229	1.3610	1.1240	0.4467	0.2515	0.1835	0.0632
225.	*	0.1182	0.1182	0.1182	0.1182	0.0212	0.0200	0.0200	0.6467	0.9337	1.3025	1.0970	0.4866	0.2775	0.2091	0.0761
230.	*	0.1260	0.1260	0.1260	0.1260	0.0184	0.0167	0.0167	0.6144	0.9475	1.2371	1.0331	0.5140	0.2942	0.2246	0.0841
235.	*	0.1499	0.1500	0.1500	0.1501	0.0197	0.0138	0.0138	0.5886	0.9656	1.1993	1.0068	0.5469	0.3312	0.2511	0.1067
240.	*	0.2052	0.2057	0.2060	0.2063	0.0340	0.0115	0.0112	0.5631	0.9837	1.1691	1.0068	0.5964	0.3947	0.3064	0.1574
245.	*	0.3251	0.3277	0.3289	0.3300	0.0837	0.0112	0.0088	0.5425	1.0054	1.1719	1.0677	0.6961	0.5116	0.4208	0.2667
250.	*	0.5611	0.5697	0.5734	0.5768	0.2107	0.0200	0.0088	0.5397	1.0469	1.2670	1.2543	0.8856	0.7236	0.6417	0.4886
255.	*	0.9710	0.9923	1.0015	1.0098	0.4637	0.0558	0.0189	0.5508	1.1146	1.4855	1.6169	1.2676	1.1124	1.0331	0.8906
260.	*	1.6428	1.6852	1.7035	1.7203	0.9486	0.1631	0.0611	0.6076	1.2629	1.9455	2.2428	1.8996	1.7511	1.6803	1.5718
265.	*	2.4875	2.5541	2.5830	2.6095	1.6136	0.3703	0.1591	0.7310	1.5144	2.5888	3.0368	2.6863	2.5484	2.4906	2.4320
270.	*	3.3452	3.4297	3.4660	3.4983	2.3274	0.6638	0.3187	0.9184	1.8428	3.2654	3.8174	3.4556	3.3322	3.2888	3.2714
275.	*	3.9920	4.0791	4.1163	4.1503	2.9371	0.9848	0.5196	1.1093	2.1489	3.7685	4.3761	4.0051	3.9004	3.8661	3.8614
280.	*	4.3489	4.4223	4.4531	4.4807	3.3238	1.2601	0.7243	1.2997	2.4000	4.0216	4.6181	4.2513	4.1696	4.1369	4.1099
285.	*	4.4288	4.4792	4.4996	4.5177	3.4767	1.4460	0.9001	1.4627	2.5675	4.0394	4.5817	4.2318	4.1776	4.1381	4.0737
290.	*	4.2108	4.2384	4.2490	4.2579	3.3757	1.5186	1.0198	1.5737	2.6363	3.8250	4.2929	3.9684	3.9540	3.8950	3.7903
295.	*	3.9958	4.0080	4.0126	4.0165	3.2489	1.5270	1.0772	1.6261	2.6567	3.6218	4.0388	3.7388	3.7462	3.6641	3.5436
300.	*	3.7664	3.7707	3.7723	3.7736	3.0935	1.4956	1.0869	1.6527	2.6530	3.4237	3.8009	3.5289	3.5362	3.4348	3.3163
305.	*	3.5600	3.5611	3.5616	3.5614	2.9446	1.4513	1.0705	1.6679	2.6390	3.2578	3.6005	3.3646	3.3490	3.2344	3.1277
310.	*	3.3828	3.3830	3.3831	3.3820	2.8195	1.4071	1.0455	1.6858	2.6176	3.1338	3.4405	3.2405	3.1827	3.0646	2.9747
315.	*	3.2219	3.2220	3.2220	3.2202	2.7082	1.3700	1.0213	1.7206	2.6243	3.0409	3.3068	3.1366	3.0233	2.9109	2.8404
320.	*	3.0670	3.0670	3.0670	3.0702	2.5838	1.3240	0.9818	1.7606	2.6144	2.9473	3.1964	3.0405	2.8587	2.7571	2.7104
325.	*	2.9592	2.9593	2.9593	2.9636	2.5286	1.3016	0.9695	1.8339	2.6146	2.9189	3.1224	2.9385	2.7354	2.6521	2.6215
330.	*	2.8539	2.8540	2.8540	2.8613	2.4797	1.2877	0.9675	1.9183	2.6059	2.8981	3.0535	2.8291	2.6125	2.5512	2.5327
335.	*	2.7632	2.7632	2.7633	2.7773	2.4348	1.2893	0.9802	2.0042	2.5836	2.8768	2.9907	2.7219	2.5032	2.4629	2.4532
340.	*	2.7203	2.7204	2.7211	2.7481	2.4169	1.2719	0.9998	2.0585	2.4986	2.8591	2.9470	2.6359	2.4347	2.4159	2.4127

345.	*	2.7109	2.7111	2.7136	2.7626	2.4490	1.3434	1.0659	2.1081	2.4319	2.8405	2.9102	2.5907	2.4096	2.4014	2.4010
350.	*	2.7414	2.7422	2.7500	2.8331	2.5179	1.4488	1.1898	2.0673	2.3037	2.8046	2.8760	2.5969	2.4290	2.4259	2.4296
355.	*	2.7975	2.7998	2.8184	2.9408	2.6171	1.5771	1.3581	1.9561	2.1349	2.7521	2.8428	2.6256	2.4722	2.4709	2.4850
-----*																
MAX	*	4.8733	4.8768	4.8827	4.8472	3.9188	2.5532	1.9799	2.1081	2.6567	4.0394	4.6181	4.2513	4.1776	4.1381	4.1099
DEGR.	*	80	80	75	75	75	70	25	345	295	285	280	280	285	285	280

PAGE 6

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

REMARKS : In search of the angle corresponding to the maximum concentration, only the first angle, of the angles with same maximum concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM)														
(DEGR)	*	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
0.	*	2.6437	2.7906	3.1256	3.5443	2.7789	2.5989	2.5431	2.6482	3.0209	3.4721	2.5593	2.4344	2.2969	0.0219	0.0927
5.	*	2.6873	2.8648	3.2007	3.6946	2.9696	2.8137	2.1280	2.2622	2.7085	3.1536	2.4262	2.3440	2.2321	0.0074	0.0439
10.	*	2.7151	2.8967	3.2095	3.7263	3.0239	2.8803	1.7049	1.8762	2.4035	2.8408	2.3192	2.2704	2.1774	0.0050	0.0194
15.	*	2.7391	2.8978	3.1863	3.6878	2.9811	2.8420	1.3580	1.5595	2.1704	2.6134	2.2632	2.2313	2.1514	0.0184	0.0226
20.	*	2.7653	2.8795	3.1461	3.6116	2.8574	2.7014	1.1389	1.3476	2.0298	2.4995	2.2567	2.2262	2.1573	0.0393	0.0403
25.	*	2.8190	2.8843	3.1699	3.5715	2.8117	2.6195	1.0360	1.2810	1.9802	2.4740	2.2869	2.2463	2.1893	0.0605	0.0607
30.	*	2.8797	2.9096	3.2502	3.5516	2.7384	2.5167	0.9650	1.2329	1.9685	2.5097	2.3487	2.2962	2.2511	0.0800	0.0800
35.	*	2.9405	2.9595	3.3644	3.5383	2.6785	2.4267	0.9297	1.2168	1.9807	2.5729	2.4251	2.3597	2.3263	0.0975	0.0975
40.	*	3.0026	3.0359	3.4968	3.5201	2.6176	2.3423	0.9176	1.2151	2.0087	2.6462	2.5068	2.4304	2.4070	0.1142	0.1142
45.	*	3.0880	3.1394	3.6855	3.5357	2.5670	2.2712	0.9328	1.2405	2.0972	2.7655	2.6301	2.5487	2.5338	0.1299	0.1298
50.	*	3.1925	3.3008	3.8355	3.5270	2.5247	2.2010	0.9150	1.2418	2.1433	2.8788	2.7486	2.6664	2.6560	0.1376	0.1376
55.	*	3.3406	3.4913	3.9632	3.5169	2.4762	2.1227	0.8787	1.2361	2.1914	2.9964	2.8709	2.7914	2.7792	0.1586	0.1590
60.	*	3.5282	3.6969	4.0700	3.5125	2.4075	2.0151	0.8103	1.2095	2.2393	3.1241	3.0036	2.9269	2.9031	0.2026	0.2047
65.	*	3.7336	3.8877	4.1410	3.5017	2.3168	1.8796	0.6991	1.1436	2.2614	3.2546	3.1389	3.0604	3.0124	0.2902	0.2981
70.	*	3.8974	4.0107	4.1514	3.4639	2.1976	1.7394	0.5472	1.0192	2.2251	3.3583	3.2462	3.1576	3.0740	0.4523	0.4755
75.	*	3.9891	4.0549	4.1001	3.3849	2.0366	1.5742	0.3669	0.8270	2.1185	3.4406	3.3225	3.2128	3.0887	0.7173	0.7705
80.	*	3.7968	3.8104	3.8349	3.1597	1.8576	1.4589	0.2140	0.5983	1.8495	3.2940	3.1738	3.0472	2.8939	1.1471	1.2498

85.	*	3.3643	3.3462	3.4027	2.8328	1.6930	1.4006	0.1080	0.3822	1.4814	2.9575	2.8379	2.7072	2.5462	1.7037	1.8678
90.	*	2.7469	2.7281	2.8426	2.4414	1.5609	1.3824	0.0456	0.2087	1.0604	2.4341	2.3308	2.2143	2.0699	2.3136	2.5333
95.	*	2.0556	2.0692	2.2398	1.9659	1.3792	1.2913	0.0152	0.0935	0.6590	1.7809	1.7031	1.6151	1.5068	2.8184	3.0794
100.	*	1.4415	1.5023	1.7247	1.5814	1.2545	1.2207	0.0074	0.0367	0.3502	1.1783	1.1269	1.0715	1.0033	3.1770	3.4498
105.	*	0.9877	1.0929	1.3735	1.3433	1.1955	1.1859	0.0208	0.0289	0.1701	0.7312	0.6873	0.6588	0.6235	3.3656	3.6263
110.	*	0.7247	0.8545	1.2051	1.2539	1.1921	1.1898	0.0433	0.0453	0.1045	0.4754	0.4213	0.4087	0.3938	3.3333	3.5700
115.	*	0.6117	0.7416	1.1194	1.2256	1.2056	1.2053	0.0663	0.0666	0.0859	0.3381	0.2675	0.2631	0.2581	3.2398	3.4523
120.	*	0.5530	0.6875	1.1095	1.2653	1.2604	1.2604	0.0871	0.0871	0.0919	0.2764	0.1878	0.1866	0.1853	3.1097	3.3068
125.	*	0.5311	0.6720	1.1226	1.3299	1.3290	1.3290	0.1057	0.1057	0.1065	0.2556	0.1495	0.1493	0.1491	2.9685	3.1593
130.	*	0.5251	0.6776	1.1415	1.3977	1.3976	1.3976	0.1230	0.1230	0.1231	0.2550	0.1319	0.1319	0.1318	2.8324	3.0224
135.	*	0.5363	0.7037	1.1896	1.4678	1.4678	1.4678	0.1392	0.1392	0.1392	0.2648	0.1257	0.1257	0.1257	2.6994	2.8890
140.	*	0.5379	0.7106	1.2271	1.5656	1.5656	1.5656	0.1461	0.1461	0.1461	0.2572	0.1111	0.1111	0.1111	2.5660	2.7544
145.	*	0.5424	0.7231	1.2701	1.6675	1.6673	1.6670	0.1657	0.1658	0.1659	0.2613	0.0954	0.0954	0.0954	2.4749	2.6600
150.	*	0.5453	0.7380	1.3255	1.7812	1.7805	1.7796	0.2073	0.2076	0.2080	0.2867	0.0789	0.0787	0.0786	2.3944	2.5747
155.	*	0.5396	0.7467	1.3838	1.9188	1.9168	1.9145	0.2904	0.2916	0.2927	0.3528	0.0617	0.0599	0.0598	2.3268	2.5023
160.	*	0.5135	0.7399	1.4250	2.0717	2.0673	2.0618	0.4429	0.4462	0.4491	0.4888	0.0474	0.0399	0.0391	2.3011	2.4743
165.	*	0.4586	0.7093	1.4547	2.2626	2.2531	2.2416	0.6915	0.6989	0.7053	0.7252	0.0440	0.0217	0.0186	2.2858	2.4632
170.	*	0.3660	0.6190	1.3679	2.3194	2.3034	2.2848	1.0672	1.0813	1.0936	1.1000	0.0768	0.0175	0.0059	2.3114	2.5085
175.	*	0.2578	0.4867	1.1913	2.2397	2.2188	2.1947	1.5123	1.5333	1.5517	1.5567	0.1625	0.0422	0.0108	2.3717	2.6089
180.	*	0.1544	0.3331	0.9379	1.9832	1.9634	1.9382	1.9383	1.9613	1.9853	1.9912	0.2904	0.0960	0.0319	2.4482	2.7414
185.	*	0.0755	0.1915	0.6518	1.5516	1.5333	1.5123	2.1947	2.2188	2.2398	2.2454	0.4338	0.1751	0.0722	2.4464	2.7945
190.	*	0.0305	0.0911	0.3883	1.0935	1.0813	1.0672	2.2848	2.3035	2.3194	2.3237	0.5632	0.2697	0.1347	2.4632	2.8458
195.	*	0.0170	0.0415	0.1992	0.7053	0.6989	0.6915	2.2416	2.2531	2.2627	2.2680	0.6614	0.3669	0.2178	2.5115	2.8991
200.	*	0.0219	0.0308	0.1077	0.4490	0.4462	0.4429	2.0618	2.0673	2.0717	2.0866	0.7063	0.4404	0.3005	2.5823	2.9471
205.	*	0.0316	0.0338	0.0635	0.2927	0.2915	0.2904	1.9145	1.9168	1.9188	1.9497	0.7256	0.4847	0.3597	2.6461	3.0055

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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
210.	*	0.0422	0.0425	0.0516	0.2080	0.2076	0.2073	1.7796	1.7805	1.7813	1.8090	0.7281	0.5058	0.3960	2.7276	3.0703
215.	*	0.0522	0.0523	0.0543	0.1658	0.1658	0.1657	1.6670	1.6673	1.6676	1.6922	0.7231	0.5146	0.4155	2.8117	3.1446
220.	*	0.0629	0.0629	0.0632	0.1463	0.1461	0.1461	1.5656	1.5656	1.5658	1.6001	0.7179	0.5189	0.4265	2.9012	3.2281
225.	*	0.0751	0.0749	0.0749	0.1402	0.1393	0.1392	1.4678	1.4678	1.4680	1.5212	0.7155	0.5227	0.4343	3.0529	3.3811
230.	*	0.0818	0.0811	0.0806	0.1253	0.1234	0.1231	1.3977	1.3979	1.3990	1.4976	0.7003	0.5119	0.4306	3.2041	3.5325
235.	*	0.1024	0.1009	0.0997	0.1137	0.1074	0.1063	1.3296	1.3304	1.3357	1.5097	0.7093	0.5298	0.4447	3.3842	3.7058
240.	*	0.1511	0.1486	0.1466	0.1141	0.0926	0.0895	1.2624	1.2651	1.2853	1.5728	0.7622	0.5800	0.4901	3.6074	3.8981

245.	*	0.2591	0.2560	0.2532	0.1480	0.0820	0.0734	1.2117	1.2197	1.2840	1.7439	0.9013	0.6993	0.6032	3.8767	4.1101
250.	*	0.4812	0.4780	0.4750	0.2598	0.0873	0.0631	1.2084	1.2320	1.4027	2.1138	1.1754	0.9340	0.8430	4.1723	4.3113
255.	*	0.8852	0.8829	0.8810	0.5086	0.1368	0.0734	1.2371	1.3003	1.6707	2.7429	1.6944	1.4034	1.2834	4.5101	4.5648
260.	*	1.5716	1.5718	1.5722	1.0091	0.2958	0.1459	1.3579	1.5080	2.2215	3.6713	2.4704	2.1414	2.0018	4.6148	4.6108
265.	*	2.4385	2.4419	2.4453	1.7047	0.5938	0.3178	1.5917	1.8682	2.9820	4.7334	3.3646	3.0145	2.8717	4.4151	4.3737
270.	*	3.2850	3.2881	3.2941	2.4186	0.9729	0.5709	1.9015	2.3038	3.7529	5.6415	4.1327	3.7870	3.6605	3.8225	3.7726
275.	*	3.8723	3.8777	3.8830	2.9587	1.3188	0.8372	2.1141	2.5957	4.2258	6.0057	4.5068	4.1908	4.0939	2.8981	2.8730
280.	*	4.1163	4.1195	4.1228	3.2262	1.5382	1.0402	2.2561	2.7530	4.3986	5.9261	4.4777	4.2233	4.1647	1.9464	1.9552
285.	*	4.0748	4.0755	4.0764	3.2697	1.6241	1.1515	2.3177	2.7852	4.3359	5.5677	4.1879	4.0184	3.9967	1.1977	1.2353
290.	*	3.7875	3.7866	3.7859	3.1180	1.5979	1.1714	2.3176	2.7324	4.0890	5.0196	3.7630	3.6931	3.6848	0.7531	0.8033
295.	*	3.5410	3.5399	3.5389	2.9806	1.5489	1.1513	2.2890	2.6869	3.8861	4.6135	3.4515	3.4456	3.4380	0.5205	0.5877
300.	*	3.3147	3.3140	3.3130	2.8455	1.4979	1.1189	2.2905	2.6702	3.7178	4.2979	3.2226	3.2522	3.2369	0.4088	0.4829
305.	*	3.1269	3.1266	3.1253	2.7281	1.4565	1.0912	2.3123	2.6781	3.5889	4.0651	3.0631	3.1062	3.0748	0.3609	0.4397
310.	*	2.9744	2.9742	2.9720	2.6358	1.4245	1.0718	2.3427	2.6933	3.4949	3.8863	2.9512	2.9873	2.9373	0.3422	0.4248
315.	*	2.8403	2.8403	2.8370	2.5559	1.4016	1.0594	2.3866	2.7157	3.4156	3.7387	2.8751	2.8835	2.8122	0.3424	0.4288
320.	*	2.7105	2.7105	2.7159	2.4537	1.3655	1.0286	2.4437	2.7534	3.3421	3.6287	2.8224	2.7712	2.6789	0.3319	0.4224
325.	*	2.6215	2.6216	2.6299	2.4193	1.3569	1.0312	2.5203	2.8013	3.3169	3.5497	2.7741	2.6989	2.5876	0.3191	0.4160
330.	*	2.5328	2.5332	2.5498	2.3995	1.3705	1.0599	2.6053	2.8501	3.2913	3.4957	2.7307	2.6345	2.5026	0.3002	0.4076
335.	*	2.4537	2.4559	2.4919	2.4106	1.4253	1.1293	2.7039	2.9111	3.2755	3.4823	2.6956	2.5752	2.4217	0.2689	0.3916
340.	*	2.4151	2.4238	2.4968	2.4835	1.5094	1.2487	2.7911	2.9429	3.2898	3.5323	2.6712	2.5321	2.3678	0.2206	0.3597
345.	*	2.4093	2.4331	2.5672	2.6559	1.7377	1.4715	2.9148	3.0333	3.3210	3.6017	2.6510	2.4824	2.3041	0.1561	0.3063
350.	*	2.4551	2.5107	2.7298	2.9241	2.0627	1.8140	2.9174	3.0216	3.3038	3.6325	2.6326	2.4565	2.2769	0.0939	0.2331
355.	*	2.5424	2.6432	2.9392	3.2458	2.4349	2.2187	2.8044	2.9017	3.2155	3.6046	2.6039	2.4433	2.2799	0.0497	0.1592
-----*																
MAX	*	4.1163	4.1195	4.1514	3.7263	3.0239	2.8803	2.9174	3.0333	4.3986	6.0057	4.5068	4.2233	4.1647	4.6148	4.6108
DEGR.	*	280	280	70	10	10	10	350	345	280	275	275	280	280	260	260

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

REMARKS : In search of the angle corresponding to
 the maximum concentration, only the first
 angle, of the angles with same maximum
 concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-355.

WIND * CONCENTRATION

ANGLE * (DEGR) *	(PPM) 31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
0. *	0.1934	0.4773	0.9004	0.8842	0.8677	1.1160	1.1322	1.1466	0.7068	0.1637	0.0555	0.0186	0.0000	0.0005	0.0072
5. *	0.1074	0.3152	0.6632	0.6505	0.6363	1.3021	1.3191	1.3321	0.8866	0.2530	0.1047	0.0433	0.0000	0.0001	0.0028
10. *	0.0512	0.1779	0.4294	0.4212	0.4119	1.3938	1.4071	1.4171	1.0031	0.3369	0.1651	0.0822	0.0013	0.0013	0.0022
15. *	0.0347	0.0968	0.2447	0.2406	0.2358	1.3979	1.4063	1.4122	1.0516	0.4017	0.2278	0.1341	0.0085	0.0083	0.0085
20. *	0.0444	0.0712	0.1345	0.1328	0.1308	1.3097	1.3137	1.3163	1.0237	0.4342	0.2775	0.1879	0.0198	0.0192	0.0191
25. *	0.0616	0.0704	0.0728	0.0722	0.0716	1.2295	1.2312	1.2319	0.9906	0.4469	0.3069	0.2275	0.0337	0.0315	0.0309
30. *	0.0801	0.0823	0.0444	0.0441	0.0439	1.1500	1.1505	1.1503	0.9491	0.4470	0.3205	0.2520	0.0510	0.0455	0.0439
35. *	0.0975	0.0979	0.0338	0.0325	0.0325	1.0810	1.0812	1.0802	0.9105	0.4431	0.3255	0.2649	0.0730	0.0633	0.0600
40. *	0.1142	0.1142	0.0321	0.0280	0.0280	1.0212	1.0212	1.0191	0.8723	0.4395	0.3280	0.2722	0.0994	0.0861	0.0809
45. *	0.1298	0.1299	0.0354	0.0265	0.0265	0.9665	0.9665	0.9622	0.8343	0.4379	0.3306	0.2775	0.1268	0.1120	0.1057
50. *	0.1377	0.1378	0.0317	0.0234	0.0234	0.9208	0.9209	0.9174	0.7944	0.4283	0.3247	0.2746	0.1463	0.1329	0.1266
55. *	0.1594	0.1598	0.0320	0.0201	0.0201	0.8839	0.8839	0.8784	0.7769	0.4318	0.3325	0.2845	0.1690	0.1581	0.1529
60. *	0.2063	0.2078	0.0424	0.0167	0.0166	0.8470	0.8471	0.8397	0.7674	0.4506	0.3584	0.3124	0.2067	0.1983	0.1941
65. *	0.3034	0.3080	0.0775	0.0133	0.0126	0.8153	0.8161	0.8172	0.7826	0.5043	0.4221	0.3791	0.2852	0.2788	0.2755
70. *	0.4892	0.5007	0.1654	0.0122	0.0084	0.7976	0.8021	0.8412	0.8661	0.6149	0.5521	0.5210	0.4466	0.4436	0.4421
75. *	0.7993	0.8234	0.3316	0.0186	0.0049	0.7946	0.8109	0.9355	1.0440	0.8505	0.7979	0.7772	0.7485	0.7498	0.7506
80. *	1.3046	1.3502	0.6603	0.0515	0.0064	0.8142	0.8667	1.1767	1.4107	1.2606	1.2264	1.2189	1.2721	1.2822	1.2871
85. *	1.9541	2.0248	1.1340	0.1338	0.0216	0.8594	0.9866	1.5600	1.9367	1.8096	1.7965	1.8058	1.9604	1.9818	1.9919
90. *	2.6489	2.7427	1.6988	0.2819	0.0616	0.9306	1.1735	2.0320	2.5358	2.4130	2.4136	2.4406	2.6819	2.7114	2.7241
95. *	3.2109	3.3110	2.2569	0.4908	0.1391	1.0007	1.3782	2.4624	3.0537	2.9174	2.9271	2.9661	3.2387	3.2683	3.2820
100. *	3.5810	3.6741	2.6917	0.7332	0.2603	1.1118	1.6053	2.7989	3.4039	3.2415	3.2564	3.3039	3.5405	3.5618	3.5719
105. *	3.7422	3.8164	2.9399	0.9643	0.4157	1.2610	1.8165	2.9953	3.5513	3.3624	3.3909	3.4432	3.5934	3.6034	3.6093
110. *	3.6606	3.7086	2.9525	1.1373	0.5854	1.4315	1.9735	3.0112	3.4635	3.2724	3.3320	3.3910	3.4158	3.4161	3.4204
115. *	3.5176	3.5465	2.8820	1.2351	0.7183	1.5740	2.0791	2.9333	3.2933	3.1916	3.2611	3.2841	3.2424	3.2367	3.2426
120. *	3.3531	3.3690	2.7611	1.2758	0.8072	1.6781	2.1314	2.8307	3.1225	3.1027	3.1624	3.1594	3.0676	3.0581	3.0708
125. *	3.1903	3.1977	2.6330	1.2793	0.8547	1.7457	2.1533	2.7228	2.9769	3.0376	3.0659	3.0383	2.9121	2.8983	2.9220
130. *	3.0419	3.0441	2.5218	1.2636	0.8729	1.7864	2.1554	2.6419	2.8836	2.9932	2.9777	2.9315	2.7758	2.7572	2.7957
135. *	2.9003	2.8995	2.4203	1.2425	0.8751	1.8268	2.1420	2.6100	2.8680	2.9570	2.9010	2.8368	2.6457	2.6244	2.6814
140. *	2.7604	2.7630	2.3137	1.2071	0.8530	1.8528	2.1334	2.5833	2.8375	2.9176	2.7897	2.7209	2.4987	2.4775	2.5554
145. *	2.6606	2.6658	2.2585	1.1874	0.8509	1.8994	2.1408	2.6420	2.8962	2.8776	2.7275	2.6511	2.3948	2.3781	2.4787
150. *	2.5757	2.5866	2.2330	1.1844	0.8614	1.9610	2.1757	2.7518	3.0007	2.8395	2.6754	2.5877	2.3094	2.2995	2.4181
155. *	2.5052	2.5326	2.2378	1.2098	0.8931	2.0421	2.2466	2.9017	3.1171	2.8053	2.6253	2.5224	2.2452	2.2417	2.3739
160. *	2.4835	2.5481	2.3101	1.2483	0.9380	2.1106	2.3160	3.0762	3.2377	2.7652	2.5651	2.4475	2.2018	2.2035	2.3453
165. *	2.4891	2.6199	2.4698	1.4083	1.0790	2.2395	2.4837	3.2833	3.3457	2.7385	2.5187	2.3944	2.2054	2.2123	2.3609
170. *	2.5678	2.8138	2.7502	1.6496	1.3108	2.2900	2.5538	3.3592	3.3450	2.6778	2.4580	2.3458	2.2215	2.2399	2.4021
175. *	2.7200	3.1024	3.0864	1.9172	1.5842	2.2373	2.5092	3.3051	3.2503	2.5925	2.3995	2.3143	2.2472	2.2872	2.4715
180. *	2.9113	3.4142	3.3885	2.1448	1.8311	2.0541	2.3304	3.1123	3.0665	2.4962	2.3532	2.3008	2.2738	2.3478	2.5620
185. *	3.0094	3.5854	3.5575	2.2648	1.9779	1.7605	2.0453	2.8114	2.7951	2.3671	2.2813	2.2564	2.2547	2.3725	2.6186
190. *	3.0782	3.6633	3.5603	2.2654	2.0184	1.4507	1.7405	2.5035	2.5410	2.2727	2.2325	2.2237	2.2412	2.4100	2.6806

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195.	*	3.1244	3.6589	3.4204	2.1835	1.9862	1.1993	1.4849	2.2596	2.3591	2.2215	2.2075	2.2053	2.2446	2.4667	2.7471
200.	*	3.1501	3.5654	3.1393	2.0616	1.9133	1.0508	1.3243	2.1238	2.2767	2.2104	2.2062	2.2057	2.2731	2.5498	2.8192
205.	*	3.2037	3.4847	2.9227	2.0439	1.8695	0.9798	1.2895	2.0846	2.2662	2.2386	2.2377	2.2377	2.3370	2.6553	2.8951

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JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
210.	*	3.2775	3.4212	2.7396	2.0248	1.8269	0.9433	1.2640	2.0824	2.3016	2.2894	2.2893	2.2894	2.4186	2.7549	2.9573
215.	*	3.3691	3.3690	2.6078	2.0303	1.7974	0.9344	1.2666	2.1076	2.3612	2.3538	2.3539	2.3543	2.5107	2.8509	3.0085
220.	*	3.4671	3.3329	2.5316	2.0494	1.7810	0.9439	1.2837	2.1508	2.4319	2.4295	2.4300	2.4311	2.6126	2.9431	3.0504
225.	*	3.5707	3.3580	2.5500	2.0886	1.7860	0.9803	1.3277	2.2492	2.5515	2.5570	2.5585	2.5611	2.7689	3.0731	3.0958
230.	*	3.6768	3.3598	2.5877	2.1089	1.7736	1.0081	1.3646	2.3301	2.6667	2.6733	2.6764	2.6811	2.9059	3.1760	3.1446
235.	*	3.7858	3.4102	2.6881	2.1504	1.7942	1.0458	1.4143	2.4270	2.8011	2.8091	2.8140	2.8203	3.0625	3.2827	3.2154
240.	*	3.9046	3.5026	2.8495	2.2042	1.8278	1.0931	1.4763	2.5503	2.9676	2.9766	2.9830	2.9904	3.2430	3.4009	3.3080
245.	*	4.0479	3.6508	3.0613	2.2717	1.8702	1.1434	1.5489	2.6928	3.1674	3.1765	3.1834	3.1915	3.4366	3.5268	3.4215
250.	*	4.2117	3.8767	3.3260	2.3387	1.9048	1.1776	1.6177	2.8404	3.3905	3.3978	3.4037	3.4115	3.6138	3.6304	3.5309
255.	*	4.4415	4.1633	3.6039	2.3889	1.9016	1.1627	1.6565	2.9890	3.6429	3.6459	3.6482	3.6513	3.7689	3.7301	3.6425
260.	*	4.4839	4.2966	3.6900	2.3164	1.7967	1.0444	1.5692	2.9454	3.6814	3.6785	3.6753	3.6725	3.6869	3.6111	3.5250
265.	*	4.2663	4.1848	3.5207	2.0918	1.5862	0.8233	1.3311	2.6701	3.4496	3.4415	3.4330	3.4246	3.3484	3.2573	3.1823
270.	*	3.7063	3.7219	3.0461	1.7351	1.3135	0.5425	0.9641	2.1402	2.8939	2.8857	2.8731	2.8647	2.7486	2.6685	2.6163
275.	*	2.8539	2.9359	2.3496	1.3294	1.0434	0.2845	0.5697	1.4671	2.1060	2.0979	2.0895	2.0809	1.9886	1.9405	1.9193
280.	*	1.9797	2.1012	1.6466	1.0137	0.8625	0.1148	0.2653	0.8354	1.3224	1.3183	1.3141	1.3100	1.2764	1.2669	1.2761
285.	*	1.2879	1.4299	1.1176	0.8368	0.7771	0.0394	0.0989	0.3914	0.7248	0.7239	0.7232	0.7228	0.7476	0.7699	0.8030
290.	*	0.8646	1.0179	0.8347	0.7716	0.7523	0.0221	0.0415	0.1736	0.3850	0.3856	0.3863	0.3869	0.4474	0.4883	0.5363
295.	*	0.6542	0.8026	0.7075	0.7590	0.7545	0.0236	0.0282	0.0765	0.2068	0.2074	0.2082	0.2090	0.2822	0.3386	0.3985
300.	*	0.5537	0.7066	0.6799	0.7715	0.7708	0.0301	0.0309	0.0454	0.1249	0.1253	0.1257	0.1263	0.1984	0.2618	0.3289
305.	*	0.5164	0.6769	0.6966	0.7925	0.7924	0.0370	0.0371	0.0408	0.0900	0.0901	0.0903	0.0906	0.1539	0.2214	0.2926
310.	*	0.5082	0.6809	0.7319	0.8176	0.8176	0.0440	0.0440	0.0451	0.0756	0.0756	0.0756	0.0757	0.1264	0.1968	0.2698
315.	*	0.5198	0.7176	0.7904	0.8631	0.8631	0.0510	0.0510	0.0517	0.0714	0.0709	0.0709	0.0709	0.1068	0.1790	0.2565
320.	*	0.5178	0.7393	0.8488	0.9028	0.9027	0.0544	0.0544	0.0545	0.0615	0.0608	0.0607	0.0608	0.0843	0.1515	0.2309
325.	*	0.5167	0.7578	0.9096	0.9468	0.9466	0.0642	0.0642	0.0643	0.0530	0.0506	0.0506	0.0506	0.0643	0.1223	0.2019
330.	*	0.5152	0.7779	0.9755	0.9993	0.9987	0.0860	0.0861	0.0863	0.0493	0.0408	0.0407	0.0407	0.0476	0.0931	0.1690
335.	*	0.5089	0.7941	1.0453	1.0585	1.0568	0.1313	0.1320	0.1325	0.0573	0.0309	0.0302	0.0301	0.0330	0.0651	0.1324
340.	*	0.4898	0.7990	1.1123	1.1167	1.1126	0.2177	0.2197	0.2213	0.0903	0.0226	0.0193	0.0190	0.0199	0.0397	0.0943
345.	*	0.4516	0.7913	1.1797	1.1753	1.1668	0.3611	0.3660	0.3696	0.1612	0.0208	0.0101	0.0085	0.0086	0.0189	0.0577
350.	*	0.3800	0.7300	1.1682	1.1572	1.1437	0.5836	0.5930	0.6002	0.3029	0.0392	0.0089	0.0028	0.0014	0.0061	0.0309

355.	*	0.2908	0.6247	1.0767	1.0616	1.0445	0.8519	0.8662	0.8772	0.4980	0.0880	0.0235	0.0061	0.0000	0.0018	0.0157
-----*																
MAX	*	4.4839	4.2966	3.6900	2.3889	2.0184	2.2900	2.5538	3.3592	3.6814	3.6785	3.6753	3.6725	3.7689	3.7301	3.6425
DEGR.	*	260	260	260	255	190	170	170	170	260	260	260	260	255	255	255

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

MODEL RESULTS

REMARKS : In search of the angle corresponding to
 the maximum concentration, only the first
 angle, of the angles with same maximum
 concentrations, is indicated as maximum.

WIND ANGLE RANGE: 0.-355.

WIND * CONCENTRATION
 ANGLE * (PPM)

(DEGR)*		46	47	48	49	50	51	52	53	54	55	56
0.	*	0.0839	0.1305	0.1159	0.0892	0.3120	0.3957	0.4255	0.2154	0.0043	0.0000	0.0000
5.	*	0.0497	0.0886	0.0797	0.0641	0.3916	0.4888	0.5221	0.3000	0.0109	0.0003	0.0000
10.	*	0.0279	0.0566	0.0519	0.0437	0.4620	0.5629	0.5975	0.3835	0.0243	0.0024	0.0013
15.	*	0.0211	0.0347	0.0326	0.0287	0.5192	0.6133	0.6480	0.4593	0.0498	0.0115	0.0085
20.	*	0.0253	0.0220	0.0211	0.0194	0.5537	0.6287	0.6635	0.5120	0.0864	0.0270	0.0197
25.	*	0.0334	0.0147	0.0143	0.0136	0.5740	0.6295	0.6706	0.5499	0.1254	0.0467	0.0325
30.	*	0.0440	0.0119	0.0114	0.0108	0.5799	0.6171	0.6695	0.5719	0.1633	0.0701	0.0466
35.	*	0.0580	0.0136	0.0127	0.0113	0.5758	0.5986	0.6676	0.5836	0.1982	0.0973	0.0636
40.	*	0.0770	0.0206	0.0190	0.0161	0.5669	0.5811	0.6701	0.5896	0.2308	0.1287	0.0857
45.	*	0.1005	0.0326	0.0304	0.0259	0.5564	0.5670	0.6772	0.5906	0.2629	0.1638	0.1140
50.	*	0.1208	0.0476	0.0449	0.0395	0.5401	0.5523	0.6826	0.5781	0.2866	0.1961	0.1440
55.	*	0.1478	0.0607	0.0580	0.0531	0.5382	0.5534	0.6981	0.5687	0.3208	0.2344	0.1845
60.	*	0.1901	0.0730	0.0685	0.0641	0.5367	0.5580	0.7124	0.5682	0.3685	0.2875	0.2416
65.	*	0.2725	0.0935	0.0801	0.0722	0.5361	0.5711	0.7347	0.6056	0.4521	0.3775	0.3356
70.	*	0.4406	0.1479	0.1077	0.0829	0.5465	0.6127	0.7950	0.7270	0.6137	0.5476	0.5110
75.	*	0.7514	0.2760	0.1816	0.1132	0.5791	0.7070	0.9283	1.0120	0.9221	0.8596	0.8253
80.	*	1.2922	0.5584	0.3648	0.2032	0.6749	0.9172	1.2154	1.5328	1.4546	1.3967	1.3649
85.	*	2.0031	0.9950	0.6785	0.3851	0.8661	1.2627	1.6554	2.2320	2.1545	2.0991	2.0712
90.	*	2.7411	1.5104	1.0824	0.6564	1.1481	1.6989	2.1698	2.9647	2.8742	2.8177	2.7953

95.	*	3.3059	1.9755	1.4782	0.9614	1.4513	2.1104	2.6113	3.5241	3.4044	3.3435	3.3283
100.	*	3.6028	2.2782	1.7625	1.2177	1.7022	2.4056	2.8848	3.8188	3.6542	3.5950	3.5890
105.	*	3.6507	2.3973	1.8967	1.3711	1.8488	2.5495	2.9708	3.8642	3.6511	3.6063	3.6103
110.	*	3.4763	2.3512	1.8865	1.4088	1.8829	2.5519	2.8888	3.6908	3.4404	3.4291	3.4425
115.	*	3.3156	2.2841	1.8402	1.3935	1.8715	2.5180	2.7779	3.5087	3.2649	3.2799	3.2752
120.	*	3.1563	2.2062	1.7778	1.3500	1.8462	2.4683	2.6579	3.3278	3.1054	3.1303	3.1036
125.	*	3.0127	2.1314	1.7170	1.3021	1.8258	2.4138	2.5398	3.1601	2.9811	2.9929	2.9417
130.	*	2.8836	2.0641	1.6607	1.2549	1.8124	2.3548	2.4332	3.0148	2.8834	2.8617	2.7934
135.	*	2.7598	2.0008	1.6097	1.2098	1.8178	2.3040	2.3529	2.9061	2.7999	2.7359	2.6577
140.	*	2.6229	1.9081	1.5443	1.1548	1.8122	2.2312	2.2622	2.7986	2.7245	2.5926	2.5109
145.	*	2.5304	1.8686	1.5088	1.1319	1.8379	2.1868	2.2454	2.7600	2.6427	2.4896	2.4132
150.	*	2.4670	1.8513	1.4921	1.1240	1.8769	2.1680	2.2671	2.7479	2.5538	2.3950	2.3226
155.	*	2.4337	1.8603	1.5020	1.1341	1.9211	2.1690	2.3122	2.7498	2.4652	2.3111	2.2437
160.	*	2.4398	1.8735	1.5063	1.1350	1.9250	2.1391	2.3326	2.7424	2.3743	2.2272	2.1692
165.	*	2.5154	1.9709	1.6020	1.2075	1.9616	2.1643	2.3857	2.7410	2.3178	2.2012	2.1612
170.	*	2.6629	2.1039	1.7282	1.3150	1.9266	2.1247	2.3599	2.6878	2.2833	2.1965	2.1722
175.	*	2.8483	2.2431	1.8562	1.4323	1.8276	2.0257	2.2698	2.6050	2.2669	2.2089	2.1965
180.	*	3.0295	2.3599	1.9591	1.5290	1.6708	1.8822	2.1352	2.5079	2.2603	2.2264	2.2212
185.	*	3.1195	2.4222	2.0079	1.5769	1.4797	1.7196	1.9844	2.3711	2.2124	2.1957	2.1941
190.	*	3.1399	2.4126	1.9894	1.5734	1.3035	1.5750	1.8536	2.2585	2.1713	2.1648	2.1644
195.	*	3.0933	2.3349	1.9115	1.5356	1.1725	1.4634	1.7558	2.1849	2.1447	2.1429	2.1427
200.	*	2.9776	2.1939	1.7940	1.4802	1.1016	1.3944	1.6989	2.1577	2.1391	2.1387	2.1384
205.	*	2.9007	2.1221	1.7572	1.4846	1.1027	1.4117	1.7164	2.1898	2.1825	2.1825	2.1825

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

WIND ANGLE RANGE: 0.-355.

WIND ANGLE (DEGR)*	* CONCENTRATION (PPM)	46	47	48	49	50	51	52	53	54	55	56
210.	*	2.8410	2.0479	1.7161	1.4754	1.0978	1.4123	1.7223	2.2390	2.2359	2.2360	2.2359
215.	*	2.8151	2.0066	1.7142	1.4771	1.1058	1.4297	1.7406	2.3041	2.3025	2.3026	2.3025
220.	*	2.8235	1.9984	1.7471	1.4840	1.1212	1.4607	1.7727	2.3786	2.3776	2.3775	2.3774
225.	*	2.8952	2.0571	1.8226	1.5127	1.1629	1.5198	1.8557	2.4923	2.4925	2.4925	2.4923
230.	*	2.9667	2.1068	1.8941	1.5208	1.1936	1.5628	1.9105	2.6015	2.6015	2.6014	2.6008
235.	*	3.0604	2.1751	1.9736	1.5437	1.2273	1.6144	1.9757	2.7255	2.7247	2.7237	2.7218
240.	*	3.1743	2.2634	2.0550	1.5662	1.2562	1.6690	2.0510	2.8701	2.8671	2.8635	2.8581
245.	*	3.3005	2.3584	2.1232	1.5745	1.2646	1.7126	2.1219	3.0292	3.0215	3.0115	2.9979
250.	*	3.4244	2.4408	2.1527	1.5367	1.2280	1.7208	2.1642	3.1784	3.1617	3.1400	3.1123

255.	*	3.5262	2.4753	2.1160	1.4461	1.1225	1.6647	2.1523	3.3078	3.2760	3.2374	3.1895
260.	*	3.4232	2.3500	1.9382	1.2685	0.9364	1.4793	1.9793	3.2116	3.1658	3.1119	3.0473
265.	*	3.1083	2.0667	1.6368	1.0291	0.6968	1.1843	1.6553	2.8914	2.8384	2.7773	2.7059
270.	*	2.5770	1.6536	1.2556	0.7699	0.4452	0.8241	1.2163	2.3522	2.3022	2.2461	2.1814
275.	*	1.9158	1.2057	0.8778	0.5438	0.2321	0.4775	0.7569	1.6781	1.6409	1.5989	1.5510
280.	*	1.3039	0.8353	0.5893	0.3940	0.0943	0.2220	0.3870	1.0541	1.0318	1.0067	0.9782
285.	*	0.8588	0.6006	0.4199	0.3209	0.0301	0.0812	0.1593	0.5921	0.5818	0.5700	0.5565
290.	*	0.6199	0.4945	0.3476	0.2977	0.0123	0.0301	0.0629	0.3314	0.3273	0.3228	0.3176
295.	*	0.5118	0.4502	0.3243	0.3000	0.0096	0.0139	0.0243	0.1888	0.1875	0.1862	0.1846
300.	*	0.4702	0.4277	0.3157	0.3009	0.0115	0.0122	0.0148	0.1205	0.1201	0.1199	0.1195
305.	*	0.4607	0.4134	0.3155	0.3013	0.0141	0.0142	0.0146	0.0895	0.0894	0.0894	0.0893
310.	*	0.4600	0.4014	0.3195	0.2992	0.0166	0.0167	0.0167	0.0759	0.0758	0.0758	0.0758
315.	*	0.4626	0.3970	0.3314	0.2979	0.0191	0.0191	0.0191	0.0715	0.0713	0.0713	0.0713
320.	*	0.4470	0.3866	0.3351	0.2873	0.0203	0.0204	0.0205	0.0614	0.0611	0.0611	0.0611
325.	*	0.4225	0.3746	0.3335	0.2712	0.0234	0.0239	0.0242	0.0517	0.0509	0.0510	0.0509
330.	*	0.3903	0.3593	0.3246	0.2505	0.0297	0.0316	0.0325	0.0434	0.0409	0.0409	0.0409
335.	*	0.3491	0.3380	0.3062	0.2262	0.0418	0.0474	0.0497	0.0378	0.0303	0.0303	0.0303
340.	*	0.2985	0.3086	0.2780	0.1995	0.0633	0.0766	0.0817	0.0382	0.0191	0.0191	0.0191
345.	*	0.2404	0.2706	0.2407	0.1720	0.0977	0.1229	0.1324	0.0482	0.0084	0.0083	0.0083
350.	*	0.1811	0.2249	0.1986	0.1432	0.1532	0.1966	0.2126	0.0819	0.0016	0.0013	0.0013
355.	*	0.1286	0.1766	0.1559	0.1154	0.2268	0.2911	0.3143	0.1401	0.0014	0.0000	0.0000
-----*												
MAX	*	3.6507	2.4753	2.1527	1.5769	1.9616	2.5519	2.9708	3.8642	3.6542	3.6063	3.6103
DEGR.	*	105	255	250	185	165	110	105	105	100	105	105

THE HIGHEST CONCENTRATION OF 6.0057 PPM OCCURRED AT RECEPTOR 25.

PAGE 12

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
 THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

	* CO/LINK (PPM)														
	* ANGLE (DEGREES)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LINK #	80	80	75	75	75	70	25	345	295	285	280	280	285	285	280
-----*															

1	*	0.8788	0.6454	0.5717	0.2129	0.0014	0.0000	0.0180	0.1566	0.4512	0.9575	1.0316	0.6945	0.3666	0.2519	0.0853
2	*	0.1151	0.0643	0.0336	0.0000	0.0000	0.0000	0.0004	0.0163	0.0784	0.1514	0.1676	0.1199	0.0621	0.0463	0.0256
3	*	0.0013	0.0017	0.0009	0.0000	0.0000	0.0000	0.0001	0.0012	0.0000	0.0010	0.0014	0.0017	0.0012	0.0007	0.0001
4	*	1.7284	1.5198	1.3834	0.9019	0.0672	0.0000	0.0200	0.1485	0.4674	1.0816	1.1037	0.6150	0.2798	0.1937	0.0744
5	*	0.0948	0.0738	0.0594	0.0003	0.0000	0.0000	0.0002	0.0055	0.0355	0.0645	0.0707	0.0472	0.0220	0.0168	0.0111
6	*	0.2018	0.3260	0.3637	0.6594	0.7804	0.2945	0.1517	0.0678	0.0000	0.1719	0.5662	0.8682	1.0352	1.0904	1.2330
7	*	0.4787	0.7544	0.8910	1.3145	1.2416	0.5652	0.3150	0.1277	0.0000	0.0398	0.2340	0.6633	1.1373	1.2824	1.4864
8	*	0.2523	0.2501	0.2554	0.2547	0.2120	0.1027	0.0599	0.0591	0.1038	0.2259	0.2738	0.2740	0.2677	0.2678	0.2752
9	*	0.0404	0.0454	0.0264	0.0284	0.0312	0.0232	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
10	*	0.1925	0.1913	0.1951	0.1948	0.1722	0.0961	0.0565	0.0557	0.0948	0.1819	0.2108	0.2108	0.2040	0.2040	0.2113
11	*	0.0424	0.0478	0.0302	0.0326	0.0355	0.0271	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	*	0.0025	0.0028	0.0018	0.0020	0.0022	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
13	*	0.0159	0.0176	0.0102	0.0109	0.0118	0.0082	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	*	0.1230	0.1676	0.1944	0.2073	0.1852	0.1096	0.0681	0.0232	0.0000	0.0000	0.0001	0.0142	0.0769	0.1136	0.1786
15	*	0.0688	0.0920	0.1015	0.1145	0.1055	0.0645	0.0328	0.0053	0.0000	0.0000	0.0000	0.0012	0.0276	0.0510	0.0946
16	*	0.2231	0.2786	0.3155	0.3184	0.2896	0.1845	0.1199	0.0380	0.0000	0.0000	0.0000	0.0060	0.0766	0.1366	0.2643
17	*	0.0291	0.0363	0.0394	0.0413	0.0383	0.0252	0.0131	0.0020	0.0000	0.0000	0.0000	0.0001	0.0053	0.0130	0.0318
18	*	0.0283	0.0457	0.0659	0.0788	0.0496	0.0032	0.0411	0.0091	0.0000	0.0000	0.0000	0.0083	0.0750	0.0632	0.0067
19	*	0.0757	0.0276	0.0138	0.0000	0.0000	0.0000	0.0037	0.0459	0.1094	0.1805	0.1845	0.1728	0.1296	0.0946	0.0288
20	*	0.0791	0.0171	0.0052	0.0000	0.0000	0.0000	0.0058	0.0868	0.1863	0.2807	0.2755	0.2755	0.2414	0.1849	0.0569
21	*	0.0129	0.0073	0.0048	0.0000	0.0000	0.0000	0.0065	0.0406	0.0000	0.0005	0.0010	0.0075	0.0180	0.0189	0.0088
22	*	0.0043	0.0004	0.0001	0.0000	0.0000	0.0000	0.0045	0.0314	0.0000	0.0000	0.0000	0.0004	0.0068	0.0120	0.0082
23	*	0.0208	0.0405	0.0605	0.1122	0.1607	0.1623	0.2557	0.1050	0.1113	0.1078	0.0941	0.0487	0.0219	0.0131	0.0039
24	*	0.0035	0.0005	0.0001	0.0000	0.0000	0.0000	0.0023	0.0096	0.0000	0.0000	0.0000	0.0001	0.0043	0.0067	0.0022
25	*	0.0186	0.0205	0.0097	0.0104	0.0117	0.0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
26	*	0.0720	0.1263	0.1740	0.2732	0.3527	0.3598	0.4861	0.7017	0.4304	0.4208	0.3711	0.1883	0.1021	0.0615	0.0142
27	*	0.0204	0.0275	0.0166	0.0199	0.1119	0.4550	0.3125	0.3622	0.5881	0.1734	0.0321	0.0333	0.0131	0.0104	0.0059
28	*	0.0030	0.0014	0.0010	0.0000	0.0000	0.0000	0.0040	0.0087	0.0000	0.0000	0.0000	0.0002	0.0031	0.0045	0.0028
29	*	0.0211	0.0218	0.0267	0.0273	0.0271	0.0286	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	*	0.0123	0.0126	0.0156	0.0159	0.0157	0.0161	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31	*	0.0122	0.0126	0.0152	0.0155	0.0154	0.0160	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

		* CO/LINK (PPM)															
		* ANGLE (DEGREES)															
		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
LINK #	*	280	280	70	10	10	10	350	345	280	275	275	280	280	260	260	
1	*	0.0737	0.0688	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0618	0.0814	0.0752	0.0480	0.0443	0.0501	0.0560
2	*	0.0230	0.0219	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0204	0.0291	0.0275	0.0168	0.0159	0.0176	0.0190
3	*	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
4	*	0.0646	0.0605	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0548	0.0745	0.0689	0.0425	0.0393	0.0500	0.0559
5	*	0.0100	0.0096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0090	0.0134	0.0127	0.0075	0.0071	0.0086	0.0093
6	*	1.2417	1.2454	0.5766	0.5101	0.1268	0.0640	0.0900	0.1240	0.7760	1.0472	0.4761	0.2469	0.1791	0.2349	0.3090	
7	*	1.5065	1.5153	0.3213	0.7401	0.2302	0.1248	0.1905	0.2722	1.1927	1.7810	1.0305	0.6107	0.4385	0.5049	0.7286	
8	*	0.2754	0.2755	0.0000	0.0192	0.0132	0.0101	0.0214	0.0232	0.2284	0.3001	0.1997	0.1209	0.0943	0.1088	0.1465	
9	*	0.0000	0.0000	1.0586	0.1312	0.2032	0.1771	0.1161	0.1567	0.0004	0.4390	1.1193	1.5770	1.7428	0.4280	0.2079	
10	*	0.2113	0.2114	0.1751	0.1188	0.0706	0.0540	0.0540	0.0709	0.1887	0.2426	0.2426	0.2509	0.2510	0.2510	0.2509	
11	*	0.0000	0.0000	0.6979	0.1911	0.1783	0.1554	0.0884	0.0984	0.0000	0.0000	0.0424	0.2655	0.4083	1.6223	1.3789	
12	*	0.0000	0.0000	0.0698	0.0039	0.0129	0.0161	0.0064	0.0038	0.0000	0.0000	0.0005	0.0256	0.0518	0.1523	0.1457	
13	*	0.0000	0.0000	0.1829	0.0031	0.0172	0.0227	0.0096	0.0061	0.0000	0.0000	0.0060	0.0797	0.1264	0.1431	0.0699	
14	*	0.1842	0.1866	0.0003	0.0916	0.0398	0.0245	0.0432	0.0602	0.1691	0.1936	0.1848	0.1571	0.1197	0.1079	0.1729	
15	*	0.0979	0.0994	0.1025	0.0732	0.0480	0.0376	0.0376	0.0484	0.0909	0.1021	0.1040	0.1224	0.1237	0.2559	0.2544	
16	*	0.2752	0.2799	0.0000	0.0602	0.0361	0.0264	0.0619	0.0815	0.2604	0.2750	0.2733	0.2625	0.2099	0.1657	0.2547	
17	*	0.0333	0.0339	0.0353	0.0261	0.0182	0.0144	0.0144	0.0180	0.0319	0.0334	0.0342	0.0414	0.0420	0.2353	0.2347	
18	*	0.0054	0.0049	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0042	0.0049	0.0044	0.0031	0.0028	0.0027	0.0031	
19	*	0.0248	0.0232	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0206	0.0255	0.0235	0.0162	0.0149	0.0133	0.0148	
20	*	0.0491	0.0458	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0407	0.0490	0.0453	0.0321	0.0295	0.0238	0.0264	
21	*	0.0078	0.0074	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0065	0.0059	0.0055	0.0054	0.0050	0.0018	0.0020	
22	*	0.0072	0.0068	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0059	0.0055	0.0051	0.0049	0.0045	0.0016	0.0018	
23	*	0.0034	0.0032	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0030	0.0046	0.0043	0.0022	0.0021	0.0071	0.0078	
24	*	0.0019	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0015	0.0015	0.0014	0.0012	0.0010	0.0006	0.0006	
25	*	0.0000	0.0000	0.9308	1.1368	1.6366	1.8704	1.8704	1.7321	1.2148	1.2722	0.4926	0.2318	0.1442	0.1565	0.1607	
26	*	0.0122	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0105	0.0156	0.0146	0.0078	0.0072	0.0224	0.0244	
27	*	0.0050	0.0047	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0043	0.0064	0.0059	0.0032	0.0029	0.0064	0.0073	
28	*	0.0025	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0021	0.0019	0.0018	0.0018	0.0016	0.0005	0.0006	
29	*	0.0000	0.0000	0.0000	0.2851	0.1761	0.1264	0.1569	0.1779	0.0000	0.0000	0.0034	0.0230	0.0303	0.0224	0.0367	
30	*	0.0000	0.0000	0.0000	0.1441	0.0960	0.0707	0.0707	0.0696	0.0000	0.0000	0.0000	0.0031	0.0075	0.0048	0.0044	
31	*	0.0000	0.0000	0.0003	0.1917	0.1207	0.0857	0.0857	0.0902	0.0000	0.0000	0.0011	0.0121	0.0170	0.0144	0.0255	

JOB: N I-25 Revised ROD1 SH392 to SH14

RUN: Harmony Rd Intersections

DATE : 12/13/16

TIME : 22:58:39

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
 THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM)										
		ANGLE (DEGREES)										
		46	47	48	49	50	51	52	53	54	55	56
LINK #	*	105	255	250	185	165	110	105	105	100	105	105
1	*	0.0000	0.5284	0.4488	0.0927	0.1053	0.0000	0.0000	0.0003	0.0618	0.2855	0.4102
2	*	0.0000	0.1039	0.0835	0.0053	0.0057	0.0000	0.0000	0.0000	0.0020	0.0325	0.0571
3	*	0.0000	0.0002	0.0001	0.0007	0.0011	0.0000	0.0000	0.0000	0.0015	0.0019	0.0011
4	*	0.0000	0.4109	0.3662	0.0847	0.0814	0.0000	0.0000	0.0000	0.0122	0.1352	0.2376
5	*	0.0000	0.0389	0.0318	0.0025	0.0021	0.0000	0.0000	0.0000	0.0001	0.0059	0.0140
6	*	0.3264	0.0000	0.0000	0.0979	0.0991	0.2339	0.2667	0.3311	0.2985	0.2543	0.1943
7	*	0.8701	0.0000	0.0000	0.2395	0.2134	0.5698	0.6771	0.8791	0.7486	0.5407	0.3926
8	*	0.1526	0.1380	0.1121	0.0624	0.0629	0.1023	0.1206	0.1543	0.1457	0.1568	0.1579
9	*	0.0393	0.0000	0.0000	0.0000	0.0000	0.0225	0.0397	0.0345	0.0523	0.0276	0.0249
10	*	0.1996	0.1607	0.1238	0.0671	0.0673	0.1199	0.1507	0.2002	0.1966	0.2011	0.2015
11	*	0.0298	0.0000	0.0000	0.0000	0.0000	0.0163	0.0308	0.0262	0.0434	0.0212	0.0192
12	*	0.0018	0.0000	0.0000	0.0000	0.0000	0.0011	0.0019	0.0016	0.0026	0.0013	0.0012
13	*	0.0118	0.0000	0.0000	0.0000	0.0000	0.0063	0.0122	0.0106	0.0178	0.0088	0.0080
14	*	0.4049	0.0002	0.0000	0.0750	0.0530	0.1824	0.2444	0.3197	0.2079	0.1079	0.0744
15	*	0.1987	0.0000	0.0000	0.0204	0.0131	0.1016	0.1305	0.1433	0.1039	0.0540	0.0393
16	*	1.1629	0.0063	0.0002	0.1555	0.0938	0.3876	0.5566	0.6270	0.3656	0.1675	0.1166
17	*	0.1200	0.0000	0.0000	0.0089	0.0041	0.0462	0.0610	0.0535	0.0402	0.0191	0.0142
18	*	0.0386	0.0000	0.0000	0.0292	0.0214	0.0252	0.0396	0.0907	0.0542	0.0336	0.0215
19	*	0.0000	0.2401	0.1801	0.0261	0.0458	0.0000	0.0001	0.0850	0.1918	0.3034	0.3376
20	*	0.0000	0.5489	0.3851	0.0434	0.1002	0.0001	0.0043	0.5476	0.8539	1.0092	1.0622
21	*	0.0000	0.0993	0.1004	0.0271	0.2643	0.1645	0.1644	0.1364	0.0508	0.0198	0.0113
22	*	0.0000	0.0572	0.1188	0.0076	0.2586	0.2657	0.2165	0.0000	0.0080	0.0036	0.0032
23	*	0.0000	0.0000	0.0000	0.0745	0.0606	0.0000	0.0000	0.0025	0.0115	0.0217	0.0214
24	*	0.0000	0.0847	0.1458	0.0235	0.0746	0.1766	0.1165	0.0005	0.0081	0.0033	0.0026
25	*	0.0890	0.0000	0.0000	0.0000	0.0000	0.0891	0.0832	0.0851	0.0722	0.0791	0.0763
26	*	0.0000	0.0014	0.0002	0.2753	0.2420	0.0040	0.0148	0.1121	0.0826	0.0838	0.0734
27	*	0.0000	0.0000	0.0000	0.0828	0.0760	0.0000	0.0000	0.0000	0.0016	0.0206	0.0310

December 14, 2016

Memorandum to Carol Parr, Monica Pavlik

Page 30

28	*	0.0000	0.0560	0.0558	0.0747	0.0159	0.0341	0.0329	0.0182	0.0079	0.0029	0.0019
29	*	0.0026	0.0000	0.0000	0.0000	0.0000	0.0014	0.0031	0.0024	0.0053	0.0020	0.0019
30	*	0.0011	0.0000	0.0000	0.0000	0.0000	0.0006	0.0013	0.0010	0.0025	0.0009	0.0009
31	*	0.0015	0.0000	0.0000	0.0000	0.0000	0.0008	0.0018	0.0014	0.0031	0.0012	0.0011



COLORADO
Department of Transportation
Division of Transportation Development

Environmental Programs Branch
4201 E. Arkansas Ave., Shumate Bldg.
Denver, CO 80222-3400
(303) 757-9281

January 17, 2017

Mr. Paul Lee, Transportation Planner
Planning and Policy Program, Air Pollution Control Division
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246

SUBJECT: CDOT Project IM 0253-221, North I-25, SH 392 to SH 14 ROD 1 (Revision 2)

Dear Mr. Lee:

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) are preparing a Record of Decision (ROD) for the project referenced above. The purpose of the project is to implement transportation solutions for an important component of the regional I-25 transportation network to enhance east-west and north-south mobility. Transportation conformity requirements under 40 CFR Part 93 apply to this undertaking. CDOT requests your concurrence on air quality, as described below. An air quality technical report for the project is attached.

CDOT and FHWA documented the selection of Phase I of the Preferred Alternative for the North I-25 corridor in ROD 1 in 2011 (Figure 1). The original Phase I involved numerous infrastructure improvements, including installation of one continuous acceleration/deceleration lane in each direction on I-25 between SH 392 and SH 14 in Larimer County. Those lanes were to be added to the current two travel lanes in each direction.

Through ROD 1 Revision 2, FHWA is modifying only the prior selection of the accel/decel lanes for Phase I. CDOT has received a TIGER Discretionary Grant for the project from the US Department of Transportation, which is the reason for revisiting and accelerating the proposed improvements. The accel/decel lanes are being replaced with one Express Lane in each travel direction. In addition, one continuous accel/decel lane will be added in each travel direction from the I-25 Port of Entry to SH 14, for a fourth lane in direction in that segment. The Express Lanes were included in the full Preferred Alternative for the project, but were not included in the initial Phase I elements.

No interchanges or intersections will be affected, but relatively minor re-alignment of I-25 frontage road segments will occur. Cross sections of the proposed new I-25 configuration are shown in Figure 2.

I-25 between SH 392 and SH 14 is primarily a rural, but developing, corridor. The area along I-25 from SH 392 to SH 14 is subject to conformity requirements of the *Revised Carbon Monoxide Maintenance Plan, Fort Collins Attainment/Maintenance Area* and the *Denver Metropolitan Area and North Front Range 8-Hour Ozone State Implementation Plan*. Evaluations were completed to evaluate for potential exceedances of the relevant National Ambient Air Quality Standards (NAAQS) associated with the project.

Regional Conformity

Reconstruction of I-25 between SH 392 and SH 14 is included in the North Front Range Metropolitan Planning Organization's fiscally-constrained *2040 Regional Transportation Plan* and in the 2016-2019

Transportation Improvement Program under the North I-25 design-build project. Therefore, regional conformity for the proposed improvements has been demonstrated.

Local Conformity

The Fort Collins carbon monoxide plan is a Limited Maintenance Plan, which allows for a less rigorous approach in general. Nevertheless, CDOT performed carbon monoxide hot spot analysis on a study area intersection (Harmony Road at the southbound I-25 ramps), which is predicted to function at level of service E or worse, to review potential localized air quality impacts of the planned project. The worst-case modeled 1-hour and 8-hour average carbon monoxide concentrations were 9.0 parts per million (ppm) and 6.2 ppm, respectively, for the completed project conditions. These results are compared to a one-hour NAAQS of 35 ppm and an 8-hour NAAQS of 9 ppm. Because modeling of the worst-case conditions resulted in values below the respective NAAQS, the project will not cause or contribute to an exceedance, worsen an existing exceedance, or delay timely attainment of the carbon monoxide NAAQS. The proposed project is not expected to interfere with the Fort Collins Maintenance Plan or its attainment goals.

Ozone is a regional pollutant and is not evaluated at the local level, so no further information is provided for ozone.

Other Air Quality Considerations

A quantitative mobile source air toxic (MSAT) analysis was previously prepared in support of ROD 1. Through that, it was concluded (and concurred with by your office in correspondence dated September 12, 2011) that "The North I-25 Preferred Alternative Phase I will provide air quality benefits from improved interchange operations, from less congestion and idling emissions and from increased transit routing and ridership." The proposed I-25 Express Lanes project would result in no change in predicted daily vehicle miles of travel (VMT) on I-25 relative to No Action (the same numbers of vehicles will be traveling the same I-25 segments), so the previous MSAT findings for ROD 1 remain valid. Moreover, emissions will likely be lower than present levels in 2040 as a result of national control programs projected to reduce annual MSAT emissions by over 90 percent from 2010 to 2050. Based on the earlier findings and predicted 2040 average daily traffic volumes on I-25 of less than 140,000 in the corridor, a qualitative evaluation of MSATs was prepared for the I-25 Express Lanes as an update and is in the attached technical report.

Daily VMT on I-25 between SH 392 and SH 14 represents approximately 0.484 percent of estimated 2040 total Colorado travel activity. The Express Lanes project is not expected to change overall VMT compared to Phase I, but is expected to improve I-25 traffic operations and efficiency compared to No Action and thereby reduce vehicle emissions. As a result, FHWA estimates that the proposed project could result in a potential small decrease in global carbon dioxide emissions in 2040 of less than one hundred-thousandth of one percent, and an equivalent percentage decrease in Colorado's share of global emissions in 2040.

Summary

The I-25 ROD 1 Revision 2 project conforms to the State Implementation Plan's purpose of "eliminating or reducing the severity and number of violations" of the NAAQS and "achieving expeditious attainment of the NAAQS." The project will not:

- cause or contribute to any new violation of any standard in any area;
- increase the frequency or severity of any existing violation of any standard in any area; or
- delay timely attainment of any standard or other milestones in any area.

If you concur with the results of the air quality analysis and the conclusions regarding conformity for this project, please sign below and return this letter to CDOT Air Quality and Noise Program Manager Rose

Mr. Paul Lee
January 17, 2017
Page 3

Waldman by February 1, 2017. If you have questions or concerns regarding this correspondence or the attached report, please contact Ms. Waldman at (303) 757-9016 or rose.waldman@state.co.us.

Very truly yours,



Jane Hann, Manager
Environmental Programs Branch

Attachment: December 2016 Air Quality Technical Report

cc: Carol Parr, CDOT Region 4 Planning and Environmental Manager

I Concur:  _____ 1/19/2017
Paul Lee, Transportation Planner Date



COLORADO

Department of Transportation

Region 4

10601 West 10th Street
Greeley, CO 80634
(970) 350.2153 (Fax) 350.2203

February 14, 2017

Mr. Steve Turner
State Historic Preservation Officer
Colorado Historical Society
1200 Broadway
Denver, CO 80202

Dear Mr. Turner,

Re: Determinations of National Register of Historic Places Eligibility and Effect for CDOT Project IM 0253-179 (SA# 18357), North I-25 Revised Record of Decision 1, I-25 from State Highway 392 to State Highway 14, Larimer County, Colorado

Dear Mr. Turner,

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) are currently preparing the North I-25 Revised Record of Decision (ROD) 1 for Interstate 25 (I-25) from State Highway (SH) 392 to SH 14. This letter and the following attachments constitute our request for concurrence on determinations of National Register of Historic Places (NRHP)-eligibility and effects for roadway improvements identified in the revised ROD 1. Starting in 2006, historic resources survey and impact assessment work has been conducted for proposed transportation improvements to the North I-25 corridor. As design for the proposed transportation improvements has progressed, specific construction projects have moved forward, including the project referenced above which is a revision to ROD 1.

Project Description

FHWA and CDOT documented the selection of Phase I of the Preferred Alternative for the North I-25 project in ROD 1 in 2011. Phase I involved numerous infrastructure improvements across the project area, including installation of a continuous acceleration/deceleration (accel/decel) lane in each travel direction on I-25 between SH 392 and SH 14 in Larimer County. The added lanes would result in three lanes for each I-25 travel direction (northbound and southbound). Through Revised ROD 1, FHWA is modifying the prior selection of the accel/decel lanes for Phase I by replacement with Express Lanes in each direction plus one continuous accel/decel lane will be added in each direction from the I-25 weigh station facility (south of Prospect Road) to SH 14. The proposed transportation improvements are subject of the North I-25 Section 106 Programmatic Agreement (PA), signed with your agency in December 2011. Pursuant to stipulations in that PA, a re-evaluation will occur at the initiation of each construction project. The information provided here constitutes the re-evaluation of NRHP-eligibility and effects for properties in the Area of Potential Effects (APE) for the North I-25 SH 392 to SH 14 Revised ROD 1 project.

Area of Potential Effects

The North I-25 corridor between SH 392 and SH 14 is primarily surrounded by rural lands. However, commercial and residential development are expanding at the Mulberry Street interchange at the north end of the project area and at the SH 392 interchange to the south. The Area of Potential Effects (APE) identified in the North I-25 Environmental Impact Statement (EIS) was utilized for this project and includes the parcels of land immediately adjacent to the right-of-way (ROW) for I-25 between SH 392

and SH 14. The APE also includes parcels directly adjacent to proposed project design footprint at East County Road 36 (Kechter Road), East Prospect Road, and SH 14 (East Mulberry Street) interchanges. Previously un-surveyed properties containing buildings and structures 45 years of age or older have been evaluated for NRHP-eligibility. Please refer to the attached APE map (Attachment A) for additional detail.

Survey Methods and Results

The survey methods employed for this investigation include archival research utilizing the following resources to determine whether historic properties could be affected by the proposed project:

- A file search through the Office of Archaeology and Historic Preservation (OAHP) online COMPASS cultural resources database to determine whether previously recorded NRHP-eligible or -listed resources were located within or near the proposed project area;
- Review of Larimer County Assessor's Office property records to determine if any buildings within the project study area met the minimum age requirement for historic eligibility. Due to the extended time that may be required to construct the project, properties at least 45 years old were evaluated for the proposed project.
- Analysis of U.S. Geological Survey (USGS) historic topographical maps and historic aerial photography to determine changes in the built landscape over time.
- Review of previous cultural resource reports and site forms including:
 - Hermsen Consultants and Centennial Archaeology, Inc. 2007. *Historic Resources Survey Report for North I-25 EIS*. Prepared for CDOT.
- Site visits to survey and document existing and potentially historic resources.
- The information collected through the archival and field investigations was used to create inventory forms (Architectural Inventory Forms - OAHP Form #1403), with attachments including photographs and maps.

CDOT and Felsburg Holt & Ullevig (FHU) documented eight (8) properties as part of the North I-25 SH 392 to SH 14 Revised ROD 1 project. Additional structures were found to be within the APE, however only properties directly adjacent to North I-25 ROW were surveyed and evaluated for NRHP eligibility, which is consistent with the 2007 North I-25 EIS.

Sites originally evaluated as part of the 2007 North I-25 EIS were not re-evaluated for eligibility, since the ten-year threshold has not been met as outlined in the North I-25 Section 106 PA [Stipulation 1(c)(2)(a)], which states "Re-evaluations of eligibility for previously recorded historic properties shall be done ten years after the initial recording." Other buildings either within or adjacent to the proposed project that failed to meet the 45-year age threshold were identified and were not documented as part of this analysis.

Determinations of Eligibility and Effects

Previously Recorded Resources

Fifteen (15) previously recorded resources were found to be located within the North I-25 SH 392 to SH 14 Revised ROD 1 Project APE. A summary of eligibility and effects determinations for these fifteen resources is outlined in Table 1 below.

Table 1. Previously Recorded Resources located within the APE

(Resource No.) Site Name	Address/Location	Site Type	NRHP-Eligibility	Effects Determinations
(5LR.1731.2) Colorado Central Railroad	SE ¼ of NE ¼ T7N, R68W, Sect. 9	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR.12555) Sunstate Equipment Company	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.12556) Moore Residence	3716 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.12557) Culbertson Residence	3604 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.11395) Kaplan Residence	1012 SE Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.11394) Northern Auto Brokers	1101 Smithfield Dr. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.11393) Rudolph Farm	1028-1100 SE Frontage Road Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.995.4) Lake Canal	SE ¼ of NE ¼ T7N, R68W, Sect. 16	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.995.6) Lake Canal	NE ¼ of NW ¼ T7N, R68W, Sect. 22	Structure	<i>Not Eligible (Officially) 12/20/2010</i>	<i>No Historic Properties Affected</i>
(5LR.1327.6) Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway	SE ¼ of SW ¼ T7N, R68W, Sect. 27	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR.9504) Cache La Poudre River Bridge B- 17-DI	SE ¼ of NW ¼ T7N, R68W, Sect. 34	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.2160.1) Boxelder Ditch	NE ¼ of SW ¼ T7N, R68W, Sect. 34	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>

Table 1. Previously Recorded Resources located within the APE

(Resource No.) Site Name	Address/Location	Site Type	NRHP-Eligibility	Effects Determinations
(5LR.12561) Hoffner Veterinary Clinic/RV World	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.11411.1) Arthur Lateral Ditch	NE ¼ of SW ¼ T6N, R68W, Sect. 10	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.8931.1) Fossil Creek Reservoir Outlet (canal)	NE ¼ of NW ¼ T6N, R68W, Sect. 15	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>

Newly Evaluated Resources

Nine (9) new properties were inventoried on the standard OAHP Form 1403 and evaluated for NRHP-eligibility and effects. Attachment B includes the site forms for these 9 newly recorded properties.

Centennial Livestock Auction (5LR.14088): This resource consists of a simple, rectangular plan office building built in 1968 which is part of a larger complex of agricultural buildings. The simple metal utility building does not meet any of the eligibility requirements outlined by the NRHP. The building was not found to be associated with any historically significant events or trends and/or people. Additionally, the building does not embody the distinctive significant characteristics of a type, period, method of construction, or engineering technique. The site is also not likely to yield important historical information. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14088, the Centennial Livestock Auction facility.

Econolodge Motel (5LR.14089): This resource consists of a large commercial motel complex with stucco siding, metal roofing and a porte-cochere over the entrance. The original portion of the motel was constructed in 1966, while several additions and renovations have occurred over time bringing the complex to its present condition. The structure does not meet any of the NRHP-eligibility requirements and was not found to be associated with historically significant events or trends and/or people. Additionally, the building does not embody the distinctive characteristics of a significant type, period, method of construction, or engineering technique. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14089, the Econolodge Motel.

Shell Gas and Schrader's Country Store (5LR.14090): This resource consists of a small rectangular gas station building built in 1966, and two newer gas station canopies and pumps, the result of being remodeled in 1988. The building is clad in light red brick, with buff accent bricks. The building was not found to be associated with historically significant events or trends and/or people. The gas station embodies some of the characteristics of the Oblong Box style gas station (rectangular plan, lack of ornamentation, corner office), but it does not have the flat roof or service bays typical of this style. Therefore, the building does not represent a definitive style, nor is it the work of a master and does not qualify under Criterion C. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts

as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14090, the Shell Gas and Schrader's Country Store.

Shell Gas Station (5LR.14091): This resource consists of a small rectangular gas station building constructed in 1966, and a newer gas station canopy with gas pumps. The building is clad in painted vertical siding, and has a flat roof of horizontal siding, projecting about one foot over the north (front), east and west elevations. The building was not found to be associated with historically significant events or trends and/or people. The gas station embodies some of the characteristics of the Oblong Box style gas station (rectangular plan, lack of ornamentation, corner office), but it does not have the service bays typical of this style and has undergone modifications to the exterior which have altered the form of the building. Therefore, the building does not represent a definitive style, nor is it the work of a master and does not qualify under Criterion C. The site is also not likely to yield important historical information through further investigation. Therefore, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14091, the Shell Gas Station.

Colorado State University Research Farm (5LR.14092): This resource consists of two individual houses that are now owned and maintained by the Colorado State University Research Foundation. One house, built in 1915, is located southeast of a small loop in the access road into the parcel; this house is the smaller of the two. It is one story in height, with a side-gabled roof (saltbox), a central chimney, and two one-over-one double-hung windows on the north and south facades. The other house was constructed in 1927 and is located about 180 feet to the northwest directly adjacent to the access road. The rectangular-plan building is 1½ stories, with a front gabled roof. The buildings were not found to be associated with historically significant events or trends and/or people. The 1927 house does have some distinctive characteristics of the bungalow type, but does not embody enough distinctive characteristics including the large front porch, large overhanging eaves, clipped gable or pent-roofed bay windows, nor do the buildings represent the work of a master. Therefore, the property is not eligible under NRHP Criterion C. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14092, the Colorado State University Research Farm.

North Poudre Irrigation Company Property (5LR.14093): This resource consists of a small, 1-story hipped roof rural cottage. The main portion of the house with a hipped roof has a square floor plan. The main entrance is located on the east elevation, at the end of a small shed roof wing that protrudes from the main portion of the house toward East County Road 34E. One large double-hung window is also located on the east elevation and is located on the main portion of the house. A shed roof porch extends along the entire west elevation of the house. No association was made between the resource and historically significant events or trends and/or people and is not eligible under NRHP Criteria A or B. While the building does have some characteristics of the Classic Cottage building type, including a square floor plan and hipped-roof, the building does not embody the distinctive characteristics to be considered a good representation of the Classic Cottage type including a central dormer, porch with Doric columns, flared eaves, or ornate window surrounds. Therefore, the building does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not meet NRHP Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14093, the North Poudre Irrigation Company Property.

Fort Collins Archery Association (5LR.14094): This resource consists of a small, 1-story side-gabled house with a small gabled wing on the north end of the building. An entrance door is located along the south or main façade of the building as well as triple and twin sets of short double-hung windows. Larger double-hung windows are found throughout. The building has horizontal aluminum clapboard siding and simple lines. The resource was not found to be associated with historically important events, trends and/or people and is not eligible under NRHP Criteria A or B. The building is a simple rural house

with no ornamentation, details or unique features and is therefore not eligible under Criterion C. Since the site has been redeveloped as an archery range in recent years, the site is not likely to yield important historical information through further investigation and is not eligible under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14094, the Fort Collins Archery Association property.

Stephen Weber Farm (5LR.14095): This resource consists of a sprawling farmhouse comprised of a one-and-one-half story portion (west end) and two-story portion (east end). The original house, built in 1917, comprises the west end of the dwelling which originally consisted of a vernacular version of the Bungalow-type house. This original portion has a large covered porch over the main façade (west elevation) with a large gable with second floor windows facing East County Road 34E. No association was found between the resource and historically significant events, trends and/or people and is not eligible under Criterion A or B of the NRHP. While the building does retain some characteristics of the Bungalow building type and was a vernacular version of that type when it was originally constructed in 1917, including the original one-and-one-half story portion of the house (west end), knee braces and large overhangs, the large two-story addition on the east and replacement siding and windows throughout have altered the distinctive character-defining characteristics of the building. Therefore, the house does not embody a good representation of the Bungalow type and does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not qualify under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14095, the Stephen Weber Farm.

Harmony-McMurray Property (5LR.14097): This resource consists of an early twentieth century residence located along the north side of East County Road 36, just west of I-25. The west end of the building, which comprises the original house, was constructed in 1910, while the east end was an addition built in 1966. The east addition has a low-pitched gabled roof oriented east/west, perpendicular to the 1910 portion of the house. Review of Bureau of Land Management (BLM) General Land Office (GLO) records did not link the subject parcel to the original landowner or patentee. As a result, no association was made between the resource and historically significant events, trends and/or people and is not eligible under Criterion A or B of the NRHP. While the building does have some characteristics of the Ranch building type, including an elongated floor plan and large sliding-sash windows, the building does not embody the distinctive characteristics to represent a unique example of the Ranch type including wide overhanging eaves, minimal front porch with decorative wrought iron supports, false shutters or low wide chimney. The 1966 addition is an example of typical home construction during the 1960s and 1970s and does not represent an exemplary form of the Ranch type. Therefore, the resource does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not qualify under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14097, the Harmony-McMurray Property.

John Jensen Property (5905 SW Frontage Road): This property contains several farm buildings dating from 1908 to 1940, which meet the minimum age requirement of 45 years for potential NRHP-eligibility. The site was inaccessible to field surveying and formal evaluation for eligibility. As a result, the site is being treated, in terms of Section 106, as eligible for the NRHP for purposes of this project. Impacts resulting from the proposed transportation improvements, including widening the existing roadway from two to three lanes, will result in the taking of approximately 0.03 acres of land in a strip 35 ft. wide by 450 ft. long from the east edge of the parcel. All farm buildings are located approximately 350 ft. west of I-25 in a grove of mature deciduous trees. Because no direct impacts would occur to any of the buildings or features associated with the John Jensen Property, and because the small land acquisition would not change the setting, feel design or workmanship of the site, the proposed project would result in *no adverse* effect with regard to the John Jensen Property.

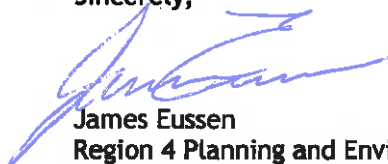
Table 1 Newly Evaluated Resources within the APE

(Resource No.) Site Name	Address/Location	Site Type	National Register Eligibility	Effects Determinations
(5LR.14088) Centennial Livestock Auction	113 NW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14089) Econolodge Motel	3836 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14090) Shell Gas and Schrader's Country Store	3733 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14091) Shell Gas Station	3809 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14092) Colorado State University Research Farm	3829 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14093) North Poudre Irrigation Company Property	4433 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14094) Fort Collins Archery Association	2825 SW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14095) Stephen Weber Property	4400 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14097) Harmony-McMurray LLC Property	4308 E. County Road 36 Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
John Jensen Property	5905 SW Frontage Rd. Fort Collins, CO	Building	<i>Eligible (Field)</i>	<i>No Adverse Effect</i>

We hereby request your concurrence with the proposed APE and with our determinations of NRHP-eligibility and effects. Your response is necessary for CDOT and FHWA's compliance with Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's regulations.

Thank you in advance for your prompt attention to this matter. If you require additional information, please contact Region 4 Historian Jason Marmor at (970) 350-2153 or jason.marmor@state.co.us.

Sincerely,



James Eussen
 Region 4 Planning and Environmental Unit Manager

Mr. Steve Turner, AIA
February 14, 2017
Page 8

cc: Carol Parr, Jason Marmor
File/Central Files

Enclosures: Attachment A: Area of Potential Effect Maps
Attachment B: Arch Inventory Form 1403 - Resources 5LR14088, 5LR14089, 5LR14090,
5LR14091, 5LR14092, 5LR14093, 5LR14094, 5LR14095, 5LR14097

Attachment A:

Area of Potential Effects Map

**North I-25 Revised ROD 1, SH 392 to SH 14
CDOT Project IM 0253-179 (SA# 18357)**

Attachment B:

Architectural Inventory Forms (OAHP Form 1403) and Attachments

5LR14088 Centennial Livestock Auction

5LR14089 Econolodge Motel

5LR14090 Shell Gas & Schrader's Country Store

5LR14091 Shell Gas Station

5LR14092 Colorado State University Research Farm

5LR14093 North Poudre Irrigation Company Property

5LR14094 Fort Collins Archery Association

5LR14095 Stephen Weber Property

5LR14097 Harmony-McMurray Property



COLORADO

Department of Transportation

Region 4

10601 West 10th Street
Greeley, CO 80634
(970) 350.2153 (Fax) 350.2203

February 14, 2017

Ms. Meegan Flenniken
Resource Program Manager
Planning, Development, & Land Stewardship
Department of Natural Resources
1800 S. County Road 31
Loveland, CO 80537
Dear Mr. Turner,

Re: Determinations of National Register of Historic Places Eligibility and Effect for CDOT Project IM 0253-179 (SA# 18357), North I-25 Revised Record of Decision 1, I-25 from State Highway 392 to State Highway 14, Larimer County, Colorado

Dear Ms. Flenniken,

The Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA) are currently preparing the North I-25 Revised Record of Decision (ROD) 1 for Interstate 25 (I-25) from State Highway (SH) 392 to SH 14. This letter and the following attachments constitute our request for concurrence on determinations of National Register of Historic Places (NRHP)-eligibility and effects for roadway improvements identified in the revised ROD 1. Starting in 2006, historic resources survey and impact assessment work has been conducted for proposed transportation improvements to the North I-25 corridor. As design for the proposed transportation improvements has progressed, specific construction projects have moved forward, including the project referenced above which is a revision to ROD 1.

Project Description

FHWA and CDOT documented the selection of Phase I of the Preferred Alternative for the North I-25 project in ROD 1 in 2011. Phase I involved numerous infrastructure improvements across the project area, including installation of a continuous acceleration/deceleration (accel/decel) lane in each travel direction on I-25 between SH 392 and SH 14 in Larimer County. The added lanes would result in three lanes for each I-25 travel direction (northbound and southbound). Through Revised ROD 1, FHWA is modifying the prior selection of the accel/decel lanes for Phase I by replacement with Express Lanes in each direction plus one continuous accel/decel lane will be added in each direction from the I-25 weigh station facility (south of Prospect Road) to SH 14. The proposed transportation improvements are subject of the North I-25 Section 106 Programmatic Agreement (PA), signed with your agency in December 2011. Pursuant to stipulations in that PA, a re-evaluation will occur at the initiation of each construction project. The information provided here constitutes the re-evaluation of NRHP-eligibility and effects for properties in the Area of Potential Effects (APE) for the North I-25 SH 392 to SH 14 Revised ROD 1 project.

Area of Potential Effects

The North I-25 corridor between SH 392 and SH 14 is primarily surrounded by rural lands. However, commercial and residential development are expanding at the Mulberry Street interchange at the north end of the project area and at the SH 392 interchange to the south. The Area of Potential Effects (APE) identified in the North I-25 Environmental Impact Statement (EIS) was utilized for this project and includes the parcels of land immediately adjacent to the right-of-way (ROW) for I-25 between SH 392

and SH 14. The APE also includes parcels directly adjacent to proposed project design footprint at East County Road 36 (Kechter Road), East Prospect Road, and SH 14 (East Mulberry Street) interchanges. Previously un-surveyed properties containing buildings and structures 45 years of age or older have been evaluated for NRHP-eligibility. Please refer to the attached APE map (Attachment A) for additional detail.

Survey Methods and Results

The survey methods employed for this investigation include archival research utilizing the following resources to determine whether historic properties could be affected by the proposed project:

- A file search through the Office of Archaeology and Historic Preservation (OAHP) online COMPASS cultural resources database to determine whether previously recorded NRHP-eligible or -listed resources were located within or near the proposed project area;
- Review of Larimer County Assessor's Office property records to determine if any buildings within the project study area met the minimum age requirement for historic eligibility. Due to the extended time that may be required to construct the project, properties at least 45 years old were evaluated for the proposed project.
- Analysis of U.S. Geological Survey (USGS) historic topographical maps and historic aerial photography to determine changes in the built landscape over time.
- Review of previous cultural resource reports and site forms including:
 - Hermsen Consultants and Centennial Archaeology, Inc. 2007. *Historic Resources Survey Report for North I-25 EIS*. Prepared for CDOT.
- Site visits to survey and document existing and potentially historic resources.
- The information collected through the archival and field investigations was used to create inventory forms (Architectural Inventory Forms - OAHP Form #1403), with attachments including photographs and maps.

CDOT and Felsburg Holt & Ullevig (FHU) documented eight (8) properties as part of the North I-25 SH 392 to SH 14 Revised ROD 1 project. Additional structures were found to be within the APE, however only properties directly adjacent to North I-25 ROW were surveyed and evaluated for NRHP eligibility, which is consistent with the 2007 North I-25 EIS.

Sites originally evaluated as part of the 2007 North I-25 EIS were not re-evaluated for eligibility, since the ten-year threshold has not been met as outlined in the North I-25 Section 106 PA [Stipulation 1(c)(2)(a)], which states "Re-evaluations of eligibility for previously recorded historic properties shall be done ten years after the initial recording." Other buildings either within or adjacent to the proposed project that failed to meet the 45-year age threshold were identified and were not documented as part of this analysis.

Determinations of Eligibility and Effects

Previously Recorded Resources

Fifteen (15) previously recorded resources were found to be located within the North I-25 SH 392 to SH 14 Revised ROD 1 Project APE. A summary of eligibility and effects determinations for these fifteen resources is outlined in Table 1 below.

Table 1. Previously Recorded Resources located within the APE

(Resource No.) Site Name	Address/Location	Site Type	NRHP-Eligibility	Effects Determinations
(5LR.1731.2) Colorado Central Railroad	SE ¼ of NE ¼ T7N, R68W, Sect. 9	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR.12555) Sunstate Equipment Company	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.12556) Moore Residence	3716 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.12557) Culbertson Residence	3604 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.11395) Kaplan Residence	1012 SE Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.11394) Northern Auto Brokers	1101 Smithfield Dr. Fort Collins, CO	Building	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.11393) Rudolph Farm	1028-1100 SE Frontage Road Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.995.4) Lake Canal	SE ¼ of NE ¼ T7N, R68W, Sect. 16	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.995.6) Lake Canal	NE ¼ of NW ¼ T7N, R68W, Sect. 22	Structure	<i>Not Eligible (Officially) 12/20/2010</i>	<i>No Historic Properties Affected</i>
(5LR.1327.6) Colorado & Southern Railroad/Greeley, Salt Lake & Pacific Railway	SE ¼ of SW ¼ T7N, R68W, Sect. 27	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>
(5LR.9504) Cache La Poudre River Bridge B- 17-DI	SE ¼ of NW ¼ T7N, R68W, Sect. 34	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.2160.1) Boxelder Ditch	NE ¼ of SW ¼ T7N, R68W, Sect. 34	Structure	<i>Eligible (Officially) 08/09/2007</i>	<i>No Adverse Effect</i>

Table 1. Previously Recorded Resources located within the APE

(Resource No.) Site Name	Address/Location	Site Type	NRHP-Eligibility	Effects Determinations
(5LR.12561) Hoffner Veterinary Clinic/RV World	4228 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Officially) 11/19/2010</i>	<i>No Historic Properties Affected</i>
(5LR.11411.1) Arthur Lateral Ditch	NE ¼ of SW ¼ T6N, R68W, Sect. 10	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>
(5LR.8931.1) Fossil Creek Reservoir Outlet (canal)	NE ¼ of NW ¼ T6N, R68W, Sect. 15	Structure	<i>Not Eligible (Officially) 08/09/2007</i>	<i>No Historic Properties Affected</i>

Newly Evaluated Resources

Nine (9) new properties were inventoried on the standard OAHF Form 1403 and evaluated for NRHP-eligibility and effects. Attachment B includes the site forms for these 9 newly recorded properties.

Centennial Livestock Auction (5LR.14088): This resource consists of a simple, rectangular plan office building built in 1968 which is part of a larger complex of agricultural buildings. The simple metal utility building does not meet any of the eligibility requirements outlined by the NRHP. The building was not found to be associated with any historically significant events or trends and/or people. Additionally, the building does not embody the distinctive significant characteristics of a type, period, method of construction, or engineering technique. The site is also not likely to yield important historical information. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14088, the Centennial Livestock Auction facility.

Econolodge Motel (5LR.14089): This resource consists of a large commercial motel complex with stucco siding, metal roofing and a porte-cochere over the entrance. The original portion of the motel was constructed in 1966, while several additions and renovations have occurred over time bringing the complex to its present condition. The structure does not meet any of the NRHP-eligibility requirements and was not found to be associated with historically significant events or trends and/or people. Additionally, the building does not embody the distinctive characteristics of a significant type, period, method of construction, or engineering technique. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14089, the Econolodge Motel.

Shell Gas and Schrader's Country Store (5LR.14090): This resource consists of a small rectangular gas station building built in 1966, and two newer gas station canopies and pumps, the result of being remodeled in 1988. The building is clad in light red brick, with buff accent bricks. The building was not found to be associated with historically significant events or trends and/or people. The gas station embodies some of the characteristics of the Oblong Box style gas station (rectangular plan, lack of ornamentation, corner office), but it does not have the flat roof or service bays typical of this style. Therefore, the building does not represent a definitive style, nor is it the work of a master and does not qualify under Criterion C. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts

as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14090, the Shell Gas and Schrader's Country Store.

Shell Gas Station (5LR.14091): This resource consists of a small rectangular gas station building constructed in 1966, and a newer gas station canopy with gas pumps. The building is clad in painted vertical siding, and has a flat roof of horizontal siding, projecting about one foot over the north (front), east and west elevations. The building was not found to be associated with historically significant events or trends and/or people. The gas station embodies some of the characteristics of the Oblong Box style gas station (rectangular plan, lack of ornamentation, corner office), but it does not have the service bays typical of this style and has undergone modifications to the exterior which have altered the form of the building. Therefore, the building does not represent a definitive style, nor is it the work of a master and does not qualify under Criterion C. The site is also not likely to yield important historical information through further investigation. Therefore, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14091, the Shell Gas Station.

Colorado State University Research Farm (5LR.14092): This resource consists of two individual houses that are now owned and maintained by the Colorado State University Research Foundation. One house, built in 1915, is located southeast of a small loop in the access road into the parcel; this house is the smaller of the two. It is one story in height, with a side-gabled roof (saltbox), a central chimney, and two one-over-one double-hung windows on the north and south facades. The other house was constructed in 1927 and is located about 180 feet to the northwest directly adjacent to the access road. The rectangular-plan building is 1½ stories, with a front gabled roof. The buildings were not found to be associated with historically significant events or trends and/or people. The 1927 house does have some distinctive characteristics of the bungalow type, but does not embody enough distinctive characteristics including the large front porch, large overhanging eaves, clipped gable or pent-roofed bay windows, nor do the buildings represent the work of a master. Therefore, the property is not eligible under NRHP Criterion C. The site is also not likely to yield important historical information through further investigation. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14092, the Colorado State University Research Farm.

North Poudre Irrigation Company Property (5LR.14093): This resource consists of a small, 1-story hipped roof rural cottage. The main portion of the house with a hipped roof has a square floor plan. The main entrance is located on the east elevation, at the end of a small shed roof wing that protrudes from the main portion of the house toward East County Road 34E. One large double-hung window is also located on the east elevation and is located on the main portion of the house. A shed roof porch extends along the entire west elevation of the house. No association was made between the resource and historically significant events or trends and/or people and is not eligible under NRHP Criteria A or B. While the building does have some characteristics of the Classic Cottage building type, including a square floor plan and hipped-roof, the building does not embody the distinctive characteristics to be considered a good representation of the Classic Cottage type including a central dormer, porch with Doric columns, flared eaves, or ornate window surrounds. Therefore, the building does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not meet NRHP Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14093, the North Poudre Irrigation Company Property.

Fort Collins Archery Association (5LR.14094): This resource consists of a small, 1-story side-gabled house with a small gabled wing on the north end of the building. An entrance door is located along the south or main façade of the building as well as triple and twin sets of short double-hung windows. Larger double-hung windows are found throughout. The building has horizontal aluminum clapboard siding and simple lines. The resource was not found to be associated with historically important events, trends and/or people and is not eligible under NRHP Criteria A or B. The building is a simple rural house

with no ornamentation, details or unique features and is therefore not eligible under Criterion C. Since the site has been redeveloped as an archery range in recent years, the site is not likely to yield important historical information through further investigation and is not eligible under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14094, the Fort Collins Archery Association property.

Stephen Weber Farm (5LR.14095): This resource consists of a sprawling farmhouse comprised of a one-and-one-half story portion (west end) and two-story portion (east end). The original house, built in 1917, comprises the west end of the dwelling which originally consisted of a vernacular version of the Bungalow-type house. This original portion has a large covered porch over the main façade (west elevation) with a large gable with second floor windows facing East County Road 34E. No association was found between the resource and historically significant events, trends and/or people and is not eligible under Criterion A or B of the NRHP. While the building does retain some characteristics of the Bungalow building type and was a vernacular version of that type when it was originally constructed in 1917, including the original one-and-one-half story portion of the house (west end), knee braces and large overhangs, the large two-story addition on the east and replacement siding and windows throughout have altered the distinctive character-defining characteristics of the building. Therefore, the house does not embody a good representation of the Bungalow type and does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not qualify under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14095, the Stephen Weber Farm.

Harmony-McMurray Property (5LR.14097): This resource consists of an early twentieth century residence located along the north side of East County Road 36, just west of I-25. The west end of the building, which comprises the original house, was constructed in 1910, while the east end was an addition built in 1966. The east addition has a low-pitched gabled roof oriented east/west, perpendicular to the 1910 portion of the house. Review of Bureau of Land Management (BLM) General Land Office (GLO) records did not link the subject parcel to the original landowner or patentee. As a result, no association was made between the resource and historically significant events, trends and/or people and is not eligible under Criterion A or B of the NRHP. While the building does have some characteristics of the Ranch building type, including an elongated floor plan and large sliding-sash windows, the building does not embody the distinctive characteristics to represent a unique example of the Ranch type including wide overhanging eaves, minimal front porch with decorative wrought iron supports, false shutters or low wide chimney. The 1966 addition is an example of typical home construction during the 1960s and 1970s and does not represent an exemplary form of the Ranch type. Therefore, the resource does not qualify for the NRHP under Criterion C. The site is also not likely to yield important historical information through further investigation and does not qualify under Criterion D. For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the North I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14097, the Harmony-McMurray Property.

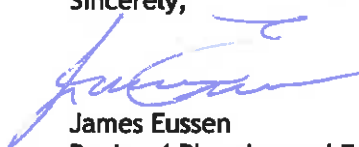
John Jensen Property (5905 SW Frontage Road): This property contains several farm buildings dating from 1908 to 1940, which meet the minimum age requirement of 45 years for potential NRHP-eligibility. The site was inaccessible to field surveying and formal evaluation for eligibility. As a result, the site is being treated, in terms of Section 106, as eligible for the NRHP for purposes of this project. Impacts resulting from the proposed transportation improvements, including widening the existing roadway from two to three lanes, will result in the taking of approximately 0.03 acres of land in a strip 35 ft. wide by 450 ft. long from the east edge of the parcel. All farm buildings are located approximately 350 ft. west of I-25 in a grove of mature deciduous trees. Because no direct impacts would occur to any of the buildings or features associated with the John Jensen Property, and because the small land acquisition would not change the setting, feel design or workmanship of the site, the proposed project would result in *no adverse* effect with regard to the John Jensen Property.

Table 1 Newly Evaluated Resources within the APE

(Resource No.) Site Name	Address/Location	Site Type	National Register Eligibility	Effects Determinations
(5LR.14088) Centennial Livestock Auction	113 NW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14089) Econolodge Motel	3836 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14090) Shell Gas and Schrader's Country Store	3733 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14091) Shell Gas Station	3809 E. Mulberry St. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14092) Colorado State University Research Farm	3829 E. Prospect Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14093) North Poudre Irrigation Company Property	4433 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14094) Fort Collins Archery Association	2825 SW Frontage Rd. Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14095) Stephen Weber Property	4400 E. County Rd. 34E Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
(5LR.14097) Harmony-McMurray LLC Property	4308 E. County Road 36 Fort Collins, CO	Building	<i>Not Eligible (Field)</i>	<i>No Historic Properties Affected</i>
John Jensen Property	5905 SW Frontage Rd. Fort Collins, CO	Building	<i>Eligible (Field)</i>	<i>No Adverse Effect</i>

We hereby invite your comments regarding the proposed APE and with our determinations of NRHP-eligibility and effects. Thank you in advance for your prompt attention to this matter. If you require additional information, please contact Region 4 Historian Jason Marmor at (970) 350-2153 or jason.marmor@state.co.us.

Sincerely,



James Eussen
 Region 4 Planning and Environmental Unit Manager

Ms. Flenniken
February 14, 2017
Page 8

cc: Carol Parr, Jason Marmor
File/Central Files

Enclosures: Attachment A: Area of Potential Effect Maps
Attachment B: Arch Inventory Form 1403 - Resources 5LR14088, 5LR14089, 5LR14090,
5LR14091, 5LR14092, 5LR14093, 5LR14094, 5LR14095, 5LR14097

Attachment A:

Area of Potential Effects Map

**North I-25 Revised ROD 1, SH 392 to SH 14
CDOT Project IM 0253-179 (SA# 18357)**

Attachment B:

Architectural Inventory Forms (OAHP Form 1403) and Attachments

5LR14088 Centennial Livestock Auction

5LR14089 Econolodge Motel

5LR14090 Shell Gas & Schrader's Country Store

5LR14091 Shell Gas Station

5LR14092 Colorado State University Research Farm

5LR14093 North Poudre Irrigation Company Property

5LR14094 Fort Collins Archery Association

5LR14095 Stephen Weber Property

5LR14097 Harmony-McMurray Property



U.S. Department
of Transportation
**Federal Highway
Administration**

Colorado Division

March 3, 2017

12300 W. Dakota Ave., Ste. 180
Lakewood, Colorado 80228
720-963-3000

Terri Blackmore
Executive Director, NFRMPO
419 Canyon Avenue, Suite 300
Fort Collins, CO 80521

Subject: Conformity Determination for the NFRMPO 2040 RTP Amendment and Amended 2016-2019 TIP

Dear Ms. Blackmore:

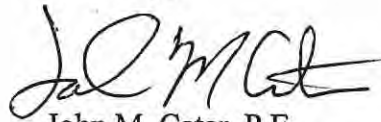
In accordance with the Clean Air Act of 1990, as amended, and 23 CFR 450, the U.S. Department of Transportation (USDOT) is required to make air quality conformity determinations of Regional Transportation Plans (RTP) and Transportation Improvement Programs (TIP) in non-attainment and maintenance areas. Consistent with the Federal Highway Administration (FHWA)/ Federal Transit Administration (FTA) Region 8 Memorandum of Agreement for Transportation Planning Oversight (MOA), the FHWA Colorado Division office signs the letter on behalf of FTA Region 8.

The North Front Range Metropolitan Planning Organization (NFRMPO) adopted an air quality conformity determination for the Fort Collins and Greeley urbanized areas for the 2040 RTP Amendment, as well as for the northern subarea of the Upper Front Range Transportation Planning Region (Upper Front Range TPR) 2040 RTP and the portion of the 2017-2020 State Transportation Improvement Program within the Upper Front Range region on February 2, 2017. On March 2, 2017, NFRMPO adopted a conformity determination for the Amended 2016-2019 TIP. The NFRMPO adopted both conformity determinations in its capacity as the Metropolitan Planning Organization.

Based on our evaluation of the NFRMPO 2040 RTP Amendment and Amended 2016-2019 TIP conformity determinations, in coordination with the EPA, the Denver Regional Council of Governments, the NFRMPO, the Colorado Air Quality Control Commission, the Regional Air Quality Council, and the Colorado Department of Transportation, we have determined that Fort Collins and Greeley urbanized areas have met the requirements of 40 CFR 51 and 93, 23 CFR 450, and 49 CFR 613 along with FHWA/FTA policies and guidance. Furthermore, the NFRMPO conformity determination is consistent with the 2008 DRCOG/NFRMPO 8-Hour Ozone MOA.

A conformity determination for the NFRMPO 2040 RTP Amendment and Amended 2016-2019 TIP is hereby made. We are also making a conformity determination for the northern subarea of the Upper Front Range TPR 2040 RTP and the Upper Front Range portion of the 2017-2020 State Transportation Improvement Program. This conformity determination does not restart the clock for conformity for either the NFRMPO Amended 2040 RTP or the Amended 2016-2019 TIP. Our action is consistent with the FHWA/FTA Transportation Planning MOA.

Sincerely,

A handwritten signature in black ink, appearing to read "John M. Cater".

John M. Cater, P.E.
Division Administrator

cc: Doug Rex, DRCOG
Barbara Kirkmeyer, Upper Front Range TPR
Paul Lee, APCD
Marissa Gaughan, CDOT
Tim Kirby, CDOT
Larry Squires, FTA
Ranae Tunison, FTA
Tim Russ, EPA



COLORADO
Department of Transportation
Region 4

Planning/Environmental Unit
10601 West 10th Street
Greeley, CO 80634
(970) 350.2167 (Fax) 350.2181

March 16, 2017

Wendy Williams
Assistant City Manager
City of Fort Collins
P.O. Box 580
Fort Collins, CO 80521

**Re: North I-25 Environmental Impact Statement
Record of Decision 1 (ROD 1)
I-25: SH 392 to SH 14, IM 0253-221
Updated Effects to Arapaho Bend Natural Area**

Dear Wendy:

The Federal Highway Administration (FHWA) in cooperation with the Colorado Department of Transportation (CDOT) is in the process of preparing a Reevaluation for Record of Decision 1 (ROD 1) for the referenced project. The North I-25 (SH 392 to SH 14) project is part of the multi-modal corridor improvements identified in the North I-25 Final Environmental Impact Statement (FEIS) (August 2011) and ROD 1 (December 2011). The ROD 1 included continuous acceleration/deceleration (accel/decel) lanes between State Highway (SH) 392 (MP 262) and SH 14 (MP 269). The project as proposed in the Reevaluation, adds one buffer separated Express Lane in each direction from SH 392 to SH 14 and changes the limits of the accel/decel lanes to MP 267 (Port-of-Entry) to MP 269 (SH 14). The Express Lanes were evaluated as part of the FEIS and are part of the Preferred Alternative but were not included in ROD 1.

Under the reevaluation for ROD 1, design changes have occurred that will change impacts to the Arapaho Bend Natural Area described in the FEIS and in our previous correspondence with the City. At the request of the City, CDOT has revised the proposed design from a retaining wall to a sloped embankment along the Arapaho Bend Natural Area to further minimize harm to this resource. The purpose of this letter is to inform the City of Fort Collins of the extent of these design changes, describe the changed impacts to the Arapaho Bend Natural Area, and request written concurrence from the City that the revised project design will not adversely affect the recreational activities, features, and attributes that qualify this resource for protection under Section 4(f) (see Section 4(f) background below). Although this design change results in extending the slope of the roadway further into the Arapaho Bend Natural Area, CDOT believes that the resource will not be adversely affected by the project, consistent with the *de minimis* determination made in the FEIS.

Section 4(f) Background

In 2005, Congress amended Title 49 USC 303, also known as Section 4(f), when it enacted the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (Public Law 109-59, enacted August 10, 2005) (SAFETEA-LU). Section 6009 of SAFETEA-LU added a new subsection to Section 4(f), which authorizes the Secretary of Transportation to approve a project that uses Section 4(f) lands without analysis of feasible and prudent avoidance alternatives if it would have *de minimis* impacts upon the Section 4(f) resource. The impacts of a transportation project on a park, recreation



area, or wildlife and waterfowl refuge that qualifies for Section 4(f) protection may be determined to be *de minimis* if:

1. The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f);
2. The official(s) with jurisdiction over the property are informed of FHWA's intent to make the *de minimis* impact finding based on their written concurrence that the project will not adversely affect the activities, features, and attributes that qualify the property for protection under Section 4(f); and
3. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, and attributes of the Section 4(f) resource.

It has been previously determined by CDOT and FHWA that the Arapaho Bend Natural Area, as a publicly-owned recreational area administered by the City of Fort Collins, qualifies for Section 4(f) protection as defined in 23 Code of Federal Regulations (CFR) 774.17 and would experience a use by the project. The City of Fort Collins previously concurred (by letter dated June 14, 2011) with CDOT's assessment that the project would not adversely affect this resource and that FHWA intended on making a *de minimis* impact finding.

Section 4(f) Use of the Arapaho Bend Natural Area

Impacts Described in the FEIS

Project impacts to the Arapaho Bend Natural Area described in the FEIS included incidental use of a high-activity area and land adjacent to highway right-of-way, increased overhead shading due to a widened bridge deck, and bank stabilization along the Cache la Poudre River. Demolition areas would be reclaimed and revegetated, and no impacts would result in a change of activities or use areas at the Arapaho Bend Natural Area.

Measures to Minimize Harm Described in the FEIS

Measures to minimize harm to this resource included building retaining walls of approximately 2,000 feet in length along the Harmony Road/I-25 interchange ramps north of Harmony Road to minimize right-of-way impacts to the Arapaho Bend Natural Area.

Updated Measures to Minimize Harm since the FEIS

Since the FEIS, the City of Fort Collins, as the official with jurisdiction over the Arapaho Bend Natural Area, expressed concern to CDOT that the retaining walls proposed to minimize harm to the resource would introduce a large, unnatural, and imposing structure that would be counter to the purpose of the Arapaho Bend Natural Area. The City felt that the retaining wall would highlight, rather than screen, the proposed I-25 infrastructure. Therefore, the City requested that CDOT consider building a sloped embankment instead of the retaining wall, even if such a change would result in greater acreage impacts to the resource. In response to the City's request, CDOT modified the design, which is addressed in the Reevaluation currently being prepared, to include a sloped embankment instead of a retaining wall. This design change would result in an additional 1.89 acres of use of the approximate 287-acre Arapaho Bend Natural Area, for a total of approximately 4.96 acres of use of the resource. None of the features or amenities of the resource would be used as a result of this additional impact, and the utility of the remainder of the Arapaho Bend Natural Area would not be diminished. In conclusion, this design change will not change the Section 4(f) *de minimis* determination previously made for this project.



Mitigation Measures

The mitigation measures identified in the FEIS remain relevant, and are listed below.

- CDOT will reclaim and revegetate in-kind the areas where the existing bridges are removed.
- CDOT will revegetate the proposed slopes with native grass species.
- CDOT will investigate the suitability of land acquisition for replacement of impacted lands used by the transportation improvements.

Public Involvement

Public input on the possible findings of *de minimis* was originally requested during the public comment period for the DEIS and FEIS, with specific requests to provide input on the proposed *de minimis* findings made at the DEIS public hearings. The public was also provided an opportunity to further comment on the revised improvements and potential impacts through the Land Conservation and Stewardship Board. No public comments expressed concern with the impacts to this resource or the intent to make a *de minimis* impact finding.

Request for Concurrence

CDOT requests written concurrence from the City of Fort Collins that the effects of the project as described above, after considering the proposed measures to minimize harm and mitigation measures, will not adversely affect the activities, features, and attributes of the Arapaho Bend Natural Area. This written concurrence will help satisfy the concurrence and consultation requirements of 23 CFR § 774.5(b)(2). Concurrence can be provided either by signing and dating the signature block at the end of this letter, or by separate letter from the City of Fort Collins to CDOT at the address shown above.

Intent for *De Minimis* Finding

Pending your concurrence, CDOT believes that the changed impacts to Arapaho Bend Natural Area described above will not adversely affect the activities, features, and attributes of the recreational area. Based on this finding, and taking into consideration the minimization and mitigation measures that have been proposed and public input received, CDOT recommends and anticipates FHWA's concurrence that the proposed action will have *de minimis* impacts to the Arapaho Bend Natural Area, and that an analysis of feasible and prudent avoidance alternatives under Section 4(f) is not required.

If you have any questions, please contact Nathan Silberhorn, CDOT Project Manager at Nathan.silberhorn@state.co.us or (970) 350-2138.

Sincerely,



Carol Parr
CDOT Project Manager

Enclosures:

December 22, 2016 letter from City of Fort Collins (NAD) to CDOT
Figure showing use of Arapaho Bend Natural Area as presented in FEIS
Figure showing use of Arapaho Bend Natural Area due to design change

cc: Monica Pavlik, FHWA
File



Concurrence

As the official with jurisdiction over Arapaho Bend Natural Area, I hereby concur with the recommendations of the project proponents that the use and impacts associated with this project, along with the identified minimization and mitigation measures, will not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

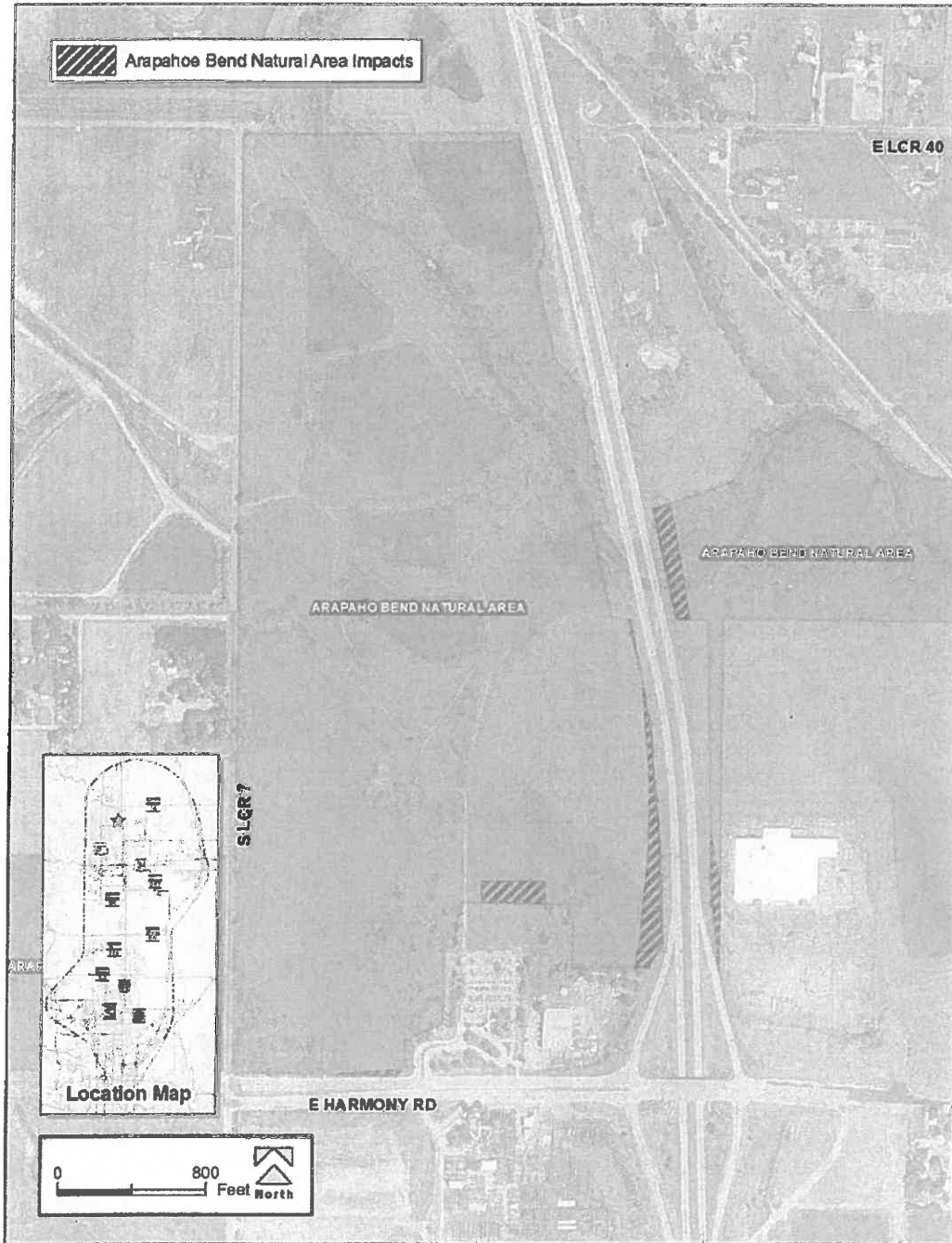
By: Wendy Williams
Wendy Williams

Title: Assistant City Manager

Date: 3/16/17



Use of Arapaho Bend Natural Area as Presented in the FEIS



STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION
Planning & Environmental Section
10601 West 10th Street
Greeley, Colorado 80634



COLORADO
Department of Transportation

March 20, 2017

Mr. Steve Turner, AIA
State Historic Preservation Officer
History Colorado Center
1200 Broadway
Denver, CO 80203

Re: Determinations of NRHP Eligibility and Effect for resource 5LR.14128 Jensen Property, CDOT Project IM 0253-179 (SA# 18357), North I-25 Revised Record of Decision 1, I-25 from State Highway 392 to State Highway 14, Larimer County, Colorado

Dear Mr. Turner,

This letter and the following attachments seek to provide additional information to our initial consultation with your office for the North I-25, SH 392 to SH 14 Revised Record of Decision (ROD) 1, on February 14, 2017. The additional information is the result of one (1) new survey at a formerly inaccessible site within the Area of Potential Effects (APE). This site, which we recently gained access to, is located at 5905 SW Frontage Road, Fort Collins, Larimer County, Colorado. We seek your concurrence on National Register of Historic Places (NRHP) eligibility and effects for the above-mentioned property which has been recorded under resource number 5LR.14128 Jensen Property.

Project Description

FHWA and CDOT documented the selection of Phase I of the Preferred Alternative for the North I-25 project in ROD 1 in 2011. Phase I involved numerous infrastructure improvements across the project area, including installation of a continuous acceleration/deceleration (accel/decel) lane in each travel direction on I-25 between SH 392 and SH 14 in Larimer County. The added lanes would result in three lanes for each I-25 travel direction. Through Revised ROD 1, FHWA is modifying the prior selection of the accel/decel lanes for Phase I by replacement with Express Lanes in each direction plus one continuous acceleration/deceleration lane will be added in each direction from the I-25 weigh station facility (south of Prospect Road) to SH 14. The proposed transportation improvements are subject of the North I-25 Section 106 Programmatic Agreement (PA), signed with your agency in December 2011. Pursuant to stipulations in that PA, a re-evaluation will occur at the initiation of each construction project. This information constitutes the re-evaluation of eligibility and effects for the above-mentioned property, which is located in the APE for the N I-25, SH 392 to SH 14 Revised ROD 1 project.

farm utility building with plywood siding. No date of construction was retrieved from the local file search for either the small secondary dwelling or the plywood-sided utility building. However, the secondary dwelling is likely from the period between construction of the main house (1908) and approximately 1930, based on the gabled-ell building type and the utility building appears much newer based on the plywood exterior and lack of overhangs and other vernacular building details. The gabled-ell secondary dwelling is severely deteriorated from neglect and appears to be vacant and/or used as a storage shed at present. Some windows and siding have been either broken or removed from the exterior of the secondary dwelling and the porch appears to be a reconstruction due to the use of plywood and newer dimensional lumber.

Review of local historical information did not establish a definitive association of the resource under Criterion A or B. The property where the resource is located was part of an original claim by Thomas Cline, a potential early settler of Larimer County. According to Farm Owners of Northern Colorado 1915, a William and Grace Mathiesen whom were ranchers, were found to be farmers in the same section that the resource is located around the time that the 1908-era house was constructed. However, no direct link was made between either the Cline or Mathiesen family and the recorded farm house and outbuildings.

The 1908-era house has been altered as a result of replacement of original building materials including exterior siding, windows and doors and construction of shed roof additions and therefore does not exemplify any particular building style or type. The secondary dwelling does retain some characteristics of the gabled-ell building type, which was a common vernacular building type at the time. However, due to years of neglect, many of the building components have been damaged including exterior siding and windows and the front porch appears to have been reconstructed due to the presence of newer building materials. The outbuildings are also in poor condition and there is evidence of alterations and expansions to the buildings. Therefore, the house and outbuildings are not exemplary representations of early twentieth century agricultural buildings and do not qualify under Criterion C. The site is also not likely to yield important information to historic or prehistoric inhabitation due to major site alterations from construction of Harris Reservoir A and adjacent sand and gravel mining operations and does not qualify under Criterion D.

For these reasons, the site is considered *not eligible*. Proposed impacts as a result of the N I-25 SH 392 to SH 14 Revised ROD 1 project would result in *no historic properties affected* with regard to resource 5LR.14128 Jensen Property. The recorded resource was inventoried on standard OAHP Form 1403 and can be found in **Attachment B**.

A summary of eligibility and effect determinations is outlined in **Table 1** below.

Attachment A:

Area of Potential Effects Map

North I-25 Revised ROD 1, SH 392 to SH 14

CDOT Project IM 0253-179 (SA# 18357)

Resource Number: 5LR.14128
Temporary Resource Number: N/A

OAHP1403
Rev. 9/98

COLORADO CULTURAL RESOURCE SURVEY

Architectural Inventory Form

Official eligibility determination
(OAHP use only)

Date _____ Initials _____
____ Determined Eligible- NR
____ Determined Not Eligible- NR
____ Determined Eligible- SR
____ Determined Not Eligible- SR
____ Need Data
____ Contributes to eligible NR District
____ Noncontributing to eligible NR District

I. IDENTIFICATION

1. Resource number: 5LR.14128
2. Temporary resource number: N/A
3. County: Larimer
4. City: Fort Collins
5. Historic building name: N/A
6. Current building name: Jensen Property
7. Building address: 5905 SW Frontage Road, Fort Collins, CO 80528
8. Owner name and address: John B. Jensen, 5901 SW Frontage Road, Fort Collins, CO 80528

II. GEOGRAPHIC INFORMATION

9. P.M. 6 Township 6N Range 68W
SE ¼ of NW ¼ SE ¼ of NW ¼ section 10
10. UTM reference
Zone 13; 500522 mE 4483636 mN
11. USGS quad name: Timnath Colorado 1973
Year: see above Map scale: 7.5' X 15' Attach photo copy of appropriate map section.
12. Lot(s): N/A Block: N/A
Addition: N/A Year of Addition: N/A
13. Boundary Description and Justification: The boundary for this resource is defined by the legal parcel boundary: Parcel No. 86102-07-002. The boundary includes all land associated with the resource as it occurs today, since the size, location and configuration of the original land parcel associated with the resource is unknown.

III. Architectural Description

14. Building plan (footprint, shape): Square/Irregular
15. Dimensions in feet: Length 40 x Width 40
16. Number of stories: 1.5
17. Primary external wall material(s): Aluminum
18. Roof configuration: Gabled Roof, Shed Roof
19. Primary external roof material: Asphalt Roof/Composition Roof
20. Special features: Porch
21. General architectural description: The resource consists of an early twentieth century farm house and several outbuildings located on the west side of SW Frontage Road, approximately 0.35 miles south of E. County Road 36 (Kechter Road). The main house was built in 1908, and has a 1 ½-story gabled roof main section oriented east/west with 1-story shed roof sections along the north, south and east elevations of the 1 ½-story main section. The shed roof sections appear to be additions from more than one time period based on visible joints in the siding, location of various doorways and other inconsistent exterior details. The exterior of the house is clad in white aluminum siding, while the roof is covered in green asphalt shingles (1 ½-story section) and white asphalt roll roofing. Entrances are located on the south and east elevations and a variety of window types and sizes are found throughout the house.
22. Architectural style/building type: No Style/No Type

Resource Number: 5LR.14128

Temporary Resource Number: N/A

23. Landscaping or special setting features: The resource is located on a 25-acre parcel of land with an access drive off of SW Frontage Road. The parcel is roughly triangular in shape, with the Arthur Lateral Ditch defining the north and eastern border of the property. Large cottonwood and other deciduous trees and shrubs are located along the ditch, with the house and outbuildings located just west of the ditch. A large irrigation pond, known as Harris Reservoir A occupies the west side of the property and was constructed in 1987. Pasture space is located along the south end of the property. The property directly north of the resource is also owned by John Jensen and consists of the Island Lake Marina, 5887 SW Frontage Road. The Marina was constructed in
24. Associated buildings, features, or objects: Several outbuildings are located on the property. A farm utility building built in 1930 has concrete block walls up to the eave line with wood-sided gable end walls and sheet metal roofing. A one-story gabled-ell secondary dwelling is located just west of the main house. This small building has horizontal wood siding and gray asphalt roof shingles. Several windows have been broken out of the building and a porch on the south end appears to have been reconstructed due to the use of plywood and other newer dimensional lumber. The building is severely deteriorated and appears to be vacant and/or used for storage. No information has been recorded on this building with the Larimer County Assessor's database or Building Department including date of construction, but it appears to be early twentieth century. Two loathing sheds and a farm utility building built in 1940 are also located on the property and have asphalt roof shingles and wood siding. These sheds are in poor to moderate condition with many windows and doors either missing or boarded up. One additional small shed/garage with plywood siding is also located on the property. While no records were found for this small building, it appears to be more contemporary construction.

IV. ARCHITECTURAL HISTORY

25. Date of Construction: Estimate: _____ Actual: 1908
Source of information: Larimer County Assessor's Database
26. Architect: Unknown
Source of information: N/A
27. Builder/Contractor: Unknown
Source of information: N/A
28. Original owner: Unknown
Source of information: Larimer County Assessor's Database
29. Construction history (include description and dates of major additions, alterations, or demolitions): According to the Larimer County Assessor's database, the main house was constructed in 1908. Several outbuildings including utility and loafing sheds were constructed later between 1930 and 1940. A small secondary dwelling is also located on the property, the date of construction of which is unknown. The secondary dwelling appears to have been constructed between 1908, when the main house was constructed, and approximately 1930 based on the gabled-ell building type and external material usage. Additionally, no records were found of the construction of the small shed/garage with plywood siding, though it was likely built more recently. Very little information from the Larimer County Building Department was retrieved that showed permits for construction or remodeling of buildings.
30. Original location X Moved _____ Date of move(s): N/A

V. HISTORICAL ASSOCIATIONS

31. Original use(s): Domestic/Single Dwelling
32. Intermediate use(s):
33. Current use(s): Domestic/Single Dwelling
34. Site type(s): Rural Home
35. Historical background: Review of BLM General Land Office records indicate that the original owner of the 80 acres in the E ½ of the NW ¼ of Section 10 of which this resource is located on was awarded to Thomas Cline on 5/4/1892 through the Timber Culture Act. An account of a Thomas Cline was found in the 1911 book, *History of Larimer County* by Ansel Watrous, which tells how he came to the Cache la Poudre valley in 1860 as an overland

Resource Number: 5LR.14128

Temporary Resource Number: N/A

freighter, hunter and guide. He is said to have crossed the plains many times with a bull team, hauling freight from the Missouri River to the Rocky Mountains. A historical piece in the Fort Collins Coloradoan (March 28, 2004), states that Thomas Cline was the sixth permanent white settler to locate in the [Cache la Poudre] valley following Antoine Janis. Thomas Cline was born in 1836 in Holmes County, Ohio, later moving to Iowa with his father's family in 1850 before coming to Weld County in 1860 and settling on the Cache la Poudre River just west of the present town of Greeley. In 1862, it is said that he moved upstream to a location near the present town of Timnath. BLM GLO records indicate that his first purchase of land in Larimer County occurred on July 1, 1870 for 121.67 acres in Section 3 of Township 6 North, Range 68 West on the Cache la Poudre River just south of present day Timnath. Thomas Cline married Anna Cosslet (born 1837 in Wales) in 1866. In 1892, Thomas acquired the 80 acres of land in Section 10 of Township 6 North, Range 68 West through a land grant by the Timber Culture Act, which is the location of resource 5LR.14128. Both Thomas and Anna lived in the Timnath area until they passed away, Anna in 1904 and Thomas in 1910. They left behind six (6) children, including: Mrs. Sophia Darnell of Fort Collins, Mrs. May Gardner, Mrs. L.E. Parker of Timnath, Edward and George Cline, and Mrs. B.A. Griffith of Livermore. However, no verifiable link was made between construction of the buildings associated with the recorded resource and Thomas or Anna Cline or whether they ever resided on the property located in Section 10. Additionally, none of the above-mentioned children were found to be associated with the recorded resource.

Review of the Irrigated Farm Owners of Northern Colorado 1915 showed a William and Grace Mathiesen listed for Section 10, of Township 6 North, Range 68 West. The 1925 Fort Collins City Directory lists a W.G. Mathiesen as a rancher, though the family's exact location were not discovered.

Larimer County Assessor's records indicate that the 1 ½-story house was built in 1908, while additional buildings were built after 1930. The 1908-era house falls within the 1870-1930 period of significance for dryland farming, the sugar beet boom, and ranching after 1900 and may have been constructed as a result of one of these major agricultural trends. However, the outbuildings were constructed during a later period, first in 1930 and again in 1940. Therefore, it is unclear which agricultural context the outbuildings are associated with.

Local research revealed other residents of 5901 SW Frontage Road including Donald E. Roberts (Evelyn M. Roberts), whom was born 4/06/1929, and is listed in the U.S. Public Records Index (1950-1993). Exact date of Donald and Evelyn Roberts at this residence is unknown. Additionally, Robert McCallum (born 1/13/1957, died May 1994), is listed in the U.S. Public Records Index (1950-1993) as a resident of 5901 SW Frontage Road, Fort Collins. However, his exact date of residency is also unknown. Two accounts of a Mrs. Nancy (Raymond) Webb were found from the Fort Collins Coloradoan newspaper (12/08/1974 and 2/06/1975), whom is also shown as a resident in the mid-1970s.

In 1987, Luther Harris created Harris Reservoir A located immediately west of the recorded resource, which is fed by natural runoff and return flows from lands lying generally to the west of the reservoir. Island Lake Marina is located on a former sand and gravel mining operation that started around 1994. The mine created a large depression that was later converted into Island Lake Marine and Sports Pond where the marina is now located. The lake is fed by water from Arthur Lateral Ditch, which is fed by the Cache Le Poudre River via Box Elder Creek, as well as natural runoff in the area. Luther Harris sold the property to John B. Jensen, the current owner of the property, in 1993. John Jensen created Island Lake Marina in 1994, a recreational boat business located on the parcel directly north of the recorded resource.

36. Sources of information:

- General Land Office Records. <http://www.gloreCORDS.blm.gov/search/>, electronic documents;
- Larimer County Assessor's Database, Clerk and Recorded, and Building Department, electronic files;
- Watrous, Ansel
1911. *History of Larimer County, Colorado*. The Courier Printing & Publishing Co. Fort Collins, CO;
- Gelder, R.W.
Irrigated Farm Owners of Northern CO, 1915. Information extracted by Marilyn Reed & Jacquelyn Glavinick. Fort Collins Public Library Local History Archive;
- Fort Collins Coloradoan (www.newspapers.com);
- 1880-1940 U.S. Federal Census (www.ancestry.com);
- Colorado Division of Water Resources (www.water.state.co.us/SurfaceWater);
- USGS Historic Topographical Maps (CO_Timnath_1960).

VI. SIGNIFICANCE

37. Local landmark designation: Yes No Date of designation: _____
Designating authority: N/A
38. Applicable National Register Criteria:
- A. Associated with events that have made a significant contribution to the broad pattern of our history;
 - B. Associated with the lives of persons significant in our past;
 - C. Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or that possess high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction; or
 - D. Has yielded, or may be likely to yield, information important in history or prehistory.
 - Qualifies under Criteria Considerations A through G (see Manual)
 - Does not meet any of the above National Register criteria
39. Area(s) of significance: N/A
40. Period of significance: N/A
41. Level of significance: National State Local
42. Statement of significance: The resource was not found to be significant in the onset of community development, nor was it found to be significant for any particular early twentieth century agricultural trends such as dryland farming or sugar beet production. Review of local records indicate that a Thomas Cline, whom may be associated with the early settlement of Larimer County, was the original land owner of 80 acres that included the recorded parcel. Additionally, William and Grace Mathiesen were also found to be farmers in Section 10 of T6N, R68W around the time of construction of the house in 1908. However, no direct link was made between either Thomas Cline or the Mathiesen family and the recorded farm house and outbuildings. As a result, the resource is not eligible under Criterion A or B of the NRHP.
- The 1908-era house has been altered as a result of replacement of original building materials including exterior siding, windows and doors and construction of shed roof additions and therefore does not exemplify any particular building style or type. The secondary dwelling does retain some characteristics of the gabled-ell building type, which was a common vernacular building type at the time. However, due to years of neglect, many of the building components have been damaged including exterior siding and windows and the front porch appears to have been reconstructed due to the presence of newer building materials. The outbuildings are also in poor condition and there is evidence of alterations and expansions to the buildings. Therefore, the house and outbuildings are not exemplary representations of early twentieth century agricultural buildings and do not qualify under Criterion C. The site is also not likely to yield important information to historic or prehistoric inhabitation due to major site alterations from construction of Harris Reservoir A and adjacent sand and gravel mining operations and does not qualify under Criterion D.
43. Assessment of historic physical integrity related to significance: The resource does not meet any of the NRHP criteria for significance, therefore integrity was not evaluated.

VII. NATIONAL REGISTER ELIGIBILITY ASSESSMENT

44. National Register eligibility field assessment:
Eligible Not Eligible Need Data
45. Is there National Register district potential? Yes No
Discuss: It was determined that this building does not meet any of the National Register criteria, therefore it would not qualify as contributing to a district.
- If there is National Register district potential, is this building: Contributing Noncontributing
46. If the building is in existing National Register district, is it: Contributing Noncontributing

Resource Number: 5LR.14128
Temporary Resource Number: N/A

VIII. RECORDING INFORMATION

47. Photograph numbers: 5LR14128_1, 5LR14128_2, 5LR14128_3, 5LR14128_4, 5LR14128_5, 5LR14128_6,
5LR14128_7

Negatives filed at: Digital Files located at Office of Felsburg, Holt & Ullevig (address below)

48. Report title: Determinations of Eligibility and Effects, N I-25 SH 392 to SH 14 Revised ROD 1

49. Date(s): March 2017

50. Recorder(s): Jake Lloyd

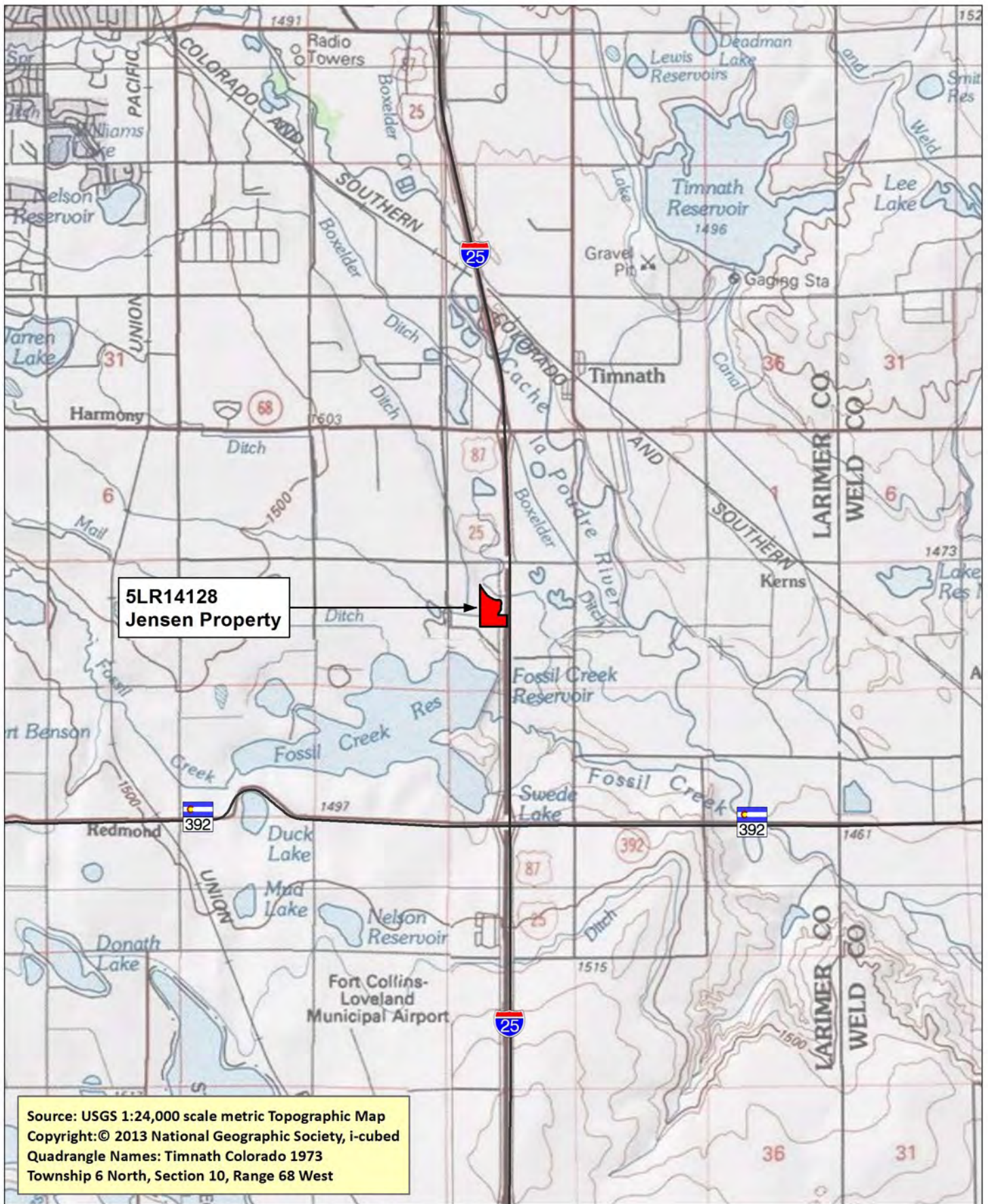
51. Organization: Felsburg, Holt & Ullevig

52. Address: 6300 South Syracuse Way, Suite 600; Centennial, CO 80111

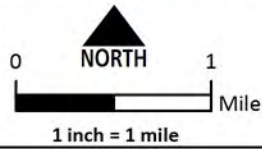
53. Phone number(s): 303.721.1440

NOTE: Please include a sketch map, a photocopy of the USGS quad map indicating resource location, and photographs.

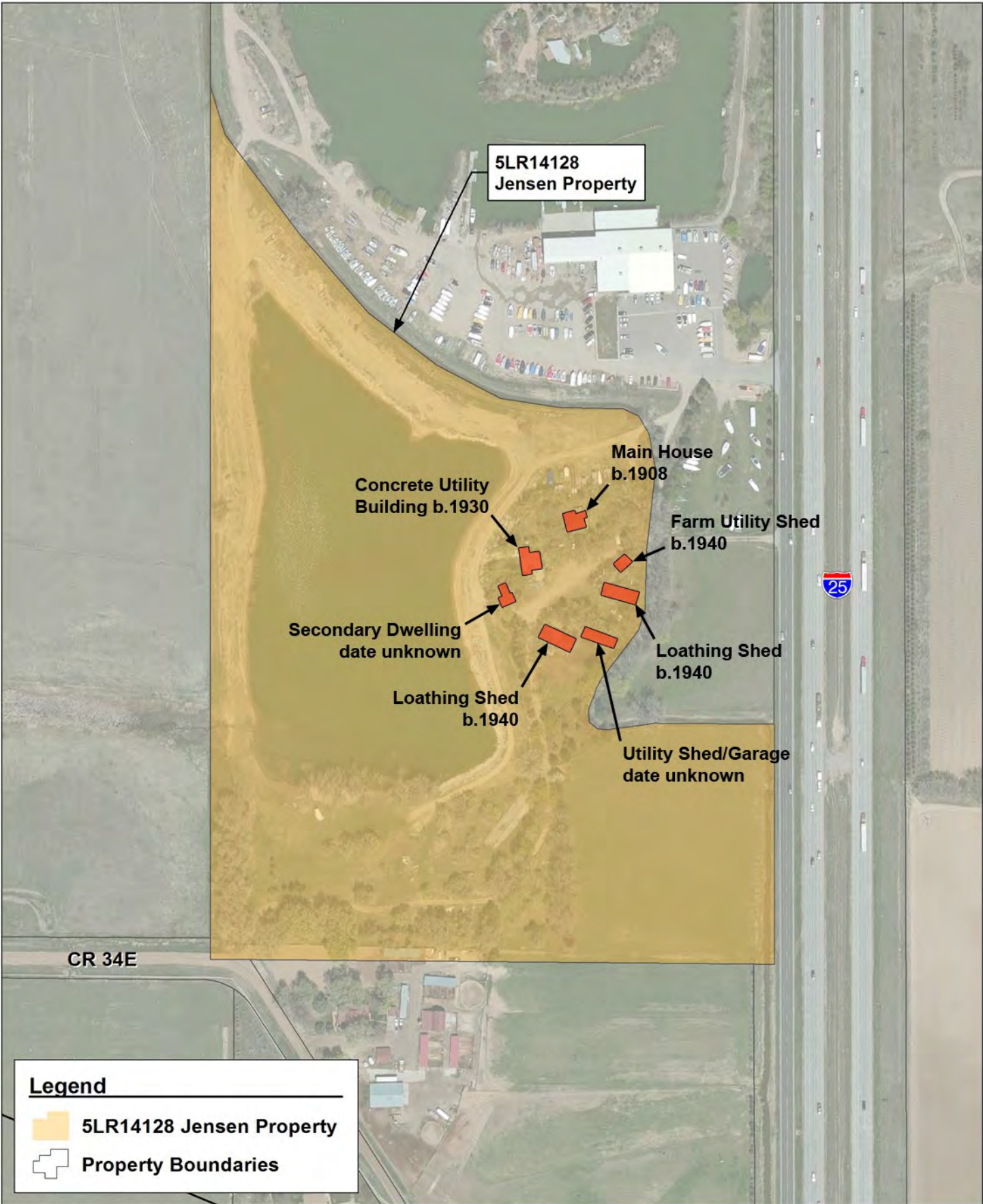
History Colorado - Office of Archaeology & Historic Preservation
1200 Broadway, Denver, CO 80203 (303) 866-3395





Source: USGS 1:24,000 scale metric Topographic Map
 Copyright: © 2013 National Geographic Society, i-cubed
 Quadrangle Names: Timnath Colorado 1973
 Township 6 North, Section 10, Range 68 West

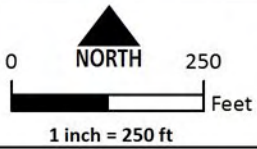


5LR14128 Quad Map
N I-25: SH 392 to SH 14
Fort Collins, CO



Legend

-  5LR14128 Jensen Property
-  Property Boundaries



5LR14128 Sketch Map
N I-25: SH 392 to SH 14
Fort Collins, CO



5LR14128_1: View northwest toward main house built in 1908. A screened porch is located on the corner beneath the shed roof addition that wraps around the south, east and north sides of the building.



5LR14128_2: View northwest of the one-story secondary dwelling located west of the main house.



5LR14128_3: View northwest toward farm utility building built in 1930 of concrete block exterior walls.



5LR14128_4: View south of one of two loathing sheds built in 1940. This one is located directly south of the 1930 concrete utility building seen in photo 3 above.



5LR14128_5: View east toward small shed/garage with plywood siding. Date of construction unknown.



5LR14128_6: View east toward second loathing shed built in 1940, located just east of small shed/garage.



5LR14128_7: View east toward farm utility shed built in 1940, which is located directly south of the main house. An expansion to the shed can be seen on the east end of the structure.



March 23, 2017

James Eussen
Planning and Environmental Unit Manager
CDOT Region 4
10601 W. 10th Street
Greeley, CO 80634

Re: Determinations of National Register of Historic Places Eligibility and Effect for CDOT Project IM 0253-179 (SA# 18357), North I-25 Revised Record of Decision 1, I25 from State Highway 392 to State Highway 14, Larimer County, Colorado (CHS #71875)

Dear Mr. Eussen:

Thank you for your correspondence dated February 14, 2017 and received on March 17, 2017 by our office regarding the consultation of the above-mentioned project under Section 106 of the National Historic Preservation Act (Section 106). Thank you for providing additional information via email on March 21, 2017 and March 23, 2017 for the above-mentioned project.

After review of the provided information, we do not object to the proposed Area of Potential Effects (APE) for the proposed project.

After review of the provided information, our previous determinations of eligibility for resources 5LR.1731.2, 5LR.12555, 5LR.12556, 5LR.12557, 5LR.11395, 5LR.11394, 5LR.11393, 5LR.995.4, 5LR.995.6, 5LR.1327.6, 5LR.9504, 5LR.2160.1, 5LR.12561, 5LR.11411.1, and 5LR.8931.1 remain. We also concur that the following resources are not eligible for the National Register of Historic Places.

- 5LR.14088
- 5LR.14089
- 5LR.14090
- 5LR.14091
- 5LR.14092
- 5LR.14093
- 5LR.14094
- 5LR.14095
- 5LR.14097
- 5LR.14128

After review of the scope of work and assessment of adverse effect, we concur with the recommended finding of *no adverse effect* [36 CFR 800.5(d)(1)] under Section 106 for 5LR.1731, including segment 5LR.1731.2, 5LR.1327, including segment 5LR.1731.6, and 5LR.2160, including segment 5LR.2160.1. We concur with the recommended finding of *no historic properties affected* [36 CFR 800.4(d)(1)] under Section 106 for the following resources.

- 5LR.995.4
- 5LR.995.6
- 5LR.8931.1
- 5LR.9504
- 5LR.11393
- 5LR.11394
- 5LR.11395
- 5LR.11411.1
- 5LR.12555
- 5LR.12556
- 5LR.12557
- 5LR.12561
- 5LR.14088
- 5LR.14089
- 5LR.14090
- 5LR.14091
- 5LR.14092
- 5LR.14093
- 5LR.14094
- 5LR.14095
- 5LR.14097
- 5LR.14128

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register eligibility criteria (36 CFR 60.4) in consultation with our office pursuant to 36 CFR 800.13. Also, should the consulted-upon scope of the work change please contact our office for continued consultation under 36 CFR 800.

We request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings. Please note that our compliance letter does not end the 30-day review period provided to other consulting parties.

If we may be of further assistance, please contact Jennifer Bryant, our Section 106 Compliance Manager, at (303) 866-2673 or jennifer.bryant@state.co.us.

Sincerely,


Steve Turner, AIA
State Historic Preservation Officer



U.S. Department
of Transportation
**Federal Highway
Administration**

Colorado Division

March 23, 2017

12300 W. Dakota Ave., Ste. 180
Lakewood, Colorado 80228
720-963-3000

Alison Michael
CDOT U.S. Fish and Wildlife Service (USFWS) Liaison
Colorado Field Office
PO Box 25486, DFC (65412)
Denver, CO 80225

**SUBJECT: USFWS North I-25 Programmatic Biological Opinion (PBO) Terms and
Conditions Reporting Project: North I-25 Environmental Impact Statement
Revised Record of Decision 1 (ROD1) Project #: FHWA-CO-EIS-08-01-F; IM
0253-179**

Dear Ms. Michael:

The Federal Highway Administration (FHWA) submits this letter addressing the Terms and Conditions outlined in the North I-25 Corridor PBO dated October 13, 2011. This letter replaces the letter that was submitted January 11, 2017. This consultation is provided based on the alternative that FHWA has identified for selection in the North I-25 Revised ROD1 between SH 392 and SH 14. This project is planned to be delivered using a design build procurement. The design builder will be required to continue to minimize impacts to the species listed in the tables below. This consultation is the site-specific consultation that is represented in the Programmatic Biological Assessment (PBA) and PBO and will suffice through the design build project as long as the impacts are no higher than what is identified in this consultation, the nature of the action does not change substantially, and no new species or critical habitat is identified.

The first Term and Condition from the North I-25 Biological Opinion reads:

As individual projects are proposed under the programmatic consultation, FHWA will provide the Service with project-specific information that includes 1) a description of the proposed action, including specific proposed conservation measures, and the area to be affected, 2) the species that may be affected and their known proximity to the project area, 3) results of habitat assessments and species surveys, 4) an updated baseline of the specific project area, 5) a description of how the action may affect the species, 6) a determination of effects, 7) a cumulative total of incidental take that has occurred to date under the consultation, 8) a description of any additional actions or effects not considered in the programmatic consultation, and 9) a description of the conservation measures or mitigation activities already implemented and their effectiveness.

1) Description of the Proposed Action

FHWA and Colorado Department of Transportation (CDOT) identified a Preferred Alternative for the corridor in the Final Environmental Impact Statement (FEIS). FHWA documented the decision for Phase I of the Preferred Alternative in the ROD1. FHWA is modifying only the selection of the continuous acceleration/deceleration lanes on I-25 between State Highway (SH) 392 and SH 14 in ROD1. Instead of the continuous acceleration/deceleration lanes, FHWA will be adding a continuous Express Lanes between SH 392 and SH14. This was evaluated as part of the FEIS Preferred Alternative (Figure 1). This project includes replacing the bridges over the Cache la Poudre River. In addition, FHWA will be constructing a portion of the Poudre River Trail (10-ft wide concrete trail) within the CDOT right-of-way on the south side of the Cache la Poudre River. The Poudre River Trail has not been constructed east or west of this segment, but will be constructed at a later date by other parties. This portion of the Poudre River Trail was not included in the FEIS.

The cross-section of the facility will comprise the 12-foot inside shoulder, 12-foot express lane, 4-foot buffer, two 12-foot general purpose lanes, and a 12-foot outside shoulder in both directions. The center median will vary between a median barrier and 52-feet. In addition, auxillary lanes will be added between the port of entry approximately 0.7 miles south of Prospect Road and SH14.

2) Species that may be Affected and Proximity to the Project Area

The Service provided a list of species potentially occurring in the regional study area on July 14, 2005. These species and potential effects from this project are listed in Table 1.

Table 1. Effects Determination for Federally Threatened and Endangered Species

Common Name	Scientific Name	Federal Listing Status	Effects Determination
Least Tern	<i>Sternula antillarum</i>	Threatened	Likely To Adversely Affect (LTAA)*
Piping Plover	<i>Charadrius melodus</i>	Threatened	LTAA*
Western prairie fringed orchid	<i>Platanthera praeclara</i>	Threatened	LTAA*
Whooping Crane	<i>Grus Americana</i>	Endangered	LTAA*
Pallid sturgeon	<i>Scaphirhynchus melodus</i>	Endangered	LTAA*
Preble's meadow jumping mouse (PMJM)	<i>Zapus hudsonius preblei</i>	Threatened	LTAA
Colorado butterfly plant (CBP)	<i>Gaura neomexicana coloradensis</i>	Threatened	Not Likely to Adversely Affect (NLTA)
Ute ladies' -tresses orchid (ULTO)	<i>Spiranthes diluvialis</i>	Threatened	NLTA
Black-footed ferret	<i>Mustela nigripes</i>	Endangered	No Effect, Block Cleared

*Effects to Platte River species are addressed through the South Platte Programmatic Biological Assessment (SPPBA) dated February 22, 2012. Water used for this project will be reported to the USFWS at year's end after completion of the project per the South Platte Programmatic Biological Opinion (SPPBO).

An Information for Planning and Conservation (IPaC) search identified six additional species with potential to occur in the project area that were not evaluated in the FEIS (shown in Table 2).

Table 2: Newly Identified Species

Species	Federal Status
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	Threatened
Greenback cutthroat trout (<i>Oncorhynchus clarki stomias</i>)	Threatened
North Park phacelia (<i>Phacelia formosula</i>)	Endangered
Arapahoe snowfly (<i>Arsapnia arapahoe</i>)	Candidate
Canada lynx (<i>Lynx canadensis</i>)	Threatened
North American wolverine (<i>Gulo gulo luscus</i>)	Proposed Threatened

3) Results of Habitat assessments and Species Surveys

On August 15, 2016, a general field reconnaissance was conducted at the Cache la Poudre River to review site conditions and identify any changed conditions for the PMJM, ULTO, and CBP compared to the FEIS.

Based on the conditions of the site at the time of inspection and upon available known occurrence and trapping data for the surrounding areas, it was determined that this site presents marginally suitable habitat not likely to support a resident population of PMJM, but may provide connectivity to upstream and downstream habitat for PMJM.

In the FEIS PBA, CDOT determined that the Cache la Poudre was suitable habitat for PMJM and that 1.16 acres would be impacted. This number has changed to 1.58 acres. The FHWA is assuming that the PMJM is present in this location. Although this area has been regularly trapped, there have been few if any mice caught since the 2013 floods. The habitat at this location has degraded due to the 2013 flood event, which was subsequent to FHWA formal consultation. This small increase (0.42 acres) of degraded habitat is not significant.

It was determined that habitat suitable for ULTO was not present and marginally suitable habitat exists for CBP. No individual plants were observed during site surveys. The site visit supports the finding in the PBA.

4) Updated Baseline of the Specific Project Area

The project area around the Cache la Poudre River was affected by the 2013 flood event since the FEIS. In addition, this area has experienced additional land development. The impacts described in the FEIS and PBA are consistent with this latest change. The project will have impacts to wetlands and riparian habitat at the Cache la Poudre bridge, which has been identified as having suitable habitat for PMJM. Additionally, there will be impacts within the 100-year floodplain, which may affect ULTO and CBP habitat. The project area is entirely within the Block Clearance Zone for black-footed ferret.

5) Description of How the Action May Affect the Species

The total amount of permanent impacts to PMJM habitat at the Cache la Poudre is 1.58 acres. A very small amount of this (0.03 acres) is expected to be permanent impacts. There is a low likelihood of occurrence for ULTO and CBP at the Cache la Poudre. No impacts to the black-footed ferret. Effects to Platte River species located downstream from the project (i.e., Least Tern, Piping Plover, western prairie fringed orchid, Whooping Crane and pallid sturgeon) are addressed through the SPPBA dated February 22, 2012, that estimates total water usage until 2019. The water used for this project will be reported to the USFWS at the year's end after the completion of the project per the SPPBO.

Table 3: Potential Effects to Newly Identified Species

Species	Federal Status	Potential Effects
Mexican spotted owl (<i>Strix occidentalis lucida</i>)	Threatened	None; there are no mature or old-growth forests suitable for the species within the project area.
Greenback cutthroat trout (<i>Oncorhynchus clarki stomias</i>)	Threatened	None; there are no coldwater streams or rivers within the project area.
North Park phacelia (<i>Phacelia formosula</i>)	Endangered	None; the project does not meet elevational requirements (8,000–8,300 feet above mean sea level (AMSL)).
Arapahoe snowfly (<i>Arsapnia arapahoe</i>)	Candidate	None; there are no coldwater streams or rivers within the project area.
Canada lynx (<i>Lynx canadensis</i>)	Threatened	None; the project area does not meet preferred elevations in Colorado (a minimum 8,000 feet AMSL), does not have the preferred vegetative cover with complex structural components for denning or transients, and does not have the preferred prey base (i.e., snowshoe hare) for the species.
North American wolverine (<i>Gulo gulo luscus</i>)	Proposed Threatened	None; while wolverines can cover great distances and be found in a variety of habitats, the project area does not have the preferred vegetative cover, such as dense riparian areas, for transients and does not have the consistent, deep snowpack for denning.

6) Determination of Effects

Impacts of the ROD1 Revision project will be consistent with the FEIS analysis, resulting in **Likely to Adversely Affect** determinations for Preble's meadow jumping mouse. The project will **Not Likely Adversely Affect** the Colorado butterfly plant, Ute ladies'-tresses orchid, or black-footed ferret, consistent with the analysis in the FEIS. In addition, the project will have **No Effect** to the Mexican spotted owl, greenback cutthroat trout, North Park phacelia, Arapahoe snowfly, Canada lynx, or North American wolverine, for reasons indicated in Table 3.

7) Cumulative Total of Incidental Take

This is the sixth project to proceed to construction under the PBO. There has been no incidental take to date of federally listed threatened or endangered species.

8) Description of Additional Actions or Effects

No additional actions or effects would occur as a result of this project.

9) Description of Conservation Measures or Mitigation Activities Already Implemented

The following conservation measures from the PBO for PMJM will be implemented for this project during the design phase of the project.

Conservation Measures

- Pre-construction habitat assessments and/or surveys for the CPB will be conducted during the survey season just prior to construction, or in accordance with the USFWS survey protocol at the time of construction.
- Pre-construction habitat assessments and/or trapping surveys for PMJM will be conducted where appropriate.
- If culverts in occupied or suitable PMJM habitat are replaced or upgraded, the new culverts will incorporate ledges to facilitate small mammal passage.
- Lighting within or near PMJM habitat will incorporate current technology and standards (e.g., Dark Skies) at the time of design to reduce lighting impacts to PMJM.
- During construction, nighttime work within 0.25 mile of PMJM habitat will be minimized.
- Any inadvertent PMJM mortalities during construction will be reported as specified in current trapping guidelines. CDOT will report all relevant information within 24 hours and subsequently submit a completed Injury/Mortality Documentation Report to the Service, Ecological Services Colorado Field Office or the Service's Division of Law Enforcement in Lakewood, Colorado (telephone 720 981-2777).
- In the unlikely event that a PMJM (dead, injured, or otherwise) is located during construction, the Colorado Field Office of the Service will be contacted immediately to identify additional measures, as appropriate, to minimize impacts to PMJM.

The second of the two Terms and Conditions from the Programmatic Biological Opinion reads:

During site-specific consultation, CDOT and FHWA will develop revegetation success criteria in coordination with the Service and will monitor revegetated sites to ensure that those success criteria are achieved.

Below is the success criteria that will be used for the mitigation areas for impacts described in this consultation.

FHWA shall monitor the revegetation of all temporarily disturbed areas for at least three (3) growing seasons following habitat restoration and enhancement activities, or until

such time that FHWA and the Service determine that revegetation was successful. Success criteria are:

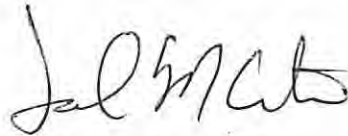
- 80 percent shrub and willow cover on areas where riprap was placed and covered with soil
- 70 percent foliar cover of native species on seeded areas
- Noxious weed cover in revegetated and restored areas will not be greater than 5 percent of that occurring in the nearby area
- Monitoring reports will be provided annually to the Service by December 1

Revegetation will occur in accordance with CDOT Standard for Roadway Construction (2011) Sections 208, 212, 213 and 216.

In addition, attached is the mitigation plan for temporary and permanent impacts to PMJM habitat in the Cache la Poudre drainage.

If you have any questions, please contact the Major Project Oversight Manager, Monica Pavlik, at 720-963-3012.

Sincerely yours,

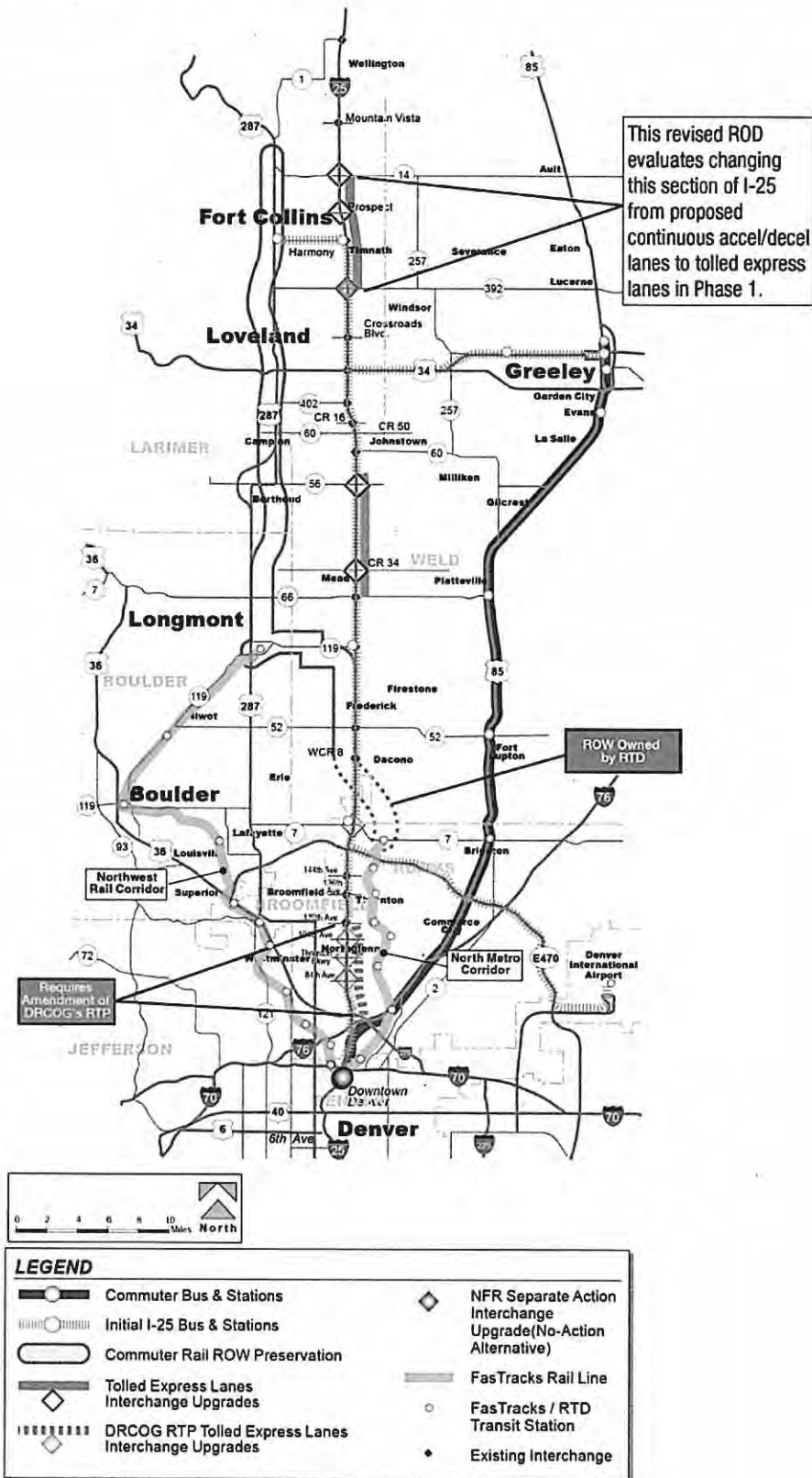


John M. Cater, P.E.
Division Administrator

Attachment (2)

cc: Carol Parr, R4 NEPA Program and Environmental Manager
Jeff Peterson, CDOT T&E/Wildlife Coordinator

Summary of Revised ROD1 Actions



Mitigation Plan

The temporary impacts of the PMJM habitat in the Cache la Poudre River drainage will be restored at a 1:1 ratio. Any PMJM habitat permanently removed due to project activities will be replaced at a 3:1 ratio. If practicable the permanent habitat will be replaced in the vicinity of the impacts. Habitat impacts will be recalculated and separated into temporary or permanent and a restoration plan will be developed when we have final design. FHWA will submit to the USFWS the final plans showing the location and quantity of the impacts and mitigation.

If the mitigation for permanent impacts cannot be completed within the CDOT ROW in the vicinity of the impacts, FHWA will work with CDOT to identify areas within CDOT ROW in the Cache la Poudre drainage and/or enter into an agreement with Fort Collins to mitigate the remainder of the impacts on the Fort Collins property located on the northeast quadrant of the I-25 and the Cache la Poudre River.

Riprap will be mixed with finer grained material to avoid settling. The riprap will be covered with approximately 12 inches of soil and planted with woody and herbaceous vegetation and will not reduce the overall amount of habitat available to PMJM.

Restoration will include the planting of several species of shrubs and willows as indicated in Table 1. In general, shrubs will be planted at a rate of approximately 10-feet on center. All shrubs will be 5 gallon containerized nursery stock.

Table 1: Shrub and Willow Plant List, Spacing and Total Number Planted

Common Name	Scientific Name	Spacing
Chokecherry	<i>Prunus virginiana</i>	10 feet on center
Wild Plum	<i>Prunus americana</i>	10 feet on center
Snowberry	<i>Symphoricarpos occidentalis</i>	10 feet on center
Woods Rose	<i>Rosa woodsii</i>	10 feet on center
Coyote Willow	<i>Salix exigua</i>	2 feet on center

Willow cuttings will be planted along the water's edge and where soil moisture conditions allow. To insure success, all willow plantings will be harvested from adjacent nearby stands during the spring and planted immediately after collection. Willows will be planted at a rate of 2-feet on center.

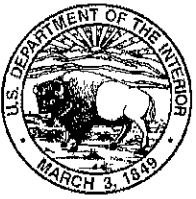
A native grass and forb seed mix will also be applied (Tables 2 and 3). Seed mixes will be applied using techniques used for CDOT revegetation projects and will follow all CDOT Standard Specifications.

Table 2: Proposed Grass and Forb Seed Mix to be Applied in Wetland and Riparian Areas.

Common Name	Scientific Name	Application Rate Pounds pls/Acre
big bluestem	<i>Andropogon gerardii</i>	1.8
Nebraska sedge	<i>Carex nebraskaensis</i>	0.6
Canada wildrye	<i>Elymus Canadensis</i>	0.6
scratch grass	<i>Muhlenbergia asperifolia</i>	0.6
Switchgrass (NE-28, BlkwI)	<i>Panicum virgatum</i>	1.8
Western wheatgrass (ROSANA)	<i>Pascopyrum smithii</i>	0.6
alkaligrass	<i>Puccinellia airoides</i>	0.6
little bluestem (PASTURA, BLAZE)	<i>Schizachyrium scoparium</i>	0.6
Indiangrass (CHEYENNE, HOLT)	<i>Sorghastrum nutans</i>	0.6
prairie cordgrass	<i>Spartina pectinata</i>	1.8
alkali sacaton	<i>Sporobolus airoides</i>	1.8
Sand dropseed	<i>Sporobolus cryptandrus</i>	0.6
TOTAL		12.0 lbs pls/acre

Table 3. Proposed Grass and Forb Seed Mix to be Applied in Upland Areas.

Common Name	Scientific Name	Application Rate Pounds pls/Acre
Western wheatgrass	<i>Pascopyrum smithii</i> "Arriba"	8.0
Sideoats grama	<i>Bouteloua curtipendula</i> "Vaughn"	3.0
Thickspike wheatgrass	<i>Elymus lanceolatus</i>	3.0
Blue grama	<i>Bouteloua gracilis</i> "Hachita"	1.5
Little bluestem	<i>Schizachyrium scoparium</i> "Pastura"	1.5
Prairie junegrass	<i>Koeleria macrantha</i>	0.2
Oats	<i>Avena sativa</i>	3.0
Purple prairie clover	<i>Dalea purpureum</i> var. <i>purpureum</i>	0.5
Beebalm	<i>Monarda fistulosa</i>	0.2
Gaillardia	<i>Gaillardia aristata</i>	1.0
Smooth blue aster	<i>Symphotrichum laeve</i>	0.5
TOTAL		22.4 lbs pls/acre



United States Department of the Interior



FISH AND WILDLIFE SERVICE Colorado Ecological Services

IN REPLY REFER TO:
FWS/R6/ES CO

Front Range:
Post Office Box 25486
Mail Stop 65412
Denver, Colorado 80225-0486

Western Slope:
445 W. Gunnison Avenue
Suite 240
Grand Junction, Colorado 81501-5711

TAILS: 06E24000-2017-I-0347

April 7, 2017

John Cater, Division Administrator
Federal Highway Administration
12300 West Dakota Avenue, Suite 180
Lakewood, Colorado 80228

Dear Mr. Cater:

On March 28, 2017, the U.S. Fish and Wildlife Service (Service) received your March 23, 2017, report regarding constructing the preferred alignment identified in the North I-25 Revised ROD1 between SH392 and SH14 in Larimer County, Colorado, and its effects to the threatened Preble's meadow jumping mouse (*Zapus hudsonius preblei*), Ute ladies'-tresses orchid (*Spiranthes diluvialis*), and Colorado butterfly plant (*Gaura neomexicana* ssp. *coloradensis*). The project will be constructed by the Colorado Department of Transportation (CDOT) with funding from the Federal Highway Administration. Our review was performed consistent with our authority under the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*). Critical habitat for these species has not been designated within the project boundaries; therefore, none will be affected.

On October 13, 2011, we issued our programmatic biological opinion regarding the impacts of improving I-25 between Denver and Fort Collins, Colorado, on several listed species (ES/LK-6-CO-12-F-001; TAILS 65412-2011-F-0658). In that opinion, we concurred that the project is likely to adversely affect the Preble's meadow jumping mouse and is not likely to adversely affect the Ute ladies'-tresses orchid or the Colorado butterfly plant because at the time we did not believe that habitat or populations of either of these species occurred within the project area. However, because the project was not expected to be constructed for many years, surveys for these two plant species or their habitat would be conducted during site-specific analysis and if any habitats or plants were identified, additional consultation may become necessary.

On January 11, 2017, we received a letter from CDOT requesting our review of their determination that the project complies with the Terms and Conditions outlined in the programmatic biological opinion, and on February 6, 2017, we responded that we had no concerns with the project because no change in impact was anticipated since our programmatic biological opinion and because all conservation measures would still be implemented.

The current request replaces the January 11, 2017, request and provides more information on the project description as well as survey efforts along the corridor. FHWA is now proposing to add continuous express lanes instead of the continuous acceleration/deceleration lanes on I-25 between SH392 and SH14 as originally intended. This project also includes replacing the bridges over the Cache la Poudre River, and constructing a portion of the Poudre River Trail within CDOT right-of-way, which was not previously considered. The area of disturbance is expected to exceed that analyzed in the programmatic biological opinion by 0.42 acre; however, for the reasons given below, we do not expect this will be significant and will not result in additional take. The total amount of impact is expected to be 1.58 acres, 0.03 of which will be permanent.

Surveys conducted on August 15, 2016, determined that habitat at the site was degraded during the 2013 flood event and that the site offers marginally suitable habitat for the Preble's meadow jumping mouse, but may provide connectivity to upstream and downstream habitats. The Cache la Poudre River corridor has been trapped extensively in the project area and the Preble's meadow jumping mouse has not been captured. No individuals of either the Ute ladies'-tresses orchid or the Colorado butterfly plant were observed during site reconnaissance.

Your letter also provided a summary of conservation measures that will be implemented as well as revegetation success criteria and a mitigation plan for temporary and permanent impacts to Preble's meadow jumping mouse habitat along the Cache la Poudre River. The mitigation plan calls for mitigating all temporary impacts on-site and mitigating for permanent impacts on-site as well as off-site. Because of the degraded condition of the habitat at the site, the low likelihood that the Preble's meadow jumping mouse occurs there, and the small amount of additional impact, which is almost entirely temporary, we do not expect any additional take of the Preble's meadow jumping mouse due to the change in project description. In addition, we expect the site to provide better connectivity after project completion due to implementation of conservation measures.

Given your habitat and project descriptions, as well as your mitigation plan, the Service agrees that the project complies with the Terms and Conditions outlined in the programmatic biological opinion (ES/LK-6-CO-12-F-001; TAILS 65412-2011-F-0658) and continues to concur with your determination that the impacts resulting from the proposed project will not jeopardize the continued existence of the Preble's meadow jumping mouse nor are they likely to adversely affect the Ute ladies'-tresses orchid or the Colorado butterfly plant. Further, no critical habitat has been designated in the project area; therefore, none will be affected.

Please note that reinitiation of consultation will be required if:

1. New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this consultation;
2. The action is subsequently modified in a manner that causes an adverse effect to the listed species or critical habitat that was not considered in this consultation; or
3. A new species is listed or critical habitat designated that may be affected by the action.

If the proposed project has not commenced within one year, please contact the Colorado Field Office to request an extension. We appreciate your submitting this report to our office for review and comment. If the Service can be of further assistance, please contact Alison Deans Michael of my staff at (303) 236-4758.

Sincerely,



Dana L. DeBerry

Colorado and Nebraska Field Offices Supervisor

cc: FHWA (Monica Pavlik)
CDOT, HQ (Jeff Peterson)
CDOT, R4 (Carol Parr)
Michael

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