PINYON ENVIRONMENTAL

PHASE I ENVIRONMENTAL SITE ASSESSMENT

I-70 Twin Tunnels Project
CDOT Project No. C 0703-354
Clear Creek County, Colorado

February 24, 2012
Revised April 27, 2012

Prepared For:

Colorado Department of Transportation Region 1
18500 East Colfax Avenue
Aurora, Colorado 80111

Pinyon Project #1/11-750-02.8000

Pinyon Environmental, Inc.

This Page Intentionally Left Blank

PHASE I ENVIRONMENTAL SITE ASSESSMENT

I-70 Twin Tunnels Project
CDOT Project No. C 0703-354
Clear Creek County, Colorado

February 24, 2012
Revised April 27, 2012

Prepared For:

Colorado Department of Transportation, Region 1
18500 East Colfax Avenue
Aurora, Colorado 80111

Prepared By:

Pinyon Environmental, Inc.

Project #1/11-750-02.8000

Author:

Brian R. Partington
Environmental Scientist

Reviewer:

Lauren E. Evans, P.E.
Principal

9100 West Jewell Avenue, Suite 200 ● Lakewood, CO 80232
(303) 980-5200 ● (303) 980-0089 (fax) Colorado@Pinyon-Env.com ● www.pinyon-env.com

Pinyon Environmental, Inc.

Table of Contents

Table of Contents (continued)

Appendices

List of Tables

List of Figures

.

1.0 Introduction and Scope of Work

Site Location (see also Section 2.0)

Site: Approximately three miles of Interstate 70 (I-70) between the East Idaho Springs interchange and the base of Floyd Hill in Clear Creek County, Colorado (Figures 1 through 6). The study area encompasses approximately 0.25 square miles.

Address: The study area (Site) includes the area of land within the existing I-70 right of way (ROW) (Figures 1 through 6), from approximately Mile Post (MP) 241.4 to 244.5. The study area is irregularly shaped, and elongated from the west toward the east. Additionally, a portion of one privately-owned parcel (Salo Parcel) is included in the study area. The Colorado Department of Transportation (CDOT) may acquire at least a portion one private property in order to accommodate improvements to I-70 (Figures 1 through 6).

City: Portions of the study area are located within the city limits of Idaho Springs; other portions are in unincorporated Clear Creek County.

County: Clear Creek

State: Colorado

Purpose and Scope of Services

The purpose of this assessment was to perform an evaluation for the potential presence of hazardous and/or toxic materials (otherwise known as "Recognized Environmental Conditions")[1] at the Site. This report is made pursuant to all appropriate inquiry into the prior ownership and uses of the Site, consistent with good commercial and customary practices appropriate to a commercial purchaser or fee owner of real property, and is

[1]Recognized environmental (RECs) are defined conditions by ASTM as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate environmental agencies.

intended to permit the user to satisfy one of the requirements to qualify for landowner liability protection.

This Environmental Site Assessment (ESA, also referred to as the Phase I report) generally meets the requirements of the ASTM "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-05." The report was formatted for reading ease and does not follow the suggested ASTM format; however, it does include all components of the ASTM standard.

The scope of services for the project included the following:

1. **Records Review**.

   - An evaluation of historical Site use, by reviewing the following sources:
     - Aerial photographs reasonably available from public sources;
     - Historical United States Geological Survey (USGS) topographic maps;
     - Historical Sanborn Fire Insurance maps;
     - Telephone books were reviewed in lieu of city directories, which were not identified for the study area;
     - Assessor information;
     - Zoning records;
     - Historic mine data (Section 4.2);
     - Cultural Resource Inventory Report (Centennial, 2011); and
     - Interviews.

   - A review of the compliance history of the Site, and of any adjacent sites, as identified by the vendor-supplied regulatory database survey (Satisfi, 2011);

   - A review of records reasonably available from appropriate federal, state and local regulatory agencies for documented soil and/or ground-water contamination investigations conducted at the Site and the vicinity, as defined by the ASTM standards in the vendor-supplied regulatory database survey (Satisfi, 2011).

     Note: It should be noted that the Satisfi report notes that the data was "filtered." The filtering is in regard to unmappable sites; specifically those that could potentially be referenced based on partial address, especially those elsewhere on I-70 outside the ASTM search radii. Satisfi "filtered" the unmappables by zip code to eliminate unnecessary, non-related listings outside the ASTM search radius. The sites that were mappable were included in the database, based on the required ASTM search radii based on site type.

     Additionally, the reference for the Central City/Clear Creek National Priority List (NPL) site was intentionally omitted from the database. Satisfi reviewed specific

discrete Operational Units (OUs) within this appropriate search radius, and no pertinent OUs associated with the Central City/Clear Creek NPL site applied to this project, since important OUs that could impact the project are located outside the search radii. However, detailed discussion of this NPL site is included in this Phase I ESA.

- A review of available documents from local agencies (Table 1) to evaluate development of the Site and, where reasonably available or relevant to the Site, the adjacent properties;

- A review of information regarding the physical settings of the Site, including:
  - The current USGS 7.5-minute topographic map;
  - Geology information published by the USGS; and
  - Soil survey, published by the Natural Resources Conservation Service.

2. **Site Reconnaissance.** A reconnaissance survey of the Site and surrounding areas was completed on November 23, 2011, and December 16, 2011, to evaluate present conditions.

3. **Interviews.** Interviews with personnel familiar with the Site and surrounding areas were conducted by Shannon Lucio and Brian Partington. The information obtained has been incorporated into the relevant report sections. Additionally, the user provided information, based on the specialized or actual knowledge, regarding environmental liens, activity use, limitations, relationship of the purchase price to the fair market value, and known recognized environmental conditions. The user also stated the reason for completion of the Phase I ESA (Section 2.1).

4. **Additional Services.** A Limited Phase II ESA was completed concurrently with this Phase I ESA (Section 3.5)

5. **Report.** Presentation of the aforementioned services in this report.

Qualifications. The environmental site assessment activities described herein were conducted in accordance with generally accepted standards, practices and procedures (expressed or implied) in effect at the time of the project, relative to the All Appropriate Inquiry (as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 42 USC Section 9601, et. seq.). Numerous individuals were contacted for information about the Site and surrounding areas (Table 1). Relevant information was also obtained from published sources (referenced in Section 6.0).

The project was completed by an Environmental Professional, or conducted under the supervision or responsible charge of an Environmental Professional. At a minimum, the Environmental Professional was involved in planning the Site reconnaissance and interviews, and reviewed and interpreted the information used in developing the conclusions. Pinyon declares that, to the best of our professional knowledge and belief, the Environmental Professionals involved met the definition as defined in §312.1 of

40CFR 312. Other persons involved are qualified individuals, and have the training and experience necessary to complete their assigned tasks. These personnel have the specific qualifications based on education, training and experience to assess a property of the nature, history and setting of the subject property (Site). Pinyon has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Resumes of the personnel involved in this project are included as Appendix A.

2.0 PROJECT AND SITE INFORMATION

2.1 Project Overview

Date of Task Order: October 26, 2011

Work Authorized By: Janet Gerak, Colorado Department of Transportation, Region 1 Environmental Project Manager

Purpose of Phase I ESA:

The purpose of the Phase I ESA is to evaluate the potential for soil and/or ground-water contamination at the Site, due to a release of hazardous substances or petroleum products. This Phase I is being completed for due diligence prior to completing a roadway project, where portions of private property may be acquired.

Planned Transaction and Proposed Site Layout:

The Proposed Action would add a third eastbound travel lane to the I-70 highway for approximately three miles between the East Idaho Springs interchange and the base of Floyd Hill (Figures 1 through 6). The Proposed Action would provide a consistent 10-foot outside shoulder throughout the project area. CDOT is considering a range of widths for the inside shoulder between the west project limits and the Hidden Valley interchange. A four-foot inside shoulder would be provided east of Hidden Valley. The eastbound bore of the Twin Tunnels would be expanded to accommodate the wider roadway section, and two tunnel widths are being evaluated. CDOT is also considering whether the additional capacity will operate exclusively as a general purpose lane or as a tolled lane during peak periods (also called a managed lane). The Proposed Action would provide a consistent 50 mile per hour (mph) design speed and 55 mph posted speed.

During widening of the south tunnel of the Twin Tunnels, a construction detour will be required to divert traffic from I-70. To accomplish this, rehabilitation of Old United States Highway 40 (U.S. 40) and the Dog House Bridge (structure CLR314-W0.7) will be required in order to accommodate interstate traffic. Additionally, a portion of Clear

Creek County Road 314 (CR 314) will also be improved between the Dog House Bridge and the Hidden Valley interchange. It should be noted that CR 314 and the Old U.S. 40 overlap within the study area. Generally, improvements to CR 314 are being addressed as a separate CDOT project, with the exception of a portion of CR 314 near the Hidden Valley interchange where realignment of I-70 will also require realignment of CR 314.

West of the Hidden Valley interchange, the curve on I-70 will be straightened, which would shift I-70 approximately 45 feet farther south toward CR 314. The curve on CR 314 would be straightened as well, to provide adequate separation from I-70. As part of the straightening of the curve on I-70, the eastbound bridge over Clear Creek (structure F-15-BH) will be replaced. The resulting CR 314 design would require a retaining wall at the hillside on the south side of CR 314. The wall would span from 2 to 15 feet in height without tiering, and up to 23 feet in height if tiered. Aesthetics and tiering would be determined during final design. The curve straightening on CR 314 is included as a component of the I-70 Twin Tunnels project. Other improvements to CR 314 will be completed as a separate project.

At the time of this Phase I ESA, final design of this project had not been completed, and the design team had not completely determined where specific property acquisitions would be located. However, the general locations of likely property acquisitions have been determined. Therefore, all or parts of four privately-owned parcels have been evaluated in support of this investigation.

2.2 General Site Information and Current Conditions

Site Location (Figures 1 through 6):

Address:	I-70 between East Idaho Springs and Floyd Hill, and four privately-owned parcels (see below)
City:	Portions of Idaho Springs
State:	Colorado
County:	Clear Creek
Intersection:	East Idaho Springs interchange, Hidden Valley interchange, U.S. 40/U.S. 6 interchange.

Other Roads: Old U.S. 40, U.S. 40/U.S. 6, CR 314, Central City Parkway

Site Information:

The following table presents information regarding the privately-owned property where potential acquisitions will be completed based on information provided to Pinyon at the time of this report:

Property Address/ Legal Description	Parcel Name	Assessor Number	Owner	Zoning	General Acquisition Description (to be finalized during design)
Subdivision: Lowe Division Block: 1 Lot: 3 - AMDMT 5 -579/879 PLAT AMDMT 5 #212918 640/339 - ADESTS ODP #212919 640/341 -PLAT HID VY ANNEX #230268 716/729 -ID SPGS ORDIN ANNEX 716/725	Salo Parcel (Figures 2 and 3)	1833-314-00-216	Salo LLC	Light Industrial	Vacant forested land located south of I-70, and north of Clear Creek to accommodate truck chain station

Site Reconnaissance Information:

Dates of Site Visits: November 23, 2011 and December 16, 2011

Personnel: Lauren E. Evans and Brian Partington, Pinyon (November 23, 2011); Brian Partington, Pinyon (December 16, 2011)

Accompanied by: Marc Morton, CDOT Region 1 (on November 23, 2011)

Methodology: The Site was accessed and observed by driving and/or walking the entire extent of the project area. In areas where it was safe to park, the Site was physically walked and visually observed while photographs were taken. Notes regarding Site conditions were made on field aerial photographs and in a field notebook. The Site was

observed entirely from public right of way. Privately-owned property that may be acquired for this project was not entered; however, those areas were physically observed from public right of way, as the areas for acquisition were readily visible from the roadway.

Inaccessible Areas: Privately-owned properties were not physically entered in support of this Phase I ESA. However, the areas that could be potentially acquired for this project were readily visible and observed from public right of way.

Other Limiting Conditions: None

Current Site Use and Conditions:

I-70 is currently being used as an interstate highway. The existing CR 314 connects Idaho Springs (I-70 Exit 241) and the Hidden Valley Interchange (Exit 243). The CR 314 serves local access, emergency response, recreation access (rafting and fishing along Clear Creek) and bicycle and pedestrian mobility. CR 314 also serves as a frontage road or alternate route during accidents, construction, and other delays on I-70 near the Twin Tunnels. The Scott Lancaster Trail runs parallel with the frontage road and a portion of the trail shares the existing roadway. Old U.S. 40 is generally unused.

Current uses for the Salo property is as follows:

Salo Parcel – Entire parcel zoned for light industrial use. The portion potentially acquired by CDOT is currently vacant land located between I-70 (on the north) and Clear Creek (on the south). High-tension power lines are located on this parcel in the study area.

Buildings/Structures on Site:

No buildings or structures are located on the Salo Parcl. No other buildings are located on the Site.

Site Description and Former Uses:

Exterior:
I-70, Old U.S. 40 and CR 314 are currently developed as roadways. The portion of the Salo Parcel which may be acquired is currently vacant.

Interior: No interior spaces are located on the Site.

Current Uses (including unoccupied spaces):

Currently, CR 314 is used as both a roadway, and periodically, the shared location of the Scott Lancaster Trail as described above.

Past Uses if Visible:
No past uses different than current roadway uses were observed.

Photographs of the Site are provided in Appendix B. General Site observations required by the ASTM standard practice are summarized on Table 2. A glossary of terms is included as Appendix C.

This Page Intentionally Left Blank

3.0 SITE DESCRIPTION

3.1 Physical Setting

Topography: The topography of the Site is variable, as the project is located in a mountainous region. Generally, I-70 follows Clear Creek, with precipitous slopes located north and south of the roadway sloping upward. Some areas along the creek are relatively flat.

Elevation: The western edge of the project is located at an elevation of 7,455 feet above mean sea level, and the eastern edge of the project is located at an elevation of 7,330 feet above mean sea level. The base of Floyd Hill is the lowest elevation of the project at an elevation of 7,225 feet. The eastern edge of the project is located at an elevation of 7,330 feet. The highest point in the project is 7,454 feet above mean sea level, and occurs approximately 0.25 mile east of the western project boundary.

Surficial Soil:

Surficial soils within the Site area consist of seven different soil units present on cliffs, ridges, mountain slopes, terraces, drainage ways and alluvial fans (USDA, 2011). The soils were mostly derived from the weathering of igneous and metamorphic rocks; however, mine spoils and earthy fill have also been mapped within the Site. The soil units are summarized below:

Soil Type	Description	Parent Type
Project area between East Idaho Springs interchange and Hidden Valley interchange		
Arents-Dumps mine complex, with 5 - 80 percent slopes (location of this complex within the study area is depicted as "potential mine waste fill" on Figures 2 to 4)	**Arents Description** Somewhat excessively drained; Occurs on mountain slopes and talus slopes. Typical soil profiles 0-24 inches: Very cobbly loamy coarse sand 24-28 inches: Gravelly sandy loam 28-60 inches: Extremely cobbly loamy sand **Dumps Description** Typical profile 0 – 60 inches: Fragmented material	Mine spoil, earthy fill, or acidic mine spoil Acidic mine spoil or earthy fill derived from igneous and metamorphic rock
Cathedral-Rock outcrop complex, with 30 - 70 percent slopes	**Cathedral Description** Well-drained; Occurs on mountain slopes and ridges Typical profile 0-3 inches: Very cobbly coarse sandy loam 3-11 inches: Very gravelly sandy loam 11-15 inches: Unweathered bedrock **Rock Outcrop Description** Occurs on cliffs, mountain slopes, and ridges Typical profile 0 – 60 inches: Unweathered bedrock	Weathered igneous and metamorphic rock Igneous and metamorphic rock
Lone Rock-Breece gravelly sandy loam with 2 to 9 percent slopes	**Lone Rock Description** Somewhat excessively drained; Occurs on alluvial fans and terraces. Typical Profile 0 – 9 inches: Gravelly sandy loam 9 - 28 inches: Very gravelly loamy sand 28 – 60 inches: Extremely gravelly sand **Breece Description** Well-drained; occurs in drainage ways and alluvial fans Typical Profile 0 - 7 inches: Gravelly sandy loam 7 – 20 inches: Gravelly sandy loam 20 – 42 inches: Gravelly coarse sandy loam 42 – 72 inches: Gravelly sandy loam	Alluvium derived from igneous and metamorphic rock Alluvium and slope alluvium derived from igneous and metamorphic rock

Soil Type	Description	Parent Type
Rock Outcrop-Tolland Complex, 30 to 100 percent slopes	**Rock Outcrop** Lithic bedrock expressed as cliffs, mountain slopes and ridges. Typical Profile Unweathered bedrock **Tolland Complex** Well drained soil occurs on mountain slopes and footslopes. Typical Profile 0 to 1 inches: Slightly decomposed plant material 1 to 2 inches: Moderately decomposed plant material 2 to 5 inches: Cobbly sandy loam 5 to 11 inches: Very gravelly coarse sandy loam 11 to 50 inches: Extremely gravelly loamy coarse sand 50 to 69 inches: Extremely cobbly loamy coarse sand	Igneous and metamorphic rock Micaceous sandy colluvium derived from igneous and metamorphic rock
Project area between Hidden Valley interchange and Floyd Hill		
Arents-Dumps mine complex, with 5 - 80 percent slopes (location of this complex within the study area is depicted as "potential mine waste fill" on Figures 2 to 4)	**Arents Description** Somewhat excessively drained; Occurs on mountain slopes and talus slopes. Typical soil profiles 0-24 inches: Very cobbly loamy coarse sand 24-28 inches: Gravelly sandy loam 28-60 inches: Extremely cobbly loamy sand **Dumps Description** Typical profile 0 – 60 inches: Fragmented material	Mine spoil, earthy fill, or acidic mine spoil Acidic mine spoil or earthy fill derived from igneous and metamorphic rock
Cathedral-Rock outcrop complex, with 30 - 70 percent slopes	**Cathedral Description** Well-drained; Occurs on mountain slopes and ridges Typical profile 0-3 inches: Very cobbly coarse sandy loam 3-11 inches: Very gravelly sandy loam 11-15 inches: Unweathered bedrock **Rock Outcrop Description** Occurs on cliffs, mountain slopes, and ridges Typical profile 0 – 60 inches: Unweathered bedrock	Weathered igneous and metamorphic rock Igneous and metamorphic rock

Soil Type	Description	Parent Type
Mammoth-Ohman-Rock outcrop complex with 30 to 60 percent slopes	**Mammoth description** Well-drained on mountain slopes. Typical profile 0 – 1 inches: Slightly decomposed plant material 1 – 10 inches: Very gravelly sandy loam 10- 16 inches: Gravelly loam 16 – 22 inches: Very gravelly loamy sand 22 – 32 inches: Very gravelly sandy loam 32 – 59 inches: Very gravelly sandy loam 59 – 67 inches: Stony loamy coarse sand **Ohman Description** Well-drained on mountain slopes and ridges. Typical profile 0 – 2 inches: Slightly decomposed plant material 2 – 5 inches: Very stony sandy loam 5 – 21 inches: Very gravelly sandy loam 21 – 35 inches: Extremely gravelly sandy loam 35 – 39 inches: Weathered bedrock	Igneous and metamorphic rock Igneous and metamorphic rock

Surficial Geology:

Surficial units in the project area include the Piney Creek and Post-Piney Creek Alluvium of the Pleistocene and Holocene epochs, which are both boulder alluvium mixed with gravel, sand, and silt in the flood plain of Clear Creek (Sheridan and Marsh, 1976). The alluvial material in the project area is generally less than 20 feet thick and may have been reworked in the past by gold dredges. Additionally, bedrock outcrops in many locations across the project area (see below).

Regional Geology:

The bedrock underlying the Site is classified as Precambrian feldspar-rich, fine- to medium-grained gneiss, characterized by conspicuous foliation and interlayered with hornblend and amplibolite gneisses. Fine layering is evident in some of the gneiss, expressed by interlamination of biotite-rich and biotite-poor layers (Sheridan and Marsh, 1976).

Nearest Surface Water Body:

The closest surface water body to the Site is Clear Creek, which parallels I-70 on the north and south sides throughout the project area (Figure 1). The elevation of this feature

is 7,465 feet above mean sea level (msl) at the western portion of the Site and is 7,235 feet above msl at the eastern portion of the Site.

Ground-Water Conditions:

The Site is in an area where the water table conditions predominate in the unconsolidated alluvial deposits near and within the Clear Creek flood plain. The ground-water elevation at the Site is expected to be generally consistent with the elevation of the surface water of Clear Creek, and flow direction would likely mimic the flow direction of Clear Creek (toward the east). Tributaries to Clear Creek are also present in the study area; most of which are unnamed. One named tributary is present, Sawmill Gulch.

3.2 General Site Environmental Conditions

3.2.1 PCBs

Transformers

Nine pole-mounted electric transformers were identified in the project area (Figures 2 through 6). All appeared to be in good condition, are apparently owned by Xcel Energy, and no visible evidence of release was noted.

3.2.2 Heating/Cooling Systems

No buildings are located on the Site.

3.2.3 Solid Waste Disposal

No solid waste is generated at the Site.

3.2.4 Drains and Sumps

Two drainage discharges were observed inside a three-sided box culvert with a natural material/rock base immediately east and under I-70 at the Twin Tunnels (Figure 3). These discharges likely drain ground water that infiltrates through bedrock and into the tunnels. As part of the water quality analysis documentation for the Twin Tunnels Environmental Assessment, water samples from these two discharge points were

collected for laboratory analysis. Detailed discussions of the sampling methods, analytical methods, and sampling results are included in this Phase I report in Section 3.5.

3.2.5 Fill Material

The majority of I-70 has been constructed on embankment fill, which was confirmed during geotechnical investigations completed by Yeh and Associates in support of this CDOT project. Geotechnical investigations have been completed in support of this CDOT project, which included drilling of 10 vertical soil borings in locations where structural elements are anticipated (e.g., retaining walls and new bridge abutments). During those drilling activities, Pinyon personnel collected representative soil samples of fill material to evaluate potential environmental conditions. Detailed discussion of the sampling methods, analytical methods, and sampling results is included in this Phase I report in Section 3.5.

United States Department of Agriculture (USDA) maps indicate that surficial soils in two large areas within the project area are potentially derived from mine-related waste (Figures 2 through 4; Section 4.2).

Fill material was visually observed during the Site visits between I-70 and Clear Creek near the I-70/U.S. 40/U.S 6 interchange (Figure 6). Fill material appeared to be a mixture of road sand, soil and asphalt.

Potential fill material may be located at the East Idaho Springs on-ramp to I-70, based on review of geological maps, and north of I-70 between the interstate and Clear Creek approximately 0.25 mile east of the western Site boundary, based on Site observations (Figure 2).

3.2.6 Storage Tanks

No storage tanks were observed located on the Site.

3.2.7 Hazardous Substances or Petroleum Product Use

There was no visual evidence of hazardous material use or storage, or hazardous waste generation on the Site. The Site is not listed on an agency list for hazardous material use or hazardous waste generation, treatment, storage or disposal (Appendix D). However, several spills have been reported as having occurred on I-70, generally the result of traffic accidents. Three spill incidents were reported in the Satisfi database as having occurred on I-70 (Appendix D). Pinyon contacted Charlotte Smith with the Colorado State Patrol (CSP) regarding records pertaining to response actions for releases that have occurred on I-70. Ms. Smith provided database listings for Clear Creek for response actions that were reported to the CSP. She indicated that CSP records are only available back to 1997. A total of 18 responses were noted within the project area on or near I-70. Review of the listings did not provide exact locations where these incidents occurred, with location descriptions based on approximate mile markers. Materials released included diesel fuel, hot asphalt and carwash soap. Fuel spills were generally in relatively small quantities of less than 80 gallons. The asphalt spill was approximately 2,000 gallons. The CSP is responsible for cleanup of spills that occur on Colorado highways. No indication of investigation or cleanup beyond initial report of release and response actions was identified in the environmental database.

3.2.8 Stained Soils or Pavement

No stained soils or pavement was observed within the project area during the Site visit.

3.2.9 Unidentified Substance Containers

No unidentified substance containers were identified during the Site visit.

3.2.10 Pits, Ponds or Lagoons

No pits, ponds or lagoons were observed on the Site during the Site visit.

3.2.11 Water Wells

Only one well was identified during the Site visit, immediately southeast of the east portal of the Twin Tunnels on the Jordan Parcel (Figures 3). Water wells were researched using the Colorado Division of Water Resources (CDWR) Colorado Decision Support System (CDSS) online database (CDWR, 2012). A total of 39 well permits were identified in proximity to the project (Figures 2 through 6). Table 3 presents basic information on each well. It should be noted that the locations as noted on Table 3, and as shown on Figures 2 through 6, are approximate, and were located by the CDWR based on Section corners or Quarter Section corners, and should not be considered accurate.

3.3 Site History

Resources
The following resources were used in developing the Site history:

- Aerial photographs from selected years between 1939 and 2011;
- Historical USGS topographic maps, from selected years between 1957 and 1974;
- Telephone book listings from selected years between 1959 and 2010;
- Sanborn fire insurance maps from selected years between 1907 and 1931;
- Tax assessor information, provided by Clear Creek County Assessor;
- Zoning records from Clear Creek County and Idaho Springs;
- Information used to evaluate mine-related uses in the vicinity (Section 4.2);
- Archaeological survey completed by Centennial Archaeology (Centennial, 2011); and
- Interviews.

A complete list of references is included as Section 6.0.

Summary of Site History

From	To	Site Use
prior to 1859	1938	Gold was discovered in 1859 in Idaho Springs, after which the majority of the Clear Creek flood plain was dredged for gold, likely including large portions of the subject Site near Clear Creek (*EPA, 1991; Sheridan and Marsh, 1976; Rapp, 2012*). Mine maps provided by CDOT indicated underground placer mining in the vicinity of Hidden Valley, which caused subsidence events beneath the interstate in the 1980s (Mine Plat, 1884). CR 314 was likely constructed prior to 1907, and was completed to allow traffic to travel to present day Floyd Hill in 1927 (*Bell, 2011, Sanborn maps (1907, 1931), Centennial, 2011*). U.S. 40 was refurbished between 1936 and 1940 (*Centennial, 2011*). In 1887, the Colorado Central Railroad was extended from Golden to Idaho Springs. The railroad struggled financially, and was discontinued in 1941. Portions of this railroad grade remain in the project area (*Centennial, 2011*).
1938	1967	The Site use was similar to the previous description (*aerial photographs, 1938, 1956, 1967), (topographic map (1957)*). The area near the Hidden Valley interchange was developed with a farmstead prior to the construction of I-70 (*Bell, aerial photographs, 1938, 1956, 1967*). I-70 was constructed between 1958 and 1967, with the section of I-70 between Idaho Springs and Floyd Hill constructed in 1961 (*Centennial, 2011*).
1967	1998	By 1974 CR 314 had been realigned to its current alignment (*aerial photograph, 1974*). The single-family residence near the Dog House Bridge was constructed sometime after 1979 and before 1999 (*aerial photograph, 1999*).
1998	Present	The Site was developed with I-70 in its current configuration *(1999 to 2011*). In approximately 1998, the Hidden Valley Interchange was reconstructed to its current configuration.

The ASTM Standard requires that Site use be documented to 1940, or first use, whichever is earlier. Pinyon has been able to verify that first Site use occurred on or around 1859. Therefore, no data failure has been encountered.

QUESTIONS REGARDING PAST ENVIRONMENTAL PRACTICES

Past Spills/Releases

Is the Site Listed on an agency listing for a reported or suspected release or spill or petroleum products, hazardous wastes, or hazardous substances?	Yes

Several spills have occurred in I-70 as the result of traffic accidents (Section 3.2.7). The Site is located within the boundaries of the Central City / Clear Creek Superfund site. Detailed discussion is presented in Section 4.2.

Past Environmental Studies

Has an environmental assessment previously been conducted at the Site?	Yes

See discussion in Section 4.2.

Environmental Liens/Actions

Are there any pending, threatened or past litigation relevant to environmental issues at the Site?	No
Are there any pending, threatened or past administrative proceedings relevant to environmental issues at the Site?	No
Are there any notices from any governmental entity regarding any possible violation of environmental laws at the Site?	No

3.4 User Supplied Information

The user of this report, the Colorado Department of Transportation, supplied information to Pinyon regarding the Site and the planned transaction (Appendix E). The user stated that they are completing this Phase I to support improvements along I-70. They had knowledge of any past environmental studies of specific to the Site, and were aware the Site is located within the Central City-Clear Creek Superfund study area. They reported no specialized knowledge or experience, and reported no spills or releases, environmental liens or activity and use limitations, or other actions. CDOT provided Pinyon with copies of various previously completed documents associated with subsurface conditions and investigations in the vicinity of the project.

3.5 Limited Phase II Environmental Site Assessment

Early research supporting this Phase I ESA, including the I-70 PEIS, indicated that mine wastes could be a REC, based on significant mineral extraction and processing that historically occurred in the project vicinity (see Section 4.2). CDOT requested that several non-scope (ASTM) services be completed to evaluate the potential RECs. The following services were completed:

- CDOT requested that soil samples be collected concurrently during geotechnical drilling activities in order to further understand potential contaminant issues. Additionally, CDOT requested that exposed and potentially mineralized rock at the surface above the west portal of the southern tunnel be sampled and analyzed.
- Two tunnel discharge points were identified in the box culvert immediately east of the east portal of the Twin Tunnels. CDOT requested that water samples be collected for analysis from these discharge points.
- The methodology utilized to support the soil and water sampling is presented in a Sampling and Analysis Plan (SAP) prepared by Pinyon, on November 23, 2011 (Pinyon, 2011). The SAP presents the protocols to sample and analyze potential regulated materials, specifically those related to mine-related waste.
- Additionally, CDOT requested that paint on the Dog House Bridge (structure CLR314-W0.7) and the I-70 eastbound bridge over Clear Creek west of Hidden Valley (structure F-15-BH) be analyzed for lead content.

3.5.1 Soil Sampling

To support this assessment, representative soil samples were collected from potential waste streams in locations where regulated materials could be encountered during construction, such as cut areas, retaining wall excavations and bridge abutments. A soil sample was also collected of exposed and outcropped mineralized rock located above the west portal of the south tunnel. Soil samples were collected concurrently at geotechnical boring locations during drilling activities completed by Yeh and Associates, Inc. (Yeh). Drilling was completed using ODEX techniques. During ODEX drilling, a carbide-tungsten drill bit is hammered vertically down the boring while an outer casing is simultaneously extended. The drill spoils are blown through the casing using highly compressed air to the surface where bulk samples may then be collected.

One or more composite sample of soil was collected at each boring location, and was analyzed for totals concentrations of the 13 Priority Pollutant Metals (antimony, arsenic, beryllium,

cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium and zinc) by EPA Method 6010/7471. Depending on the total concentration results for each of those metals, selected samples were to be analyzed using the Toxicity Characteristic Leaching Procedure (TCLP). Samples were also analyzed for pH by EPA Method 9045. Samples were placed in appropriate pre-cleaned containers provided by the laboratory. Samples were visually described, the colors evaluated using Munsell Soil Color Charts (Munsell, 2000),, and placed in the appropriate containers. Proper chain-of-custody procedures were followed during the sampling process. All samples were submitted for analysis to Origins Laboratory, Inc. (Origins), of Denver, Colorado. Analytical results for the soil samples collected are attached to this report as Appendix F.

One duplicate sample per day was collected to evaluate sampling and analytical precision during the geotechnical sampling activities.

The results were compared to the Colorado Department of Public Health and Environment (CDPHE) Colorado Soil Evaluation Values (CSEVs) (CDPHE, 2011a), to evaluate potential worker health risks that may be present, as well as to assess potential disposition of excavated material (i.e., reuse on site or disposal).

3.5.1.1 Soil Results

Soil samples from 10 geotechnical borings were collected (Figures 3 through 6). A total of 12 soil samples and six field duplicate samples were collected for laboratory analysis. One sample of the outcropped mineralized rock was also submitted for laboratory analysis (Figure 3).

In general, the material encountered during drilling included varying depths of fill material composed of sandy, angular to subangular gravel sidecast with cobbles and boulders derived from presumably local metamorphic rock sources. This material overlaid rounded gravels, cobbles and boulders, assumed to be alluvium associated with Clear Creek. The color of this material ranged from dark grayish brown, to olive brown and brown. No visual evidence of mineralized material or potential mine waste was observed during drilling operations.

The mineralized outcropped material was a loose, very poorly cemented, silty, sandy potentially intrusive rock that was easily crushed with hand pressure. The Munsell color (2.5YR 6/8, olive yellow) was indicative of potential mineralization.

The concentrations of the metals detected in the samples collected were all below both the residential-use (unrestricted) and commercial-use (worker safety) CSEVs, with the exception of arsenic (Table 4). The concentrations of arsenic detected ranged from below the laboratory reporting limit to 7.2 milligrams per kilogram (mg/kg). The average concentration (where detected) was 5.3 mg/kg. The current residential (unrestricted) and commercial (worker safety) CSEVs for arsenic are 0.39 and 1.6 mg/kg, respectively.

In Colorado, arsenic occurs naturally, and often at concentrations greater than that observed during this investigation. The CDPHE recently released guidance related to evaluating arsenic concentrations in soil, specifically regarding screening data collected from sites where historical use does not indicate the potential for arsenic contamination (CDPHE, 2011b). The guidance is based on the collection of over 2,700 samples from 44 counties in Colorado. The average concentration of arsenic in soils based on this sampling was 11 mg/kg. The CDPHE has adopted a policy that if arsenic concentrations are lower than 11 mg/kg, and releases of arsenic could not have occurred at the site, the CDPHE will require no further action to address arsenic in soil. The highest result observed during this investigation (7.2 mg/kg) is lower than the CDPHE average of 11 mg/kg. Visual evaluation of the material encountered during drilling activities indicates that the subgrade at the locations where significant excavation will be completed (e.g., retaining walls, bridge abutments, bridge piers), is composed of processed blast rock derived from local metamorphic rock source upslope of the interstate, likely placed when I-70 was initially constructed. No evidence of mine wastes was observed. Therefore, the arsenic concentrations detected during this investigation are likely naturally-occurring, and would not likely require additional investigation or corrective actions.

The pH of the geotechnical samples ranged from 4.08 to 9.06, with an average of 8.3.

Metals concentrations in the sample collected of the mineralized outcrop material were very similar to those of the roadway embankment material, with all concentrations below the residential and commercial CSEVs, except arsenic (Table 4). The concentration of

arsenic was 4.7 mg/kg, below the average concentration of the roadway embankment material, and below the 11 mg/kg CDPHE evaluation criteria.

The pH of the outcrop material was measured at 2.7, significantly lower than that measured in the other samples collected. Although low, this pH is not low enough for the material to be considered a characteristically hazardous waste by the EPA, when disturbed and removed.

3.5.2 Ground-Water Sampling

Ground-water samples were collected from each of the two discharge points from within the box culvert which is located beneath I-70 east of the Twin Tunnels (Figure 3). Initially, the southern-most discharge point was sampled, and subsequently both pipes were sampled during a separate event. Additionally, the rate of discharge from each pipe was measured.

The samples were analyzed for total recoverable metals and potentially dissolved metals. The metals that were analyzed were aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium (III and VI), copper, iron, lead, manganese, molybdenum, mercury, nickel, selenium, silver, thallium, uranium and zinc. These analytes were analyzed using EPA Clean Water Act (CWA) Methods 200.7, 200.8; or EPA SW846 Method 245.1. Additionally, phosphorus was analyzed by Standard Method (SM) 4500-P, pH was analyzed by SM 4500-H, and total suspended solids was analyzed by SM 2540D. All samples were submitted to Origins for laboratory analysis. Analytical results for water samples collected are attached to this report as Appendix G.

3.5.2.1 Ground-Water Results

The results of the metals analysis were compared to the appropriate CDPHE surface-water standards (Table 5). Based on the project location, discharge is to Segment 11 of Clear Creek, and the first hierarchal regulation is Regulation 38 for inorganic constituents (metals) (CDPHE, 2011c), followed by Regulation 31 (CDPHE, 2011d). Using CDPHE protocols, only chronic standards were examined during this investigation.

If no value was listed for a given metal, table value standards (TVS) from Regulations 31 and 38 for acute aquatic life impacts were used. For example, Segment 11 has a numeric

limitation for arsenic, whereas other metals such as cadmium and lead have a TVS from Regulations 31 and 38. If no numeric value from Regulation 38, or acute TVS from Regulations 31 and 38, are given for a specific constituent, then either the Regulation 31 "water+fish" standard or the domestic water-supply (DWS) standard applies (depending on use classification), in that order. This segment of Clear Creek is classified for water supply; therefore, surface water standards are generally very stringent. Many of the Regulation 31 and 38 TVSs are based on a mathematical formula with the current stream hardness as the variable. CDOT has provided a current hardness value for Clear Creek of 61 milligrams per liter (mg/L), which was utilized as the variable. It is possible that more recent hardness data is available from another source; however, at the time of this investigation, no other data was identified. Potential permit limits could be amended with more appropriate hardness data.

Ground-water sample results collected at the Site indicate that ground water seeping from the Twin Tunnels contains very low concentrations of several metals. The results from the most recent sampling event indicate that potential permit limits for the following metals are exceeded: arsenic, iron, lead, manganese and selenium (Table 5).

The pH of the water samples was measured at between 7.6 and 7.85 standard units. This measurement is nearly neutral, and does not indicate that the water has contacted potentially mineralized rock, nor is it acidic.

Concentrations of phosphorus and TSS were below the laboratory reporting limits. Discharge rates were measured at 0.83 liters per minute for the southern discharge point, and 0.67 liters per minute for the northern discharge point.

3.5.3 Lead-Paint Sampling

Paint samples for the analysis of lead were collected from the Dog House Bridge and the eastbound bridge over Clear Creek west of Hidden Valley. The paint samples were collected using a chisel or a knife. The following samples were collected:

- Dog House Bridge – White Paint on Railing
- Dog House Bridge – Black Paint on Steel Girders

- Hidden Valley Bridge – Gray Paint on Steel Girders

One paint chip sample of each color of paint identified from the bridges was collected and submitted to Reservoirs Environmental Laboratory, Inc. (Reservoirs), for lead analysis. Reservoirs is accredited by the American Industrial Hygiene Association for metals analysis through the *Environmental Lead Proficiency Analytical Testing (ELPAT)-Environmental Lead Laboratory Accreditation Program* for environmental samples and the *Proficiency Analytical Testing (PAT) - Industrial Hygiene Laboratory Accreditation Program* for industrial hygiene samples. Reservoirs operates under AIHA Certificate #480 and laboratory ID #101533. The samples were analyzed using the Atomic Absorption Spectroscopy (AAS)/Atomic Spectroscopy (AES)/Atomic Emission Spectroscopy - Inductively couples Plasma (AES-ICP). The analytical reports for the paint samples are included with this report as Appendix H.

3.5.3.1 Lead-Paint Results

Lead was found in each of the paints identified on the two bridge structures. The following is a summary of results:

Dog House Bridge

- White Paint on Railings: 0.007 percent
- Black Paint on Steel Girders: 54.44 percent

Hidden Valley Bridge

- Gray Paint on Steel Girders: 0.133 percent

4.0 ADJACENT AND NEARBY PROPERTIES

4.1 General Off-Site Description

Zoning:

The adjacent properties in the Site vicinity are zoned for commercial, light industrial, residential and natural resources (undeveloped forested land) uses. Generally, the western portion of the study area from East Idaho Springs to Hidden Valley has mixed uses, and the eastern portions of the study area from Hidden Valley to Floyd Hill are zoned for natural resources (undeveloped forested land).

Adjacent Site Use:

East Idaho Springs to Twin Tunnels:

Adjacent uses north of I-70 from East Idaho Springs to the Twin tunnels include sparse residential use and undeveloped forested land. South of I-70, and west of the bridge over Clear Creek, adjacent uses include sparse residential use, forested land and Clear Creek to the south. To the west, several buildings are present that may have been a U.S. Forest Service (USFS) Civilian Conservation Corps facility in the past. East of the bridge over Clear Creek, and south of Clear Creek, commercial and light-industrial land uses are present north of CR 314. These uses include, from west to east, an outdoor yard for storage of various campers and boats, a small pond, a small self-storage facility, Ferrellgas propane distribution company, a commercial rafting company, an aggregate batch plant, and the City of Idaho Springs wastewater treatment plant. The City of Idaho Springs has indicated that large buried wastewater-related treatment tanks are located south of the west portal of the Twin Tunnels; south of Clear Creek. Furthermore, the City of Idaho Springs has expressed concern that vibration from tunnel blasting could have an undesired effect on these tanks; however, this scenario is out of the scope of this Phase I ESA.

Twin Tunnels to Hidden Valley:
Lands adjacent to the Site in this area were observed to be undeveloped steep forested land, with the exception of the residential property (Jordan Parcel).

Hidden Valley Interchange:
Several single-family residences are located south of the Site and CR 314. Beyond those residences are undeveloped forested lands.

North of I-70, light-industrial properties are present, as well as the Central City Parkway. Uses include the City of Black Hawk potable water treatment plant, a commercial/industrial warehouse, and the CDOT Hidden Valley road and bridge shop. There are concrete treatment tanks at the treatment plant.

Hidden Valley to Floyd Hill:
Generally, adjacent uses are undeveloped steep, forested lands in this area.

General Regional Property Use:
Generally, land uses in the vicinity of the project are limited, and constrained by rugged forested and mountainous lands. Some development, as discussed above, is present but generally located near I-70 and/or Clear Creek.

4.2 Sensitive Environmental Off-Site Uses (Current and Historical)

During the off-Site reconnaissance and review of the Satisfi database (see Tables 6 and 7, Appendix D), regulatory agency files and historical information, or a combination thereof, five establishments with the potential to impact the Site was identified. The following is a discussion of each.

Methamphetamine Lab - The CSP database listed the possible location of a methamphetamine lab at 2134 CR 314 (Figure 5). Pinyon was not able to identify any additional information regarding this facility, or response actions related to this listing. Typically, the environmental conditions with these types of sites are confined to within

the building. This address is located across Clear Creek from I-70, and is hydraulically disconnected from the project.

Hidden Valley Texaco - This facility operated at the location of the existing CDOT Hidden Valley facility, northeast of the I-70/Hidden Valley exit (Figure 4). This filling station historically maintained five above-ground storage tanks which have been removed. Remedial activities have been completed; however, low-level contamination was left in place, including near I-70. Contaminant concentrations were documented to decrease over time, and the Colorado Department of Health (now the CDPHE) issued a No Further Action letter on March 25, 1991. At the time of this Phase I ESA, construction activities in the vicinity of this facility are limited to re-striping; therefore, there is not an anticipated exposure issue to construction workers with residual contamination that may remain in this area.

Clear Creek Distributing – This facility is the large commercial/light industrial property located north of the Central City Parkway, east of the Black Hawk potable water treatment facility (Figure 4). A petroleum release was reported on April 13, 1990. Files were reviewed at the Colorado Department of Labor and Employment, Division of Oil and Public Safety (OPS). Files indicate that petroleum contamination was remediated to the satisfaction of the OPS. Minor petroleum impacts were noted to remain on this property, but are not located off-site. Ground water was demonstrated to flow north of this facility, towards Clear Creek. The OPS issued a No Further Action letter on April 19, 2005. Residual contaminants, if present, are not likely to impact the project.

Kermitts Roadhouse – This site is located at the base of Floyd Hill at the intersection of I-70 and U.S. Highways 6 and 40 (Figure 6). A filling station was reported to have been developed at this property around 1946, and was called the Tunnel Inn Service Station (Centennial, 2011). An undated photograph taken of this property during I-70 construction shows what appears to be a filling station at the location of Kermitts. This facility is no longer operating as a service station. The OPS does not have files related specifically to this facility; however, the OPS does have a file regarding a facility called Clear Creek Village Conoco located at the junction of "I-70 and Hwy 6." It is possible that this is the same property, although this was not confirmed. Records show that four permanently closed USTs were located at the Clear Creek Village Conoco facility,

reportedly installed in the 1960s and 1970s. No information regarding the exact location of these tanks, or potential environmental conditions, was identified. Kermitts Roadhouse is located topographically lower, and likely hydraulically down-gradient of the Site, and any residual petroleum hydrocarbon contamination is not likely to impact the Site.

Central City/Clear Creek Superfund Site - Gold was discovered in Idaho Springs in 1859, and hard rock and placer mining was a leading industry in the vicinity until the 1950s. Over 800 inactive mines and tunnels are located in Clear Creek and Gilpin counties (EPA, 1991). Initially, placer mining was conducted; however, deposits were quickly depleted. Mining activities then focused on hard rock sulfide ores through deep mines. Flooding problems required that the mines be drained through drainage shafts, many of which continue to drain water heavily contaminated with metals, and discharge into surface-water bodies. The Central City/Clear Creek Superfund site was added to the NPL in 1983. This listing includes multiple waste piles, tailing impoundments, milling sites and draining mine adits within a 400-square mile area in the Clear Creek watershed. Mining and ore processing left a legacy of contamination of soil, surface water and ground water in many areas in Clear Creek and Gilpin counties. Most significant is the impact to Clear Creek and its tributaries, which serve as a major drinking water source for the Denver area. The most significant contaminants are metals, in particular, lead, arsenic and cadmium (EPA, 1991).

The boundary of this Superfund site is not precisely defined due to the nature of the site, but generally includes the approximately 400 square miles of the Clear Creek watershed west of Golden. Mining activities occurred at many locations across a broad area, leading to a wide distribution of mine waste, where many discrete locations contain small amounts of waste. In order to address concerns with different discrete facilities, the EPA organized work into separate working units, or OUs. Operable Units 1 and 2 specifically addressed five tunnels which were discharging acid mine drainage. Operable Unit 3 was designed initially to address surge events from the Argo Tunnel in Idaho Springs; however, was expanded to include all areas not specifically addressed in OUs 1 and 2 within the 400-square mile Superfund site boundary, specifically where impacts to Clear Creek and its tributaries is identified (Clear Creek watershed). The subject project is

included within the boundaries of OU 3. In 1991, the U.S. EPA issued a Record of Decision (ROD) with the intention of describing the final response action (EPA, 1991). However, the ROD was prepared to maintain some flexibility, and was not intended to be the final decision document as subsequent studies and corrective action plans would supersede this document. The ROD considered on-site consolidation of waste rock and tailings; however, individual capping was selected at the time due to cost considerations. The ROD was updated in 2006 (CDPHE, 2006). The updated ROD added a remedial action component - the addition of an on-site repository where materials subject to remedial actions could be consolidated.

The most recent Five-Year Review Report for this Superfund site was reviewed (CDPHE, 2009). This report describes several specific sites selected for remedial activities. Of all the specific sites identified, only one is likely to potentially impact the project. The Virginia Canyon Ground Water/Big Five Project included investigation of zinc loading from Virginia Canyon to Clear Creek in Idaho Springs. The source of contamination was identified, and a cut-off wall was constructed to capture impacted ground water and convey it to the Argo Tunnel Water Treatment Plant (WTP) in Idaho Springs; therefore, this issue is not likely to impact the Site. In 2005, a pipeline was constructed to convey discharge from the Big Five Tunnel to the Argo Tunnel WTP. Additional projects have been planned; however, funding issues have delayed implementing further remedial actions. However, EPA has noted that construction of a new bulkhead in the Argo Tunnel may occur at the same time as the Twin Tunnels project will be constructed. EPA indicates that water-quality sampling of Clear Creek will be completed to evaluate potential impacts to the creek from that work. The purpose of the bulkhead project is to allow for interruption of discharge from the Argo Tunnel in the event that maintenance of the treatment plant is needed to eliminate undesired discharges into Clear Creek.

Several information sources were reviewed pertaining to mines and/or mills which may have operated in the vicinity of the project. These sources included the Colorado Division of Reclamation Mining and Safety (DRMS) online mapping application (DRMS, 2011); the USGS 7.5 Minute Squaw Pass Topographic Quadrangle (USGS, 1957); the geologic map of the Squaw Pass Topographic Quadrangle (Sheridan and

Marsh, 1976); the I-70 Mountain Corridor PEIS (Preliminary Environmental Impact Statement) Regulated Materials and Historic Mining Technical Report (PEIS, 2011); historic information from the Colorado Bureau of Mines provided by Clear Creek County (CBM, 1959 and 1967), the Centennial Archaeology survey of the Twin Tunnels project (Centennial, 2011), and files maintained by the CDPHE. Several site-specific studies have been completed for CDOT in the project vicinity; one of which is applicable. That study included the completion of three soil borings and collection of soil samples near the western edge of the project area (Yeh, 2005). Additionally, a subsidence study was completed by CDOT in 1981 in I-70 at the Hidden Valley Interchange (CDOT, 1981), and several engineering geology plan sheets were provided to Pinyon.

Based on the resources reviewed, the following summary is presented regarding potential mining activities near and within the project:

- The alluvium material located within the Clear Creek floodplain has likely been reworked during gold dredging activities early in the Colorado gold rush (Sheridan and Marsh, 1976; Rapp, 2012).
- A strip mine was located in the commercial area south of Clear Creek, and west of the Twin Tunnels (USGS, 1957; Sheridan and Marsh, 1976). Review of historic aerial photographs indicates that this area was heavily disturbed after 1938 and before 1956. The disturbance area appeared to encompass the commercially-developed area, and may have extended to a small area beneath I-70. Subsequent to mining it is likely that fill material was used to regrade this area. The source of the fill is unknown.
- Information collected from the DRMS indicates several mine permits in the vicinity; however, there is no information that mining actually resulted at the locations noted in that database (DRMS, 2011).
- The Gold Bar Placer Mine historically operated at the location of the current Hidden Valley Interchange in the late 1800s (Mine Plat, 1884). Underground placer mining reportedly occurred in this area, and there have been subsidence events reported at the Hidden Valley interchange resulting from failing underground roof supports (CDOT, 1981). CDOT completed a subsidence investigation, where significant underground voids were identified, and the result of past underground placer mining. Verbal discussions with CDOT staff indicate that the voids were subsequently mitigated beneath I-70. No information regarding the disposition of mine processes or mine waste was identified.
- Several small adit complexes were identified by Centennial Archaeology north of the Site across the project area (Figures 2 through 6). These facilities are generally very small in nature, are likely small prospects or glory holes, and no evidence of ore

processing was identified with these facilities. Small waste-rock piles are associated with these adits, but were located outside areas where significant construction would be completed. These adit complexes are likely de minimis environmental conditions.

- Two potential mill sites have been identified in the vicinity of the project, the Silver Spruce Mill, and the Dixie Mill (PEIS, 2011). The Silver Spruce Mill operated approximately 1,500 feet west of the project, and the Dixie Mill operated approximately 100 feet north of I-70 at the general location of the start of the Central City Parkway (Figure 4).

  Review of Information Reports from the CBM (CBM, 1957 and 1969) indicates that the Dixie Mill operated near the Hidden Valley Interchange from at least the 1950s to late 1960s. Discussions with Marjorie Bell of the Idaho Springs Historical Society indicate that the mill may have operated before this time; perhaps after World War II, as during the war mining activities not deemed essential to the war effort were prohibited (Bell, 2011). The information collected indicates that processes included the use of a tailings pond, a classifier, ore bins, crusher, concentrating tables and a rod mill at this facility. Ore was reportedly brought to the mill from the Dixie company mine (Dixie Mine), which was located southwest of Idaho Springs near Chicago Creek. Ore brought to the facility was dumped into one of four 50-ton crude ore bins, which fed ore by conveyor to a jaw crusher. The crushed ore was then conveyed to the rod mill. Fine-grained material was then run over a rag plant to extract free gold, then flow went over a concentrating table and to eight cell floats. An Allen Cone (classifier) was used to de-water concentrates before being dropped into a 45-ton bin. The mill reportedly produced gold, silver, lead, copper and zinc. These general processes were confirmed by Ms. Bell, who worked briefly at the mill in a gift shop in the mid-1950s.

  The CDPHE also maintains a file related to the Concord Minerals facility at Hidden Valley, which is related to the Dixie Mill. Pinyon reviewed the file at the CDPHE Records Center. The file is related to an EPA Consent Agreement and Final Order issued in the early 1980s, related to the illegal storage of large quantities of hazardous waste, including sodium xanthate and sodium cyanide used to process gold at this facility. Concord reportedly handled volumes of waste in excess of that permitted under the Hazardous Waste Regulations. Moreover, the company reportedly attempted to illegally dispose of this waste at the landfill located near Empire. Inspection reports also suggested that process wastes may have leaked on the mill site; however, no information was available indicating cleanup of those materials. Eventually, Concord Minerals removed drums of waste for offsite disposal, and was levied a fine by the EPA. This facility was historically located at the current location of the Central City Parkway and City of Blackhawk Water Treatment Facility. Review of hydrogeological data related to the Clear Creek Distributing facility indicates that ground water flows toward the north, as influenced by Clear Creek; therefore, this facility is not likely to impact the Twin Tunnels project.

- Yeh and Associates, Inc. (Yeh), previously completed a limited investigation along the east-bound on-ramp to I-70 from Idaho Springs in 2005 (Yeh, 2005). Three shallow borings (ES-08, ES-09 and ES-10) were advanced with a hand auger near the western edge of the project to depths between one and four feet below the ground surface (Figure 2). Soil samples were collected and analyzed for the Resource Conservation and Recovery Act (RCRA) eight metals (arsenic, barium, cadmium, chromium, lead, selenium, silver and mercury). Pinyon compared the results to the 2011 CDPHE CSEVs. The concentrations of all metals from all samples were below the current CSEVs for those metals, with the exception of arsenic. The concentrations of arsenic in those samples ranged from less than 5.2 milligrams per kilogram (mg/kg) to 9 mg/kg. These concentrations are below the CDPHE action level of 11 mg/kg (see Section 3.5).

- It is possible that mine wastes have been utilized as roadway embankment beneath I-70 and/or CR 314, as well as nearby off-Site areas. Mapping information from the USDA indicates that at least two large areas beneath the project may include mine waste (USDA, 2011; Figures 2 through 4). Based on dates of mining operations in the project vicinity, the lack of environmental regulations during those times, and the limited availability of data regarding the disposition of mine-related wastes for the time period in question, there is a possibility that mine wastes are located in the project area, including the Site, and could be encountered during construction activities. However, soil sample results from areas of I-70 where significant soil disturbing activities will be completed did not indicate the presence of mine wastes. Therefore, it is possible that mine wastes could be encountered, although the likelihood is low, and quantities are likely limited.

- Pinyon interviewed Mr. Ed Rapp with the Clear Creek Watershed Foundation (Rapp, 2012). Mr. Rapp was formally a District Engineer with the U.S. Army Corps of Engineers, and is an expert regarding mine-waste related environmental conditions in the project vicinity, having worked on many local projects to improve the water quality in Clear Creek, and is a major stakeholder regarding public projects that could impact the creek from mining-related wastes. Mr. Rapp stated that the project area is located outside the main ore body that was economically mined historically near Idaho Springs. However, dredging likely occurred within the Clear Creek floodplain as previously described. Mr. Rapp stated that dredging activities utilized mechanical means to extract gold from the ore, and chemical extraction was not historically utilized in those processes. Mr. Rapp stated that in his opinion, there was relatively low risk of mine waste to be located in the project vicinity in significant quantities, as most mining and processing of mineralized rock took place west of the project vicinity. Mr. Rapp indicated that the small amounts of waste could be encountered, although that scenario was unlikely in his opinion.

5.0 CONCLUSIONS

5.1 Findings

Based on the information obtained and reviewed, the following were identified:

RECs Yes

- Mining and milling activities occurred in the project vicinity from approximately 1859 to the 1980s. It is possible that mine-related wastes are located beneath the roadway on the project, which could be encountered during construction activities at the Site. It is likely that mine waste, if encountered, would be difficult to distinguish as it would likely have been mixed with "clean" embankment material beneath the roadway. If this is the case, chemical concentrations would be significantly diluted by those historic processes.

Historical RECs None

De Mimimis Conditions Yes

- Ground water is discharging continuously from the Twin Tunnels into a box culvert immediately east of the tunnels. Water sampling indicates that this water contains concentrations of metals that exceed potential surface-water discharge limits. Although this condition may be a project liability as management and/or treatment of this water may be required in accordance with CDPHE permit conditions, by definition, this scenario is not a REC as elevated metals concentrations is likely the result of natural processes.
- Several small adits are located near the Site, and outside the project footprint. These are relatively small features where no evidence of mine processing was identified. Based on the limited nature of these features, it is unlikely that they would lead to a regulatory action; therefore, are considered de mimimis.

Non-Scope Issues

- Lead has been identified in paint on components of both the eastbound Hidden Valley Bridge over Clear Creek, and the Dog House Bridge. Although this condition is a potential project liability as the lead will need to be abated to eliminate risk to workers

health and the environment, by definition, this condition is not considered a REC under the ASTM standard.

5.2 Opinion

The classification of items as non-RECs was made using the definition of a REC. There is indication of an existing or material threat of release at the Site.

5.3 Additional Investigations

- Pinyon recommends that a Materials Management Plan be completed that details site-specific standard operating procedures regarding the identification, sampling, handling and disposal of mine-related wastes that could be encountered during construction of this project.
- Pinyon recommends that the selected contractor be notified that lead-based paint is located on the Hidden Valley Bridge over Clear Creek and the Dog House Bridge. Further, Pinyon recommends that the contractor avoid sanding, cutting, burning, or otherwise causing the release of lead from paint on these structures. If this is not possible, the lead should be abated properly. If possible, components that will require demolition should be removed carefully and properly recycled. OSHA Regulation 1926.62 should be consulted for worker protection prior to work on these structures. Work should be completed on these structures in accordance with CDOT Specification 250.04.
- Workers on this project must follow *CDOT Specification 250 – Environmental, Health and Safety Management* during excavation activities at this site.

5.4 Data Gaps

- There are four privately-owned properties where real property may be acquired for construction of this project. No private properties were entered during the Site visits. However, the portions of those properties proposed for acquisition were readily visible from public right of way. Therefore, this data gap is not considered significant.
- Owners of private properties that may be acquired in support of this project were not interviewed. This data gap is considered significant.

5.5 Conclusions

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 of approximately three miles of Interstate 70 (I-70) between the East Idaho Springs interchange and the base of Floyd Hill in Clear Creek County, Colorado (Site). Any exceptions to, or deletions from, this practice are described in Section 7.1 of this report. This assessment has revealed evidence of recognized environmental conditions in connection with this property.

This Page Intentionally Left Blank

6.0 REFERENCES

Agency Contacts

Refer to Table 1

Reports and Publications

Bell, 2011. "Personal Communication with Margorie Bell of the Idaho Springs Historical Society, and Brian Partington of Pinyon," December 16, 2011.

CBM, 1959. "Information Report, Dixie Mill," Completed by the Colorado Bureau of Mines, Dated December 22, 1959.

CBM, 1967. "Information Report, Dixie Mill," Completed by the Colorado Bureau of Mines, Dated June 8, 1967.

CDOT, 1981. "Hidden Valley Subsidence - Four Plan Sheets (No Report Provided)," Colorado Division of Highways (now CDOT), November 1981.

CDPHE, 2006. "Central City/Clear Creek Superfund Site, Amendment to the Operable Unit 3 and Operable Unit 4 Records of Decision for the Addition of an On-Site Repository," prepared by the Colorado Department of Public Health and Environment, September 25, 2006.

CDPHE, 2009. "Five-Year Review Report, Fourth Five-Year Review Report for Central City/Clear Creek Superfund Site, Gilpin and Clear Creek Counties, Colorado," prepared by the Colorado Department of Public Health and Environment, September 29, 2009.

CDPHE, 2011a. "Table 1 - Colorado Soil Evaluation Values," Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division, July 2011.

CDPHE, 2011b. "Risk Management Guidance for Evaluating Arsenic Concentrations in Soil," Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division, June 2011.

CDPHE, 2011c. "Regulation No. 31 – The Basic Standards and Methodologies for Surface Water (5 CCR 1002-31)," Colorado Department of Public Health and Environment, Water Quality Control Commission, Effective January 1, 2011.

CDPHE, 2011d. "Regulation No. 38 – Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin," Colorado Department of Public Health and Environment, Water Quality Control Commission, Effective June 30, 2011.

CDWR, 2012. "Colorado Decision Support System (CDSS) On-Line Mapping Application," Maintained by the Colorado Division of Water Resources, accessed January 2012.

Centennial, 2011. "A Class III Cultural Resource Inventory Report for the Colorado Department of Transportation I-70 Twin Tunnels Environmental Assessment, Clear Creek, Colorado," prepared by Centennial Archeology, December 2011.

DRMS, 2011. "Colorado Division of Reclamation Mining and Safety Mapping Application," maintained by the Colorado Division of Reclamation Mining and Safety, www.drmsmaps.state.co.us, accessed December 14, 2011.

EPA, 1991. "EPA Superfund Record of Decision: Central City, Clear Creek, EPA ID: COD980717557 OU 3, Idaho Springs, Colorado," prepared by the U.S. Environmental Protection Agency, September 30, 1991.

Munsell, 2000. "Munsell Soil Color Charts," Published by Munsell Color, 2000.

PEIS, 2011. "I-70 Mountain Corridor PEIS Regulated Materials and Historic Mining Technical Report," prepared in support of the I-70 Mountain Corridor Programmatic Environmental Impact Statement by the Colorado Department of Transportation, dated August 2010, reissued March 2011.

Pinyon, 2011. "Sampling and Analysis Plan – Twin Tunnels," Prepared by Pinyon Environmental, Inc., November 23, 2011.

Rapp, 2012. "Personal Communication between Brian Partington and Ed Rapp," January 10, 2012.

USDA, 2003. "Soil Survey of Georgetown Area, Colorado, Parts of Clear Creek, Gilpin, and Park Counties," United States Department of Agriculture, Soil Conservation Service, 2003.

Yeh, 2005. "Preliminary Site Investigation, Interstate 70 Ramp Metering, Empire Junction, Downieville, Mt. Evans-SH 103 and Idaho Springs East, Clear Creek County, Colorado," prepared by Yeh and Associates, Inc., June 7, 2005.

Maps

Mine Plat, 1884. "Survey No. 2113 Mineral District No. 2 Plat, Gold Bar Placer," Provided by the Colorado Department of Transportation, 1884.

Sheridan, D.M. and Marsh, S.P., 1976, Geologic map of the Squaw Pass quadrangle, Clear Creek, Jefferson, and Gilpin Counties, Colorado: U.S. Geological Survey, Geologic Quadrangle Map GQ-1337, scale 1:24000.

USDA, 2011. "Web Soil Survey," Online Mapping Application Maintained by the Unites States Department of Agriculture, Natural Resources Conservation Services, http://websoilsurvey.nrcs.usda.gov/app/, Accessed December 2011.

USGS, 1957. "7.5-Minute Topographic Map, Squaw Pass Quadrangle, Colorado," United States Geological Survey, 1957.

USGS, 1974. "7.5-Minute Topographic Map, Squaw Pass Quadrangle, Colorado," United States Geological Survey, 1957, revised 1974.

Telephone Directories

Mountain Bell, 1975. Mountain Bell Telephone Directory for Idaho Springs. Mountain Bell, Denver, 1975.

Mountain States, 1959. Mountain States Telephone Directory for Idaho Springs. Mountain States Telephone Directory, Boulder, 1959.

Mountain States, 1965. Mountain States Telephone Directory for Idaho Springs. Mountain States Telephone Directory, Boulder, 1965.

Mountain States, 1969. Mountain States Telephone Directory for Idaho Springs. Mountain States Telephone Directory, Boulder, 1969.

US West, 1980. The White and Yellow Pages Telephone Directory for Idaho Springs. US West, Denver, 1980.

US West, 1985. The White and Yellow Pages Telephone Directory for Idaho Springs. US West, Denver, 1985.

US West, 1989. The White and Yellow Pages Telephone Directory for Idaho Springs. US West, Denver, 1989.

US West, 1995. The White and Yellow Pages Telephone Directory for Idaho Springs. US West, Denver, 1995.

US West, 2000. The White and Yellow Pages Telephone Directory for Idaho Springs. US West, Denver, 2000.

US West, 2005. The White and Yellow Pages Telephone Directory for Idaho Springs. US West, Denver, 2005.

US West, 2010. The White and Yellow Pages Telephone Directory for Idaho Springs. US West, Denver, 2010.

Sanborn Fire Insurance Maps

The following Sanborn Fire Insurance Maps of Idaho Springs, Colorado, were reviewed:

1890, 1895, 1900, 1907, 1931 and 1939

Aerial Photographs

Pinyon reviewed the following photographs from Clear Creek County:

October 23, 1938, Frame BOV 39-13;
October 23, 1938, Frame BOV 39-14;
September 15, 1956, Frame ECB-7-121;
July 2, 1967, Frame BLM-C-4-1;
October 3, 1974; Frame 08-017; and
August 22, 1980, Frame 2-30.

Pinyon reviewed the following photographs from Google Earth:

September 21, 1999;
September 22, 2001;
August 11, 2003;
October 22, 2005;
July 30, 2006;
March 30, 2008; and
September 23, 2011.

Databases

Satisfi, 2011. "Satisfi Environmental Information Database Search, Clear Creek County Road 314, dated October 6, 2011 (Appendix D)."

7.0 LIMITATIONS

This report was prepared by Pinyon Environmental, Inc., at the request of and for the sole benefit of Colorado Department of Transportation, or any entity controlling, controlled by, or under common control with Colorado Department of Transportation. This report addresses certain physical characteristics of the Site with regards to the release or presence of hazardous materials. It is not intended to warrant or otherwise imply that the Site is or is not free from conditions, materials, or substances which could adversely impact the environment or pose a threat to public health and safety. The material in this report reflects the best judgement of Pinyon in light of the information that was readily available at the time of preparation.

This report is for the exclusive and present use of Colorado Department of Transportation, or any entity controlling, controlled by, or under common control with Colorado Department of Transportation, to assist with an environmental evaluation of the Site. In the event of any reuse or publication of any portion of this report, Pinyon Environmental Engineering Resources, Inc., shall not be liable for any damages arising out of such reuse of publication. Any use a third party makes of this report, or any reliance on or decisions to be made on it, are the responsibility of such third party. Pinyon accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

The principles outlined in Section 4.5 of the ASTM Standard are an integral part of this practice and are intended to be referred to in resolving any ambiguity or exercising such discretion as is accorded the user or environmental professional in performing an environmental site assessment or in judging whether a user or environmental professional has conducted appropriate inquiry or has otherwise conducted an adequate environmental site assessment.

Under ASTM Standard, this report is presumed to be valid for 180 days from the date of completion. For more information on the continued viability of this document, refer to the ASTM Standard, Section 4.6.

This report does not address additional requirements that must be met in order to qualify for the landowner liability protections (LLPs) (for example, the continuing obligation not to impede the integrity and effectiveness of activity and use limitations (AULs), or the duty to take reasonable steps to prevent releases, or the duty to comply with legally required release reporting obligations). Additionally, the report user has responsibilities with respect to All Appropriate Inquiry and LLPs.

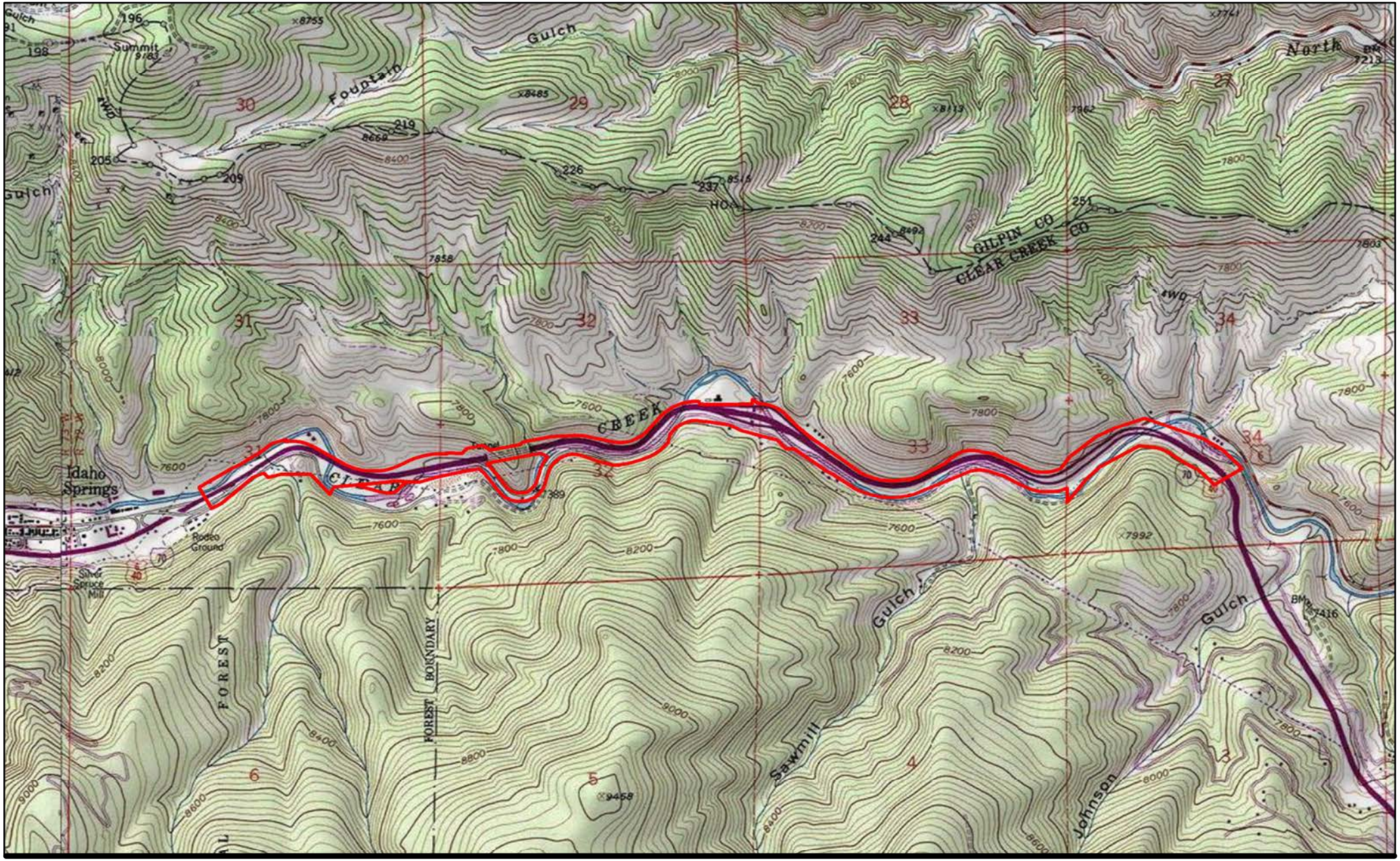
7.1 Deletions and Deviations from Standard

Owners of properties that may be acquired were not interviewed in support if this Phase I ESA.

Any data failures encountered are discussed in Section 3.4; any data gaps are outlined in Section 5.4.

7.2 Additions to Standard

A Limited Phase II ESA was added to the ASTM Standard, as described in the text.



Study Area

Site Location: Sections 31-34, Township 3S, Range 66W, 6th Principal Meridian

Twin Tunnels Environmental Assessment
Idaho Springs/Clear Creek County

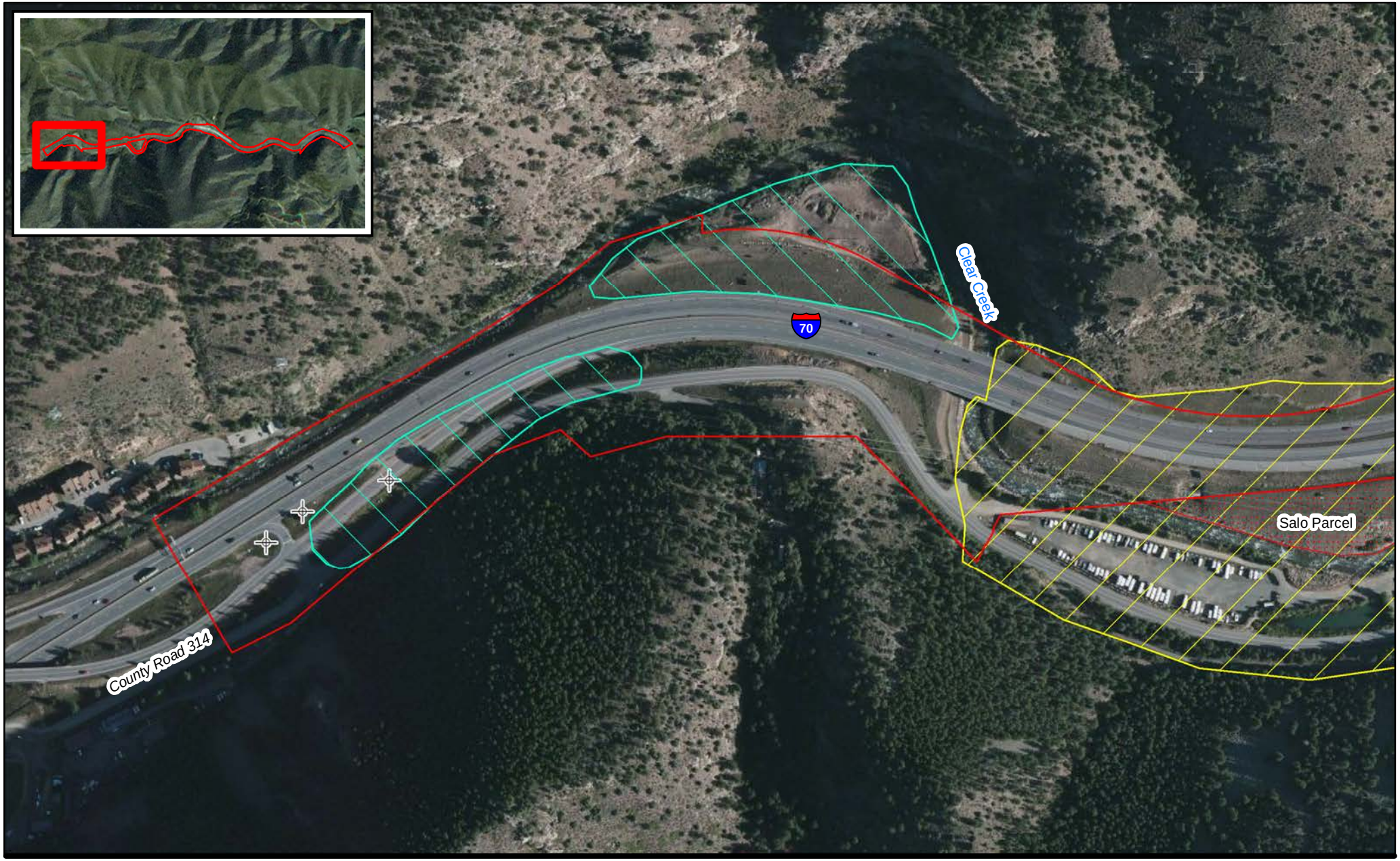
N
W E
S

0 890 1,780 Feet

Scale: 1:25,200

Data Source:

USGS 7.5' Topographic Map
Squaw Pass, CO 1957 (Photorevised 1974)



- Adits (Centennial, 2011)
- Soil Sample Location (YEH, 2005)
- Mill Location
- Geotechnical Borings
- Mile Marker
- Twin Tunnels
- Area with Significant Soil Disturbance During Construction
- Private Property - Included in Study Area
- Right of Way / Study Limits
- Potential Mine Waste Fill (USDA, 2011)
- Artificial Fill
- Notable Area

Twin Tunnels Environmental Assessment
Idaho Springs/Clear Creek County

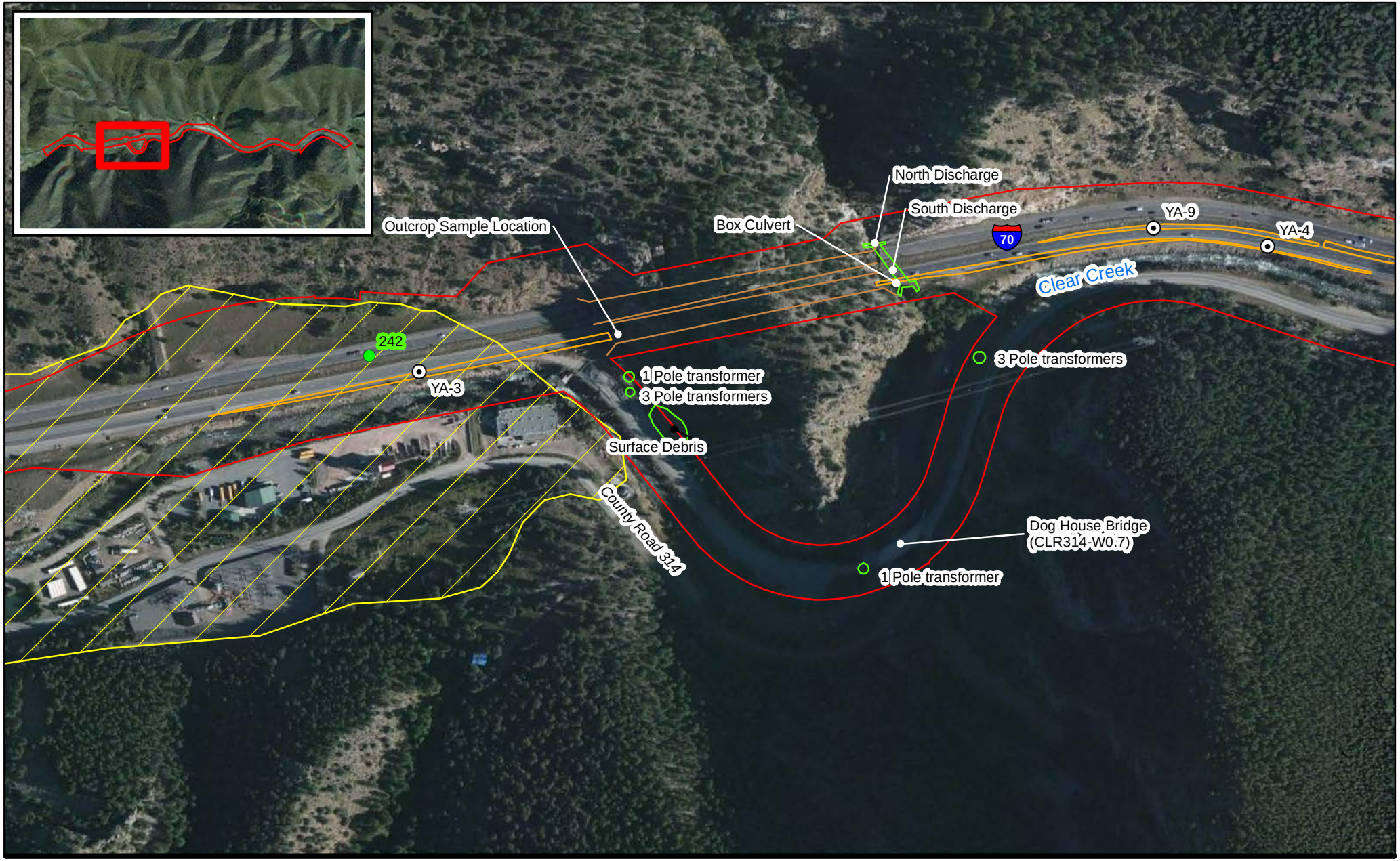
N
W E
S

0 75 150 300 Feet

Scale: 1:4,000

Data Source:

Satisfi 2011	2005 U.S. Census TIGER Files
USDA 2011	YEH 2005
Sheridan and Marsh 1976	Centennial 2011



- Adits (Centennial, 2011)
- Soil Sample Location (YEH, 2005)
- Mill Location
- Geotechnical Borings
- Mile Marker
- Twin Tunnels
- Area with Significant Soil Disturbance During Construction
- Private Property - Included in Study Area
- Right of Way / Study Limits
- Potential Mine Waste Fill (USDA, 2011)
- Artificial Fill
- Notable Area

Twin Tunnels Environmental Assessment
Idaho Springs/Clear Creek County

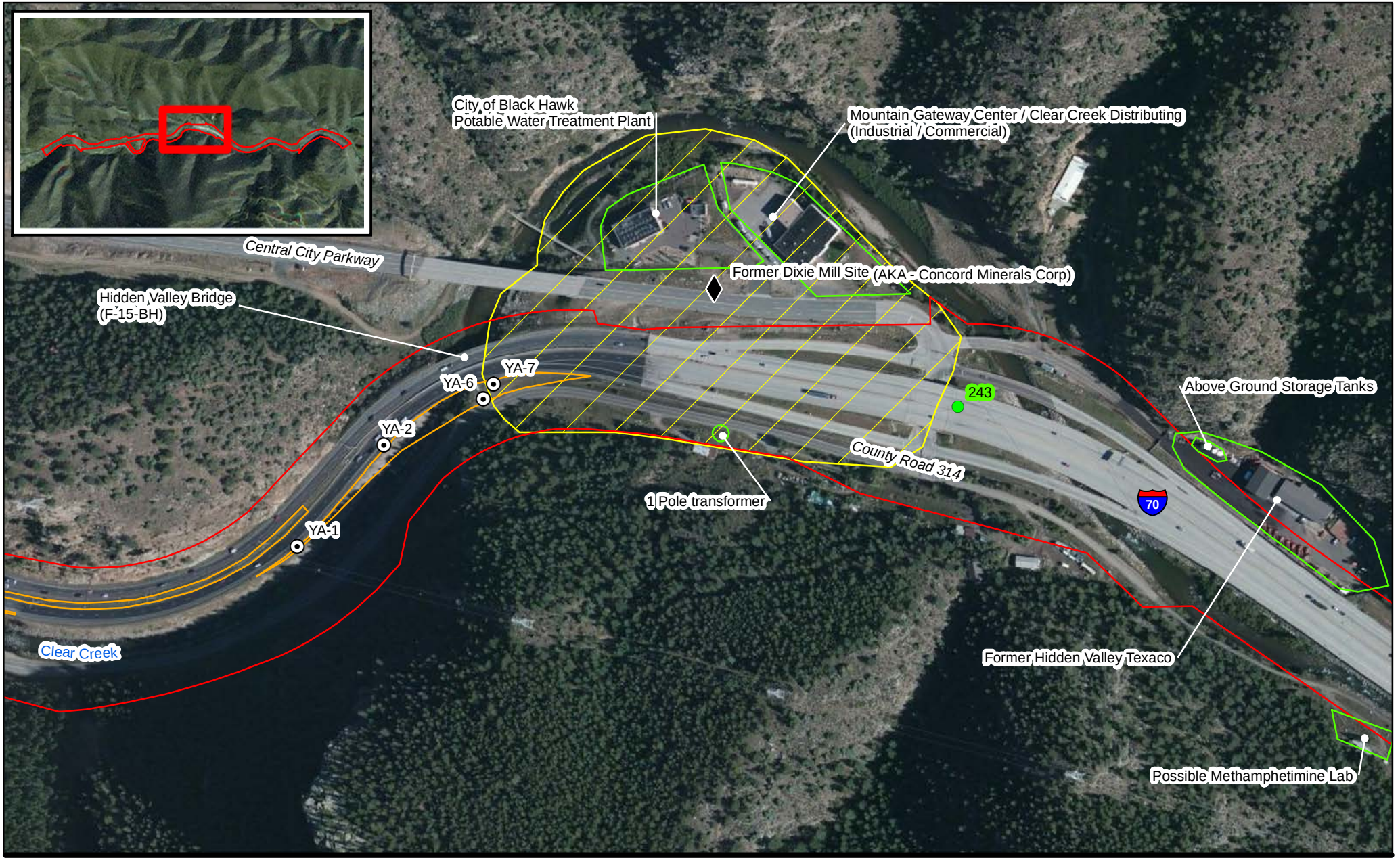
N
W E
S

0 75 150 300 Feet

Scale: 1:4,000

Data Source:

Satisfi 2011	2005 U.S. Census TIGER Files
USDA 2011	YEH 2005
Sheridan and Marsh 1976	Centennial 2011



- Adits (Centennial, 2011)
- Soil Sample Location (YEH, 2005)
- Mill Location
- Geotechnical Borings
- Mile Marker
- Twin Tunnels
- Area with Significant Soil Disturbance During Construction
- Private Property - Included in Study Area
- Right of Way / Study Limits
- Potential Mine Waste Fill (USDA, 2011)
- Artificial Fill
- Notable Area

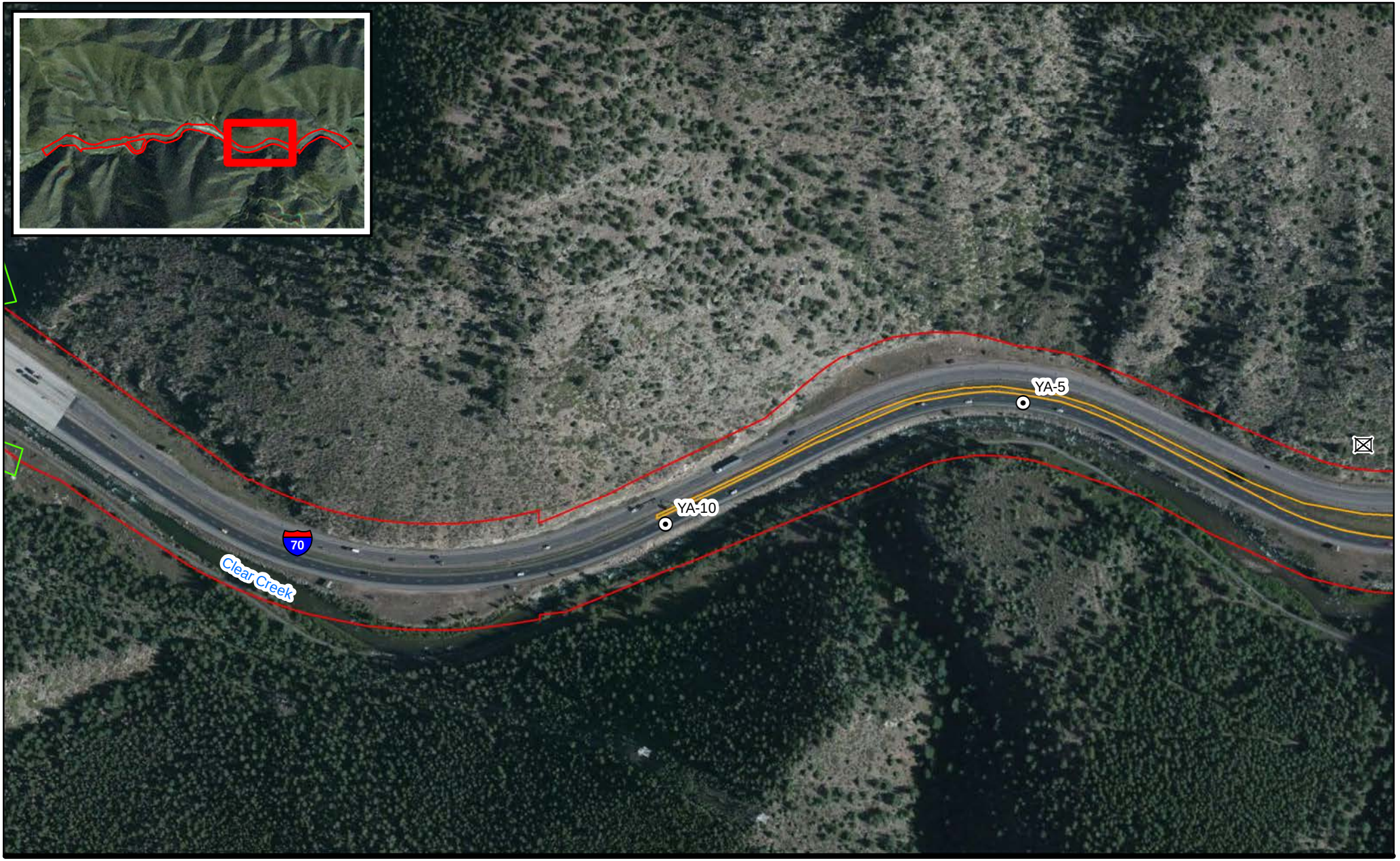
Twin Tunnels Environmental Assessment
Idaho Springs/Clear Creek County

0 75 150 300 Feet

Scale: 1:4,000

Data Source:

Satisfi 2011	2005 U.S. Census TIGER Files
USDA 2011	YEH 2005
Sheridan and Marsh 1976	Centennial 2011



- Adits (Centennial, 2011)
- Soil Sample Location (YEH, 2005)
- Mill Location
- Geotechnical Borings
- Mile Marker
- Twin Tunnels
- Area with Significant Soil Disturbance During Construction
- Private Property - Included in Study Area
- Right of Way / Study Limits
- Potential Mine Waste Fill (USDA, 2011)
- Artificial Fill
- Notable Area

Twin Tunnels Environmental Assessment
Idaho Springs/Clear Creek County

N
W E
S

0 75 150 300 Feet

Scale: 1:4,000

Data Source:

Satisfi 2011	2005 U.S. Census TIGER Files
USDA 2011	YEH 2005
Sheridan and Marsh 1976	Centennial 2011

- Adits (Centennial, 2011)
- Soil Sample Location (YEH, 2005)
- Mill Location
- Geotechnical Borings
- Mile Marker
- Twin Tunnels
- Area with Significant Soil Disturbance During Construction
- Private Property - Included in Study Area
- Right of Way / Study Limits
- Potential Mine Waste Fill (USDA, 2011)
- Artificial Fill
- Notable Area

Twin Tunnels Environmental Assessment
Idaho Springs/Clear Creek County

0 75 150 300 Feet

Scale: 1:4,000

Data Source:

Satisfi 2011	2005 U.S. Census TIGER Files
USDA 2011	YEH 2005
Sheridan and Marsh 1976	Centennial 2011

Table 1
Summary of Persons and Agencies Contacted

Agency/Affiliation	Contact Name/Website Date Contacted	Phone Number
Municipal Water and Sewer Provider		
None		
Electrical and Natural Gas Provider		
Xcel Energy	www.xcelenergy.com	800.895.4999
Agencies		
Clear Creek Assessor	www.co.clear-creek.co.us/depts/assess.htm December 8, 2011	303.679.2322
Clear Creek Planning and Zoning	Jan Patterson December 8, 2011	303.679.2436
Clear Creek Fire Authority	Kelly Babaion December 8, 2011	303.567.4342
Colorado State Patrol	Charlotte Smith December 8, 2011	303.273.1901
CDPHE	Diana Huber	303.692.3331
Interviews		
Resident along CR 314/ Idaho Springs Historical Society	Marjorie Bell December 16, 2011	303.567.2446
Clear Creek Watershed Foundation	Ed Rapp January 10, 2012	303-567-2699
CDOT Region 1 / ESA User	Marc Morton	720.497.6972

Notes:
CDPHE Colorado Department of Public Health and Environment
ESA Environmental Site Assessment

Table 2
Summary of General Site Observations

Issue	ASTM Section	Observed/ Present (Y/N)?	Section for Additional Information
Potable Water Supply	9.4.1.9	N	Table 1
Municipal Sewer System	9.4.1.10	N	Table 1
Equipment Containing PCBs	9.4.2.10	Y	§3.2.1
Heating/Cooling Equipment	9.4.3.1	Y	§3.2.2
Improper Waste/Debris Disposal/Fill Material	9.4.4.4	Y	§3.2.3, §3.2.5
Hazardous Substance/Petroleum Use	9.4.2.3	N	§3.2.7
Storage Tanks (UST/AST)	9.4.2.4	N	§3.2.6
Odors	9.4.2.5	N	--
Pools of Liquids	9.4.2.6	N	--
Drums	9.4.2.7	N	--
Hazardous Substance/Petroleum Containers	9.4.2.8	N	§3.2.7
Unidentified Substance Containers	9.4.2.9	N	§3.2.9
Stains or Corrosion	9.4.3.2	N	--
Drains/Sumps	9.4.3.3	Y	§3.2.4
Pits, Ponds or Lagoons	9.4.4.1	N	§3.2.10
Stained Soil, Pavement, Floors	9.4.4.2	N	§3.2.8
Stressed Vegetation	9.4.4.3	N	--
Wastewater Treatment/Storage	9.4.4.5	N	--
Storm Water Storage Area	9.4.4.5	N	--
Discharge to drain, ditch, underground, stream	9.4.4.5	Y	§3.2.4
Wells-Monitoring	9.4.4.6	N	--
Wells-Dry Wells, Water Supply, Abandoned	9.4.4.6	Y	§3.2.11
Septic System	9.4.4.7	N	--

Notes:
Y Yes
N No
U Unknown

Table 3
Water Well Information

Permit Number	Status	Date	Well Use	Well Depth	Owner	Location (UTM NAD83)		Accuracy
						Easting	Northing	
28934	Unk	8/13/1996	OTHER	Unk	IDAHO SPRINGS CITY OF	457840	4399490	Spotted from quarters
8769	Unk		HOUSEHOLD USE ONLY	Unk	LOWE FRANK C.	458286	4399480	Spotted from quarters
22673	Unk	3/25/1994	OTHER	Unk	COLORADO DEPT OF TRANSPORT-ATION	458514	4399280	Spotted from quarters
159475	Record change. A portion of the file was modified/corrected.	1/17/1991	DOMESTIC	125	LOWE FRANK C	458585	4399230	Spotted from section lines
54706	Change in ownership accepted and updated.	3/30/1972	DOMESTIC	100	SHOATES TIMOTHY L & AMY	459023	4399290	Spotted from section lines
200556	Unk	12/9/1996	HOUSEHOLD USE ONLY	245	PAWLOWSKI ALLAN	459372	4399320	Spotted from section lines
56847	Statement of Beneficial use received.	5/11/2001	MUNICIPAL	Unk	BLACK HAWK CITY OF	460180	4399860	Spotted from section lines
26572	Unk	9/22/1995	OTHER	Unk	CLEAR CREEK DISTRIBUTING INC	460316	4399910	Spotted from quarters
27153	Unk	12/14/1995	OTHER	Unk	CLEAR CREEK DISTRIBUTING	460316	4399910	Spotted from quarters
27754	Unk	4/3/1996	OTHER	Unk	CLEAR CREEK DISTRIBUTING CO	460316	4399910	Spotted from quarters
30448	Unk	4/9/1997	OTHER	Unk	BLACK HAWK CITY OF	460316	4399910	Spotted from quarters
31577	Unk	8/27/1997	OTHER	Unk	CLEAR CREEK DISTRIBUTING CO	460316	4399910	Spotted from quarters

Table 3 (Continued)
Water Well Information

Permit Number	Status	Date	Well Use	Well Depth	Owner	Location (UTM NAD83)		Accuracy
						Easting	Northing	
11704	Unk	7/28/1988	INDUSTRIAL	0	SMITH GREG	460328	4399830	Spotted from section lines
11958	Unk	9/25/1989	COMMERCIAL	0	TIARA CORP	460361	4399830	Spotted from section lines
99456	Unk	5/4/1978	COMMERCIAL	450	GEORGE TOM	460361	4399830	Spotted from section lines
99456	Change in ownership accepted and updated.	1/28/1994	COMMERCIAL	425	EAGLE WAREHOUSE SERVICES, LLC	460362	4399800	Spotted from section lines
152447	Unk	7/20/1988	HOUSEHOLD USE ONLY	80	BELL BRUCE	460380	4399700	Spotted from section lines
21495	Canceled well permit.	Unk	DOMESTIC	130	PASZTI DENES	460580	4399630	Spotted from section lines
146563	Abandoned well.	9/22/1986	COMMERCIAL	130	PASZTI DENES	460716	4399520	Spotted from quarters
146563	Unk	10/15/2010	COMMERCIAL	252	ANDERSON KEN & PEGGY	460603	4399600	User supplied
4689	Unk	Unk	HOUSEHOLD USE ONLY	Unk	VERNON LELAND H.	460716	4399520	Spotted from quarters
2742	Unk	Unk	COMMERCIAL	Unk	JOHNSON R J	460716	4399520	Spotted from quarters
3461	Unk	Unk	COMMERCIAL	100	JOHNSON R J	460716	4399520	Spotted from quarters
15581	Unk	5/29/1963	DOMESTIC	Unk	BARTON WAYNE	460716	4399520	Spotted from quarters
77639	Expired well permit.	6/3/1974	COMMERCIAL	Unk	VERNON LELAND H	460755	4399590	Spotted from section lines
47329	Unk	Unk	DOMESTIC	50	SIMPSON HAROLD A	461100	4399540	Spotted from quarters
83085	Unk	Unk	COMMERCIAL	975	HALL JOHN L.	462517	4399750	Spotted from section lines
12294	Unk	12/12/1990	IRRIGATION	Unk	FREI ALBERT R & MARY JANE	462761	4399650	Spotted from section lines
25439	Unk		DOMESTIC	30	HUEBNER CHAS G	458723	4399890	Spotted from quarters

Table 3 (Continued)
Water Well Information

Permit Number	Status	Date	Well Use	Well Depth	Owner	Location (UTM NAD83)		Accuracy
						Easting	Northing	
70119	Unk	6/8/1973	COMMERCIAL	300	MARTIN VICTOR R & CAROLYN E	460642	4399930	Spotted from section lines
197153	Expired well permit.	6/18/1996	DOMESTIC	0	CLEAR CREEK BRD CNTY COMMISSIONERS	462129	4398990	Spotted from section lines
197154	Expired well permit.	6/18/1996	DOMESTIC	0	CLEAR CREEK BRD CNTY COMMISS-IONERS	462294	4399080	Spotted from section lines
29532	Unk	10/17/1996	OTHER	0	BLACK HAWK CITY OF	459532	4399890	Spotted from quarters
48199	Canceled well permit.	2/18/1997	COMMERCIAL	0	BLACK HAWK CITY OF	460180	4399860	Spotted from section lines
52014	Canceled well permit.	5/5/1999	MUNICIPAL	0	BLACK HAWK CITY OF	460180	4399860	Spotted from section lines
13155	Unk	10/8/1962	COMMERCIAL	0	VON DRYKE KARL M	462627	4399240	Spotted from quarters
67771	Expired well permit.	1/29/1973	DOMESTIC	0	OLNHAUSEN S L	462650	4399260	Spotted from section lines
230487	Change in ownership accepted and updated.	11/3/2000	DOMESTIC	802	PFAFF TREVOR K & JEANISE A	462373	4399000	Spotted from section lines
269383	Resubmitted date.	5/30/2006	HOUSEHOLD USE ONLY	327	YOWELL RICK & LINDA	458282	4399080	Spotted from section lines

Table 4
Twin Tunnel Soil Sample Results
Clear Creek County, Colorado

Sample Location	Depth (feet)	Date	Comment	Metal Concentration (mg/kg)													pH
				Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	
			Residential CSEV	**31**	**0.39**	**160**	**70**	**120000**	**3100**	**400**	**13**	**1500**	**390**	**390**	**NS**	**23000**	**NS**
			Commercial CSEV	**410**	**1.6**	**1300**	**770**	**1500000**	**41000**	**800**	**160**	**12000**	**5100**	**5100**	**NS**	**310000**	**NS**
YA-1	0-25	11/30/2011	Gravel fill, angular, sandy with cobbles, dark yellowish brown (10YR 3/4) to dark grayish brown (10YR 4/2)	<2.17	**<3.93**	<0.197	<0.212	14	72.6	20.2	0.009	11.5	<2.81	62.8	<3.23	104	8.69
YA-1	0-25	11/30/2011	Duplicate	<2.1	**<3.81**	<0.191	0.407	18.6	43.9	19	0.009	14.5	<2.72	90.5	<3.13	116	8.72
Relative Percent Difference				NA	NA	NA	NA	-28.2%	49.3%	6.1%	0.0%	-23.1%	NA	-36.1%	NA	-10.9%	-0.3%
YA-2	0-10	12/6/2011	Gravel fill, angular, sandy with cobbles, brown (10YR 4/3)	<2.1	**<3.8**	<0.19	0.47	9.77	18.4	13.4	0.0143	10	<2.71	33.6	<3.12	73.1	8.29
YA-3	0-5	12/6/2011	Gravel fill, angular, sandy with cobble, dark grayish brown (10YR 4/2)	<2.04	**5.36**	<0.185	0.237	15.4	28.5	16.2	0.004	10.1	<2.64	62.9	<3.04	93.4	8.88
YA-3	5-20	12/6/2011	Possible native, gravel, sandy, sub-rounded to rounded, brown (10YR 4/3)	<2.09	**4.11**	<0.19	1.42	7.92	46.3	76.8	0.282	6.48	<2.71	50.6	<3.11	123	7.6
YA-3	5-20	12/6/2011	Duplicate	<2.08	**<3.77**	<0.189	0.343	8.48	77.7	78.4	0.245	5.57	<2.69	43.7	<3.09	123	7.31
Relative Percent Difference				NA	NA	NA	122.2%	-6.8%	-50.6%	-2.1%	14.0%	15.1%	NA	14.6%	NA	0.0%	3.9%
YA-4	0-20	12/7/2011	Gravel fill, angular, sandy, dark grayish brown (10YR 4/2)	<2.15	**<3.89**	<0.195	6.62	18.7	119	29.4	0.008	17.4	<2.78	85.4	<3.2	1600	4.8
YA-5	0-15	12/7/2011	Gravel fill, angular, sandy, dark grayish brown (2.5YR 4/2)	<2.03	**6.13**	<0.185	<0.199	68.6	21.6	16.7	0.01	43.7	<2.63	199	<3.03	102	9.06
YA-6	0-10	12/1/2011	Gravel fill, angular, sandy, brown (10YR 4/3)	<2.14	**<3.88**	<0.194	0.486	11.3	23.8	24.1	0.017	8.46	<2.77	54.6	<3.16	82.7	8.54
YA-6	0-10	12/1/2011	Duplicate	<2.17	**<3.94**	<0.197	0.33	9.97	23.3	19.4	0.013	7.35	<2.81	61.9	<3.23	82.4	8.47
Relative Percent Difference				NA	NA	NA	38.2%	12.5%	2.1%	21.6%	26.7%	14.0%	NA	-12.5%	NA	0.4%	0.8%
YA-6	10-20	12/1/2011	Possibly native gravel, sub-rounded to rounded, grayish brown (10YR 5/2)	<2.06	**<3.73**	<0.187	<0.201	13.8	27.3	25.1	0.013	9.54	<2.66	48.7	<3.06	82	8.31

Table 4 (continued)
Twin Tunnel Soil Sample Results
Clear Creek County, Colorado

Sample Location	Depth (feet)	Date	Comment	Metal Concentration (mg/kg)													pH
				Antimony	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Thallium	Zinc	
			Residential CSEV	**31**	**0.39**	**160**	**70**	**120000**	**3100**	**400**	**13**	**1500**	**390**	**390**	**NS**	**23000**	**NS**
			Commercial CSEV	**410**	**1.6**	**1300**	**770**	**1500000**	**41000**	**800**	**160**	**12000**	**5100**	**5100**	**NS**	**310000**	**NS**
YA-7	0-15	12/9/2011	Gravel fill, subangular, sandy, olive brown (2.5YR 4/3)	<2.21	**<4.01**	<0.201	0.911	11.2	20.2	14.7	0.007	9.45	<2.86	45.8	<3.29	72.8	8.61
YA-7	0-15	12/9/2011	Duplicate	<2.15	**<3.9**	0.195	0.21	9.92	21.6	15.5	0.007	7.17	<2.78	43.4	<3.2	66.4	8.49
Relative Percent Difference				NA	NA	NA	125.1%	12.1%	-6.7%	-5.3%	0.0%	27.4%	NA	5.4%	NA	9.2%	1.4%
YA-8	0-15	12/7/2011	Gravel fill, angular, sandy, dark grayish brown (2.5YR 4/2)	<2.07	**7.2**	<0.188	<0.202	62.8	20.9	5.72	<0.001	39.6	<2.67	209	<3.07	91	8.28
YA-9	0-10	12/8/2011	Gravel fill, angular, sandy, olive brown (2.5YR 4/3) to gray (2.5YR 5/1)	<2.08	**<3.77**	<0.189	<0.203	8.05	27	5.61	0.002	5.35	<2.69	65.8	<3.1	69.6	8.57
YA-9	0-10	12/8/2011	Duplicate	<2.04	**<3.69**	<0.185	<0.199	8.85	32	4.7	<0.001	6.75	<2.63	53.3	<3.03	66.4	8.55
Relative Percent Difference				NA	NA	NA	NA	-9.5%	-16.9%	17.7%	NA	-23.1%	NA	21.0%	NA	4.7%	0.2%
YA-10	0-10	12/7/2011	Gravel fill, angular, sandy, very dark grayish brown (2.5YR 3/2)	<2.06	**3.91**	<0.187	<0.201	21.2	77	23.6	0.026	14.6	<2.67	120	<3.07	105	8.74
YA-10	0-10	12/7/2011	Duplicate	<2.16	**<3.91**	<0.196	0.35	18	41.9	26.9	0.032	14.3	<2.79	114	<3.21	108	8.68
Relative Percent Difference				NA	NA	NA	NA	16.3%	59.0%	-13.1%	-20.7%	2.1%	NA	5.1%	NA	-2.8%	0.7%
West Portal Outcrop	Surface	1/30/2012	Loose, very poorly cemented, silty sand outcrop material, potentially mineralized intrusive rock, olive-yellow color (2.5YR 6/8)	<1.9	**4.7**	<0.97	2.4	15.4	334	8.9	<0.039	10.3	52.5	<0.97	<1.9	1180	2.7

Notes:

CSEV - Colorado Soil Evaluation Value, Colorado Department of Public Health and Environment, Table 1, July 2011

J - Result is less than the reporting limit, but greater than the minimum detection limit, and the concentration is an approximate value

mg/kg - milligrams per kilogram

NS - No standard

NA - Not analyzed

< - Indicates concentration below the laboratory reporting

Bold - Indicates concentration exceeds regulatory standard

Table 5
Twin Tunnel Discharge Analytical Results and Surface Water Discharge Permit Limits
Clear Creek - Segment 11
Clear Creek County, Colorado

Metals	Sample Location				Sample Location				Sample Location				Potential Permit Limit (µg/l) Hierarchal Limits from Left to Right					
	South Discharge; 12/7/2011				South Discharge; 1/30/12				North Discharge; 1/30/12									
	Total Recoverable (µg/l)	Notes	Potentially Dissolved (µg/l)	Notes	Total Recoverable (µg/l)	Notes	Potentially Dissolved (µg/l)	Notes	Total Recoverable (µg/l)	Notes	Potentially Dissolved (µg/l)	Notes	Reg 38 Numeric (Chronic)	Reg 38 Numeric (Acute)	Chronic TVS (Reg 31 & 38)	Acute TVS (Reg 31 & 38)	water+fish (Reg 31)	DWS (Reg 31)
Aluminum	<200		<200		<50		74		18	J, B	42	J			248.15	1,738.26		
Antimony	<2.0		<2.0		<2.5		<2.5		<2.5		<2.5						5.6	6
Arsenic	0.98	J	<2.0		1.4	J	1.6	J	2.4		3.1		0.02	340.00			0.02-10 [1]	0.02
Barium	47		45		61.1		62		136		123							1,000
Beryllium	0.26	B, J	0.19	B, J	<0.5		<0.5		<0.5		<0.5							4
Cadmium	<0.06	U	<0.06	U	<0.2	U	<0.2	U	<0.2	U	<0.2	U	1.42		0.29	1.78		5
Chromium III	<10		NA		<25		NA		<25		NA			50.00	49.44	380.09		50
Chromium VI (Hexavalent)	<10		NA		<5.3		NA		<5.3		NA				11.00	16.00	100	50
Copper	2.87		2.42		3.1	J	5.4		<10		3.6		17.00		5.87	8.44	1,300	1,000
Iron	<200		<200		44	B, J	<60		486		428		1000					300
Lead	0.35	J	0.24	J	18		24.1		<0.4	U	7.5				1.46	37.56		50
Manganese	34		26		70		69		818		769				1,399.17	2,532.42		50
Mercury	0.41		0.404		<0.5	U	<0.5	U	<0.5	U	<0.5	U	0.01					2
Molybdenum	5.81		5.49		4.97		4.79		13.8		12.7							210
Nickel	3.39	J	3.32	J	6.4		7.1		4.1		3.9				34.23	308.22	610	100
Selenium	1.1	J	0.77	J	7.7		7.3		14.9		12.9				4.60	18.40	170	50
Silver	<0.1	U	<0.1	U	<0.2	U	<0.27	U	<0.27	U	<0.27	U			0.14	0.87		100
Thallium	<0.5		<0.5		<2.0		16.8		0.6	J	5.54				15.00		0.24	0.5
Uranium	97.7		81		<1.0		<1.0		<1.0		<1.0				870.26	1,393.25		16.8
Zinc	30.6		28.2	J	26.5		34.7		<2.0		4.9				77.31	102.07	7400	5,000
Phosphorus	NE				<50		NA		<50		NA		110					
pH	7.85				7.8				7.6				6.5-9.0					
TSS	NE				<4.0				<4.0				30					
Discharge Rate	0.83 liters/minute				0.83 liters/minute				0.67 liters/minute				NS					

Notes:

Hardness-Dependent Value for River Segment = 61 mg/L provided by Clear Creek County

Permit Limit highlighted in green

Value potentially exceeds discharge permit limit

Indicates the laboratory reporting and minimum detection limits are higher than the potential permit limit for this metal

TVS = table value standard

DWS - domestic water supply limit

dis = dissolved

< = indicates a result less than the reporting limit

J = Indicates a result greater than the method detection limit but less than the reporting limit

B = Indicates metal detected in method blank

Table 5 (Continued)
Twin Tunnel Discharge Analytical Results and Surface Water Discharge Permit Limits
Clear Creek - Segment 11
Clear Creek County, Colorado

U = Indicates a result lower than reporting limit and method detection limit

TSS - Total Suspended Solids

Hg - Reg 38 Numeric is for chronic

NE - Not Evaluated

NS - No Standard

NA - Not Applicable

µg/l - micrograms per liter

Formulas for TVS Values and Other Notes:	
Metals	**Formulas for TVS Values/Other Notes**
Aluminum	Acute = e(1.3695[ln(hardness)]+1.8308) (applies to total recoverable results) Chronic = e(1.3695[ln(hardness)]-0.1158)
Antimony	
Arsenic	3.0 - Current interim chronic standard only for Segment 14 of the South Platte River
Barium	Note that only acute Ba level given is DWS
Beryllium	Note that only acute Be level given is DWS
Cadmium	Acute TVS = (1.136672-[ln(hardness) x (0.041838)])*e(0.9151[ln(hardness)]-3.1485) Chronic TVS = (1.101672-[ln(hardness) x (0.041838)])*e(0.7998[ln(hardness)]-4.4451) 1.42 ug/L temporary modification until 7/15/2015 (dissolved only)
Chromium III	Acute TVS = e(0.819[ln(hardness)]+2.5736) Chronic TVS = e(0.819[ln(hardness)]+0.5340)
Chromium VI (Hexavalent)	Acute (acute and chronic)=TVS
Copper	Acute TVS = e(0.9422[ln(hardness)]-1.7408) Chronic TVS = e(0.8545[ln(hardness)]-1.7428) Numberic standard from Reg 38 (chronic)=17
Iron	e(0.9422[ln(hardness)]-1.7408) Where an actual water supply use, the less restrictive of two options apply - existing quality or DWS (dissolved)
Lead	Acute TVS = (1.46203-[ln(hardness)*(0.145712)])*e(1.273[ln(hardness)]-1.46) Chronic TVS = (1.46203-[ln(hardness)*(0.145712)])*e(1.273[ln(hardness)]-4.705)
Manganese	Acute TVS = e(0.3331[ln(hardness)]+6.4676); e(0.9422[ln(hardness)]-1.7408) Chronic TVS = e(0.3331[ln(hardness)]+5.8743); e(0.9422[ln(hardness)]-1.7408) Where an actual water supply use in stream, the less restrictive of two options apply - existing quality or DWS (dissolved)
Mercury	Total Recoverable
Molybdenum	
Nickel	Acute TVS = e(0.846[ln(hardness)]+2.253) Chronic TVS = e(0.846[ln(hardness)]+0.0554)
Selenium	
Silver	Acute TVS = ½ e(1.72[ln(hardness)]-6.52) Chronic TVS = e(1.72[ln(hardness)]-9.06) Trout TVS = (1.72[ln(hardness)]-10.51) (This value used instead of chronic as it is more conservative) Standard is lower than laboratory minimum detection limit and reporting limit
Thallium	
Uranium	Acute TVS = e(1.1021[ln(hardness)]+2.7088) Chronic TVS = e(1.1021[ln(hardness)]+2.2382)
Zinc	Acute TVS = 0.978 e(0.8537[ln(hardness)]+1.9467) Chronic TVS = 0.986e(0.8537[ln(hardness0]+1.8032)
Phosphorus	Proposed standard
pH	Standard units
TSS	30-day average

Table 6
Summary of Database Search

Type of Database[1]	Number of Listings in Specified Search Radius (mile)			
	< 1/8	⅛ - ¼	¼ to ½	½ to 1
National Priority List (NPL)	0	0	0	0
RCRA Corrective Action	0	0	0	0
National CERCLIS	0	0	0	
National CERCLIS-NFRAP	0	0	0	
Voluntary Cleanup (VCUP)	0	0	0	
RCRA Permitted Treatment, Storage, and Disposal	0	0	0	
RCRA Generators	1	0		
RCRA No Longer Regulated (NLR)	1	1		
Solid Waste Landfills	0	0	0	
Leaking Underground Storage Tanks (LUST)	2	0	6	
Registered UST/AST	5	0		
State Spills (SPILLS)	3	0		
Federal ERNS	10	0		
Brownfields	0	0		

Notes:

1 See Appendix D for complete report and maps identifying facilities summarized above, including a description of each database reviewed.

2 The grey boxes indicate that this distance is not required to meet the minimum ASTM-required distance.

Table 7
Details of Identified Agency Listings

Site Number (Appendix D)[1]	Facility Name	Facility Address	Distance (feet) / Direction	Database	Potential to Impact Project?[2]
1	Mile Marker 242 On Interstate 70	Mile Marker 242 On Interstate	On-site	ERNS, ERNS, ERNS	Yes; however, location of this spill as reported is not clearly defined.
2	WB I-70, Exit Ramp At Mp 244	WB I-70, and Exit Ramp	On-site	ERNS, ERNS, ERNS, ERNS, ERNS	Yes; however, location of this spill as reported is not clearly defined.
3	Interstate 70 At Mile 243	Interstate 70 At Mile 243	On-site	ERNS, ERNS	Yes; however, location of this spill as reported is not clearly defined.
4	Idaho Springs Old Water Plant	10 County Hwy 314	~100 South	SPILLS, SPILLS, SPILLS, RCRANLR	No. Several releases of sewage at Idaho Springs Treatment Plant temporarily impacted Clear Creek, but impacts were temporary.
5	Camas	1039 East Idaho Springs Road	~300 South	UST	No, tank registration is for liquid-petroleum gas (propane) tank.
6	Hidden Valley Texaco	I-70 and Exit 243	Adjacent to the North	UST, LUST	No. This facility historically operated at the location of the existing CDOT facility, northeast of the I-70/Hidden Valley exit. This filling station historically maintained five above-ground storage tanks which have been removed. Remedial activities have been completed; however, low-level contamination was left in place, including near I-70. Contaminant concentrations were documented to decrease, and the Colorado Department of Health issued a No Further Action letter on March 25, 1991.
6	Clear Creek Distributing	I-70 and Exit 243	Adjacent to the North	UST, LUST	No. Release reported on 4/13/1990, and No Further Action Letter issued on January 13, 1997. Files were reviewed at the OPS, which showed that petroleum contamination was remediated. Minor impacts were noted to remain on this property, but not off-site. OPS issued a No Further Action letter on April 19, 2005. Residual contaminants are located hydraulically down-gradient of the CR 314 project.
6	Colorado Department Of Transportation - Hidden Valley	Exit 243 Hiddeen Valley I-70	Adjacent to the North	UST, RCRAGN	No. AST located in secondary containment, and no evidence of release. No violations regarding RCRA registration. Chemicals of concern included lead, likely the result of lead battery uses.

Table 7 (Continued)
Details of Identified Agency Listings

Site Number (Appendix D)[1]	Facility Name	Facility Address	Distance (feet) / Direction	Database	Potential to Impact Project?[2]
7	USDA Forest Service	County Road 314	~1100 West	RCRANLR	No. Incomplete address; however, this is likely the historic Civilian Conservation Corps facility located approximately 350 feet west of the Site. This facility is listed as a RCRA facility which is no longer reporting. No enforcement or violation information was identified related to this facility.
8	CDOT Idaho Springs CSP	3000 Colorado Blvd	~2000 West	LUST	Release remediated and issued No Further Action on 12/24/1992.
9	Cdot Idaho Springs	2931 Colorado Blvd	~2100 West	LUST	Release remediated and issued No Further Action on 10/18/1991.
10	Spring Station Llc	2900 Colorado Blvd	~2100 West	LUST	Release remediated and issued No Further Action on 8/23/2005.
11	Scorpion Shell	2808 Colorado Blvd	~2500 West	LUST	Release remediated and issued No Further Action on 5/26/2004.
12	Tall Country Idaho Springs	2806 Colorado Blvd	~2600 West	LUST, LUST	Two releases remediated and issued No Further Action on 4/1/1999 and 7/22/2003.

Notes:

[1] *Five unmappable facilities were identified. Based on the partial address provided, it is unlikely that these facilities are located within the search radius, or would impact the Site. The remaining listing is discussed in Section 4.2.*

[2] *Potential assessed is based on depth and direction of ground-water flow, distance from project, and review of files.*

See Appendix C for definitions of acronyms, and Appendix D for Facility Number.

Pinyon

www.pinyon-env.com

BRIAN R. PARTINGTON

ENVIRONMENTAL SCIENTIST

EDUCATION

B.S., Environmental Science with emphasis in Ecological Restoration, Metropolitan State College of Denver

CERTIFICATIONS

CDPHE Certified Asbestos Project Designer, No. 16688, Colorado

OPS Petroleum Storage Tank Committee Listed Environmental Consultant, No. 6193, Colorado

MEMBERSHIPS

American Council of Engineering Companies/Colorado

American Institute of Professional Geologists

Association of Environmental and Engineering Geologists

TRAINING

Functional Assessment of Colorado Wetlands (FACWet) Methodology Training

40 Hour Hazardous Waste Operations Course

38 Hour Army Corps of Engineers Wetland Delineation and

PROFESSIONAL EXPERIENCE

Mr. Partington has 11 years of experience in environmental sciences. He has worked as project manager and field operations manager on a variety of projects requiring hazardous materials assessments, environmental constraints analysis, biological resources evaluations, and National Environmental Policy Act (NEPA)-related surveys. He has also established effective working relationships with governmental agencies including the Colorado Department of Transportation (CDOT) and U.S. Army Corps of Engineers (Corps), Colorado Department of Public Health and Environment (CDPHE), and Colorado Department of Labor and Employment, Division of Oil and Public Safety (OPS).

RELEVANT EXPERIENCE

Contaminant Investigations. Mr. Partington has completed evaluations of several landfills, specifically for the presence of hazardous or contaminated media, explosive gases and asbestos containing materials (ACMs). He has completed Materials Management Plans and Soil Characterization and Management Plans (for ACMs) in accordance with CDPHE requirements regarding disturbance of landfills.

VCUP Experience. Mr. Partington has been a project manager on all aspects of remediation projects. Tasks have included site characterization, corrective action plan development, implementation or corrective measures, monitoring and closure. Contaminated sites have included leaking underground storage tank (LUST) sites, Colorado Voluntary Cleanup and Redevelopment Act sites, and RCRA Corrective Action Sites. Mr. Partington has also completed risk-based ground-water modeling and vapor intrusion modeling. Mr. Partington has provided environmental oversight for many underground storage tank removals.

Phase I ESAs. Mr. Partington has completed numerous Phase I Environmental Site Assessments for sites throughout Colorado, Idaho, Montana, New Mexico, Wyoming, Nevada and Utah on vacant, private, commercial and mining properties. Recently, he completed Phase I ESAs for uranium prospects in northeast Wyoming, west-central New Mexico and northern Nevada; and a gold prospect area in Idaho; all of which encompassed land areas that were many square miles in size. State and federally maintained records concerning historic mining, reclamation and prospecting were obtained. Reports were developed that provided information on past and existing conditions at the sites. He helped develop baseline data for these projects, including collecting the necessary environmental data to allow the projects to proceed, as required by state and federal regulatory agencies. Mr. Partington has also completed several Modified Environmental Site Assessments related to transportation projects

Management Training Program, Richard Chinn Environmental Training Inc.

for the CDOT under requirements of NEPA.

Phase II ESAs. Mr. Partington has performed many Phase II investigations. These assessments have included completion of soil borings, construction of ground-water monitoring wells, and soil vapor wells. Investigations have been performed on a wide variety of sites, including landfills, junk yards, dry cleaners, gas stations and heavy-industrial properties. The investigations were completed to evaluate whether properties had been impacted by current and/or past activities at the sites or from adjacent properties.

Geological. Mr. Partington has completed Mineral Resources, Geology, and Soils Technical Reports for the RTD FasTracks Southeast and Southwest Corridor Extension projects Environmental Evaluation Reports. These analyses were performed to address potential resource conflicts, as well as potential geologic hazards that may impact the preferred alternative to design. He also has extensive experience completing geologic hazard surveys to meet the requirements of municipalities and the Colorado Geological Survey. These surveys included landslide identification, mapping, recognition of uncontrolled filling and research. In addition, Mr. Partington has performed many underground coal mine subsistence investigations in Boulder and Weld counties. Tasks included geophysical and lithologic logging, and interpretation of boreholes to analyze the development suitability of properties located and estimate “worst case” surface strains to structures built over abandoned mines.

Pinyon

www.pinyon-env.com

LAUREN E. EVANS

PRESIDENT

AREAS OF EXPERTISE

VCUP Experience
RCRA Experience
Phase II ESAs
Phase I ESAs
CERCLA Experience
Brownfields Assessments

EDUCATION

B.S., Geological Engineering, Colorado School of Mines

PE LICENSES

Colorado, License #27007
Nebraska, License #E-11779
Nevada, License #020415

REGISTRATIONS

OPS Registered Consultant Program, Colorado, Individual Number 5131

CERTIFICATIONS

First Aid and CPR

Engineering Expert Witness (ACEC), No. EEW23

8-Hour OSHA Supervisor

OSHA Health & Safety

MEMBERSHIPS

ACEC Colorado, National Director (2010 - 2012)

ACEC National Planning Cabinet, 2010 - 2012

ACEC National Environment

PROFESSIONAL EXPERIENCE

Ms. Evans has 29 years of consulting experience, in contaminant assessment and remediation, regulatory compliance, and NEPA studies. She has served as project manager on all phases of these projects. With respect to contamination investigations, she has completed projects for real estate due diligence studies, and under RCRA, CERCLA, Brownfields, and Colorado voluntary clean-up programs. She has been involved with more than 3,000 Phase I Environmental Site Assessments nationwide, and overseen remediation of sites contaminated by releases of petroleum products, chlorinated solvents, and metals. Ms. Evans has been involved during Environmental Impact Statements and Environmental Assessments of highway, transit, rail, and aviation projects, and had collected data and evaluated impacts of numerous resource areas. She has also provided quality assurance/quality control review of the documents during all stages of the projects. Ms. Evans has assisted legal counsel with the technical aspects of numerous cases, including PRP evaluation at CERLCA sites, and on those involving regulatory compliance, consultant negligence, asbestos in soil, and other contaminant issues. Finally, Ms. Evans is the founder and president of Pinyon Environmental, Inc.

RELEVANT EXPERIENCE

Brownfields Assessments. Throughout her career, Ms. Evans has overseen projects which required management of large quantities of scientific data and other types of information. She has designed databases and spreadsheets for these purposes, and has developed word processing templates and forms for the efficient collection of data and preparation of reports. On a large Superfund project, relevant reports were reviewed and coded, with information pertinent to an ongoing legal proceeding tracked in a database for rapid retrieval of data. Project databases have been used to track ongoing monitoring data, asbestos information, hazardous material storage and use, and links to pertinent websites. These techniques have provided the clients with an efficient tool to develop project histories and other project tracking mechanisms.

CERCLA Experience. Ms. Evans has worked on numerous sites regulated or evaluated under CERCLA, including Summitville Mine, Lowry Landfill, Rocky Mountain Arsenal, Hill and Sheppard Air Force Bases, Air Force Academy, Riverfront Landfill, Shiprock Uranium Mine, and Wasatch Chemical. She has perfored PA/SIs, and participated in RI/FS and remedial design projects. She also assisted the legal staff for one client by evaluating potential liability at three Colorado sites, which included detailed historic review and technical data research to develop an opinion on contribution by responsible party.

& Energy Committee (2003 - present)

ACEC/CO Environmental Committee (past Chairperson)

Past President American Council of Engineering Companies of Colorado (ACEC/CO) (President from 2008 - 2009)

VOLUNTEER INVOLVEMENT

Colorado Dry Cleaner Committee, 2009 - present

Colorado Hazardous Waste Commission (governor appointment); Served 2000 - 2007; Chairperson 2004 - 2007

Iliff Ridge HOA, Lakewood, Colorado, 2000-present: president

Denver CASA (Court Appointed Special Advocate), Denver, Colorado, 1999-2006: Child Advocate

Socially Conscious Coffee, Denver, Colorado, 2006-Present: Board of Directors Member

Phase I ESAs. Lauren has extensive experience in performing site assessments for property transfers. She has conducted, managed, or reviewed over 3,000 Phase I ESAs throughout the country. She is familiar with the current ASTM standard for completion of Phase Is, and has been a speaker at numerous seminars and conferences on the topic. She has managed projects involving the completion of over 100 Phase Is in multiple states In a short period of time, with one project completed in approximately three weeks. Projects have ranged from small rights of way to 110,000 acre ranch properties, and from vacant land to large industrial facilities. Ms. Evans has served as an expert witness on cases where it was alleged that a Phase I had not met the standard, and has assisted clients in developing standard procedures for their due diligence programs. For a Fortune 50 company, she developed a standardized report format for use by consultants on projects nationwide, and has provided training to private companies, and state and municipal agencies.

Phase II ESAs. Ms. Evans has conducted numerous Phase II assessments for evaluating soil and ground-water contamination. These projects have involved volatile and semi-volatile organic compounds, pesticides and herbicides, metals, radioactive elements, and biological contaminants. She has completed all aspects of these projects from sampling plan design and implementation through report preparation and closure. Ms. Evans has employed numerous sampling technologies, including multi-port sampling wells and random sampling schemes.

RCRA Experience. Ms. Evans has performed corrective measure studies, developed emergency and post-closure monitoring plans, evaluated waste streams to determine if they were hazardous, and performed oversight and certification of closure. She has also assisted in ground-water monitoring under post-closure permit conditions. In 2000, she was appointed by Governor Bill Owens to the Colorado Hazardous Waste Commission (later reorganized as the Hazardous and Solid Waste Commission), where she served until 2007, including three years as Chairperson.

VCUP Experience. Ms. Evans has managed several projects completed in order to obtain a finding of no further action (NFA) under the Colorado Voluntary Cleanup Program (VCUP). The contaminants on these projects included petroleum products, chlorinated solvents, and metals. The properties had previously been used as auto repair facilities, waste water treatment plants, junk yards and dry cleaners, or were impacted by adjacent industrial facilities. Ms. Evans has completed the subsurface investigations, Phase I ESAs, and the VCUP applications. She has successfully obtained an NFA determination on all of the projects she has worked on.

PROJECT EXPERIENCE

FasTracks Ms. Evans provided Independent Technical Review and impact evaluation for the RTD FasTracks Gold Line and North Metro Corridor EISs, the Commuter Rail Maintenance Facility EA, and the US 36 EIS. She has provided internal review for the I-225 Corridor and the Southeast/Southwest Corridor extension projects. Ms. Evans was hazardous materials manager for the Gold Line project and has been involved with the Environmental Evaluation for the Northwest Rail project. She has also developed budgets and the project management plans. In addition, Ms. Evans prepared the Scoping Report, assisted staff member Scott Epstein with the Purpose and Need, and prepared technical memos on affected environments, including those for hazardous materials and water resources. Ms. Evans provided similar services on the draft Denver Union Station EIS.

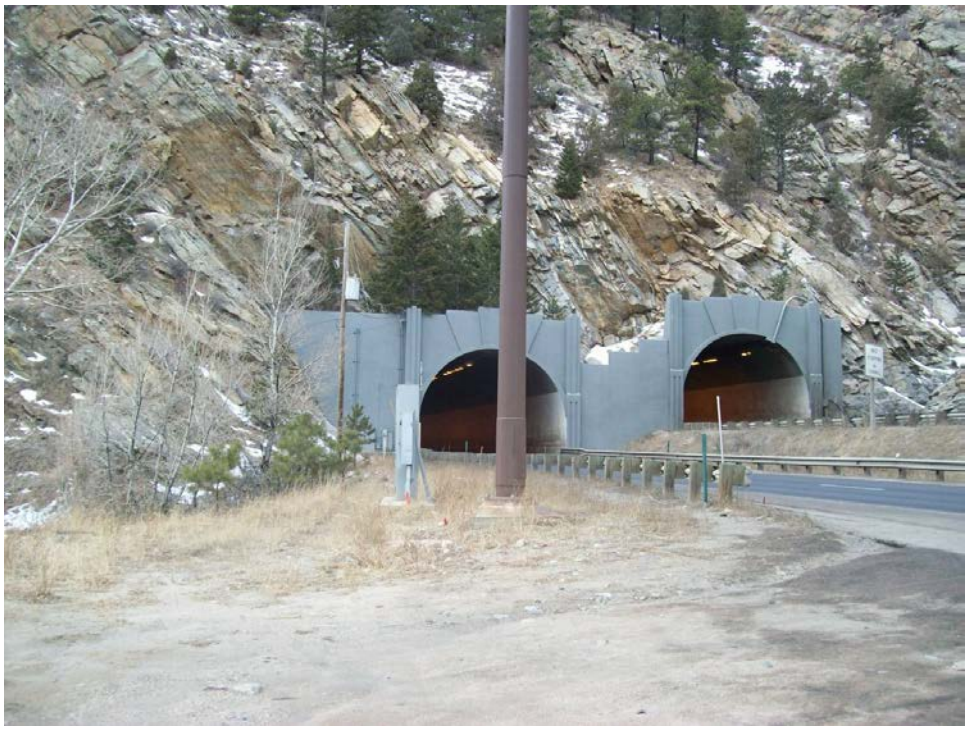
PUBLICATION

Evans, Lauren "In-field Processing of Time Domain Electromagnetic (TDEM) Sounding Data," Proceedings from GeoTech '86: Computer Aided Methods of Geology and Engineering, AIPG 1986

EXPERT TESTIMONY

Baseline Farms Two, LLP, et al v. Hennings
Case No. 99CV2155
Adams County District Court, Division A
(Trial Testimony, No Deposition)

1. East Partial of Twin Tunnels



2. East Bound I-70, View from Near Twin Tunnels

3. Box Culvert Beneath I-70 East of Twin Tunnels

4. Hidden Valley Bridge Over Clear Creek

5. Hidden Valley Interchange

6. Old Highway 40

7. East Idaho Springs Interchange

8. I-70 West of Twin Tunnels. Chain Station in Foreground

9. Commercial Property at Hidden Valley

10. CDOT Hidden Valley Facility

11. Eastbound I-70 East of Hidden Valley

12. I-70 Eastbound Approaching Floyd Hill

13. Northern Tunnel Discharge

14. Southern Tunnel Discharge

15. Geotechnical Drilling Operations West of Twin Tunnels

16. Electric Transformers Near West Portal of Twin Tunnels

GLOSSARY OF TERMS

AAI	All Appropriate Inquiry - that inquiry into the previous ownership and uses of the *property* consistent with good commercial or customary practice as defined in CERCLA, 42 U.S.C §9601(35)(B).
ACBM	Asbestos Containing Building Material. Any surfacing, thermal systems insulation or miscellaneous material found in or on interior structural members which contains more than one percent asbestos.
ACGIH	American Conference of Governmental Industrial Hygienists
AHERA	Asbestos Hazard Emergency Response Act
ASHARA	Asbestos School Hazard Re-Authorization Act
AST	Above-ground Storage Tank
ASTM	American Society of Testing and Materials
AUL	Activity and use limitations. Legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or ground water on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment.
Bona fide prospective purchaser liability protection	A form of liability protection offered under AAI; knowledge of contamination would not generally preclude this liability protection. A person must make *all appropriate inquiry* on or before the date of purchase. The facility must have been purchased after January 11, 2002. Other necessary requirements also apply.
CAA	Clean Air Act
CDPHE	Colorado Department of Public Health and Environment
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act, commonly referred to as Superfund.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System

GLOSSARY OF TERMS

Contiguous property owner liability protection	A form of liability protection offered under AAI; a person may qualify for the *contiguous property owner liability protection* if, among other requirements, such person owns real *property* that is contiguous to, and that is or may be contaminated by *hazardous substances* from other real *property* that is not owned by that person. To qualify, the *all appropriate inquiry* completed before the purchase must not result in knowledge of contamination. Other necessary requirements also apply.
CORRACTS	RCRA Corrective Action Site
COT	Chain of Title
CWA	Clean Water Act
Data failure	Under the ASTM Standard, a failure to achieve the historical research objectives, even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful. Data failure is one type of data gap.
Data gap	Under the ASTM Standard, lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information.
EC	Engineering controls. Physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to hazardous substances or petroleum products in the soil or ground water on the property. Engineering controls are a type of activity and use limitation (AUL).
Environmental lien	A charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA and similar state or local laws.
Environmental professional	A person meeting the education, training, and experience requirements as set forth in 40 CFR §312.10(b).
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act

GLOSSARY OF TERMS

Hazardous Materials — Hazardous material means any substance, waste, or material determined by any state, federal or local governmental authority to be capable of posing a risk of injury to health, safety and property, including, but not limited to, all substances, wastes and materials designated, defined or listed as hazardous, extremely hazardous or toxic pursuant to the Clean Water Act, 33 USC Sec. 1251, et seq.; Resource Conservation and Recovery Act, 42 USC Sec. 6901 et. seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 USC Sec. 9601, et. seq.; the United States Department of Transportation Hazardous Material Table, 49 CFR Part 172; regulations of the Environmental Protection Agency, 40 CFR Part 302; or such substances, materials and wastes that are or become regulated under any applicable local, state or federal law, and including any asbestos, petroleum and any petroleum fractions, urea formaldehyde foam insulation, chlorofluorocarbons (CFCs), or polychlorinated biphenyls (PCBs).

Hazardous Substance — Defined by CERCLA. Includes substances designated for special consideration under the CAA, the CWA, or the TSCA, and any hazardous wastes defined under RCRA. EPA can designate additional substances as hazardous if they present substantial danger to health and the environment.

Hazardous Waste — Waste defined in RCRA, which , due to its quantity, concentration, or physical, chemical or infectious characteristics, may present a hazard to human health or the environment.

IC — A legal or administrative restriction (for example, "deed restrictions," restrictive covenants, easements, or zoning) on the use of, or access to, a site or facility to *(1)* reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or ground water on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment.. An institutional control is a type of AUL.

LBP — Lead-Based Paint

LQG — Large Quantity Generator. Refers to a generator who generates more than 1,000 kilograms of hazardous waste in a calendar month.

LUST — Leaking Underground Storage Tank

Major occupants — Those tenants, subtenants, or other persons or entities each of which uses at least 40 % of the leasable area of the property or any anchor tenant when the property is a shopping center.

GLOSSARY OF TERMS

mg/Kg	milligram per kilogram
mg/L	milligram per liter
NAD	No Action Determination (Colorado VCUP)
NESHAP	National Emission Standard for Hazardous Air Pollutants
NFA	No Further Action
NFRAP	No Further Remedial Action Planned (CERCLA)
NIOSH	National Institute for Occupational Safety and Health
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List (Superfund sites)
NVLAP	National Voluntary Laboratory Accreditation Program
OPS	Division of Oil and Public Safety, Colorado Department of Labor and Employment
OTHERHW	Listed RCRA Facilities but do not fit into category of CORRACTS, TSDs, or Generators; includes Transporters, Non-Notifiers, former Generators, and others.
OSHA	Occupational Safety and Health Administration
PA/SI	Preliminary Assessment/Site Investigation (CERCLA study)
PCB	Polychlorinated biphenyl
PEL	Permissible Exposure Limit
PLM	Polarized Light Microscopy, a method of analyzing bulk samples for asbestos.
ppb	Parts-per-billion
ppm	Parts-per-million
RECs	Recognized Environmental Conditions
RCRA	Resource Conservation and Recovery Act
RCRA-Viol	RCRA facilities with a reported violation
RCRIS	Resource Conservation and Recovery Information System

GLOSSARY OF TERMS

RCRIS- TSDC	RCRA TSD facilities subject to corrective action
RFA	RCRA Facility Assessment (RCRA study).
RFI	RCRA Facility Investigation (RCRA study).
RI/FS	Remedial Investigation/Feasibility Study (CERCLA study).
SCL	State CERCLIS Equivalent Site
SDWA	Safe Drinking Water Act
SPILLS	State spills list and federal ERNS list.
SPL	State NPL Equivalent Site
SQG	Small Quantity Generator. Refers to a generator who generate between 100 and 1,000 kilograms of hazardous waste in a calendar month.
SWLF	Solid Waste Landfill
TRIS	Toxic Release Inventory System
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TSD	Treatment, Storage or Disposal (refers to RCRA facilities).
µg/Kg	microgram per kilogram
µg/L	microgram per liter
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	Underground Storage Tank
VCUP	Voluntary Cleanup Program (Colorado Program)
Viol/Enf	Violations/Enforcement Actions (RCRA)
VSQ	Very Small Quantity Generator. Refers to a generator who generates less than 100 kilograms of hazardous waste in a calendar month.

GLOSSARY OF TERMS

Other terms may be used that are defined in the ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-05.

InfoMap

Technologies Incorporated

Environmental FirstSearch ™ Report

Target Property: I-70 CORRIDOR

IDAHO SPRINGS CO 80452

Job Number: 11175002

PREPARED FOR:

Pinyon Environmental Engineering, Inc

9100 W Jewell Avenue, Suite 200

Lakewood, CO 80232

by Satisfi, Inc

720-200-9472

10-06-11

Tel: (610) 430-7530 *Fax: (610) 430-7535*

Environmental FirstSearch
Site Information Report

Request Date:	10-06-11	**Search Type:**	LINEAR
Requestor Name:	Brian Peterson		3.35 mile(s)
Standard:	ASTM-05	**Job Number:**	11175002
		Filtered Report	

Target Site:

IDAHO SPRINGS CO 80452

Demographics

Sites:	33	**Non-Geocoded:**	4	**Population:**	NA
Radon:	NA				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-105.461816	-105:27:43	**Easting:**	460432.057
Latitude:	39.744802	39:44:41	**Northing:**	4399325.79
Elevation:	N/A		**Zone:**	13

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes: 1 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel
80403	GOLDEN	CO	0.63 NE	Y
80439	EVERGREEN	CO	0.00 --	Y

Services:

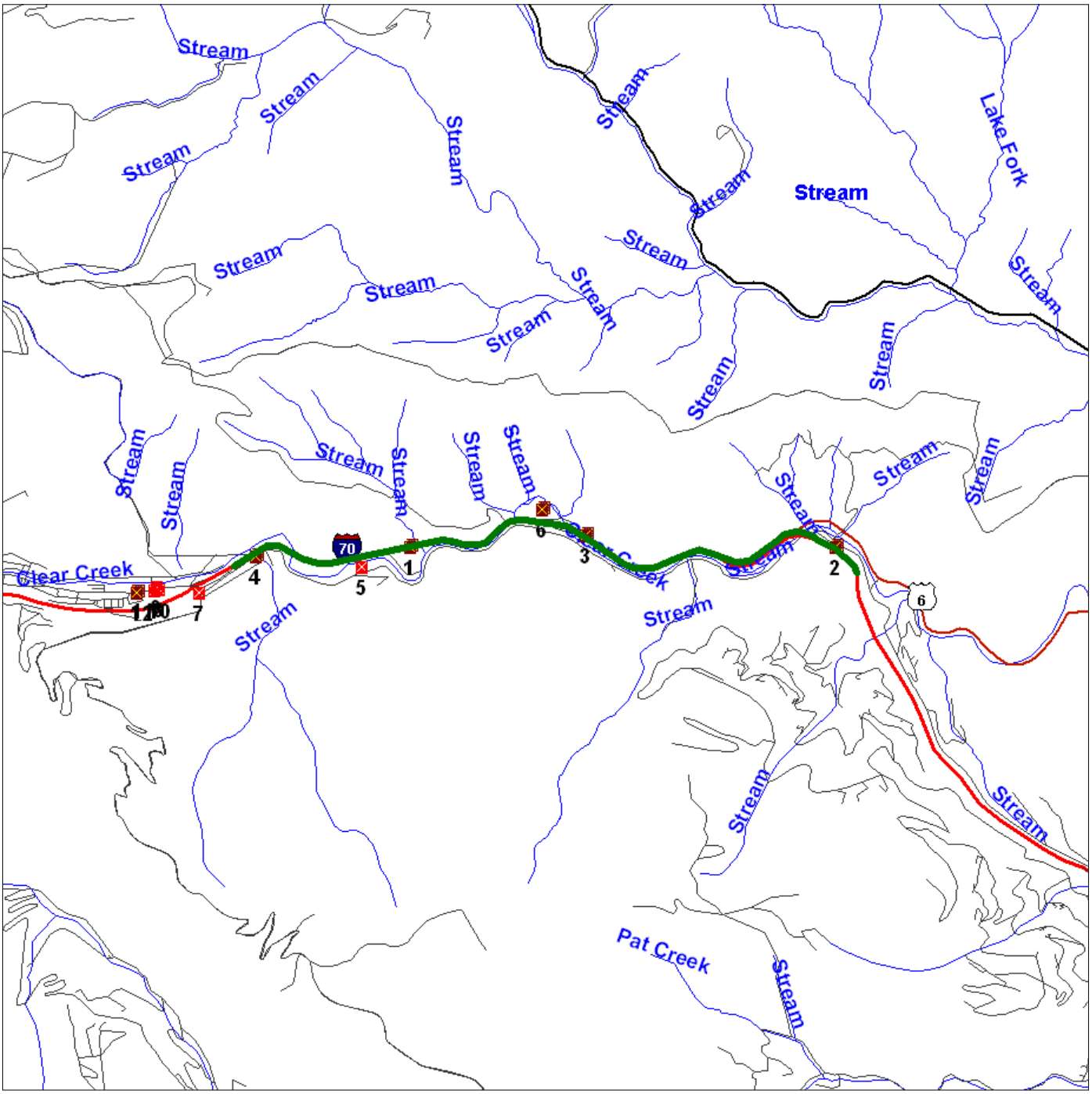
	Requested?	Date
Fire Insurance Maps	No	
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search/Env Liens	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch

1 Mile Radius from Line

Single Map:

, IDAHO SPRINGS CO 80452



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

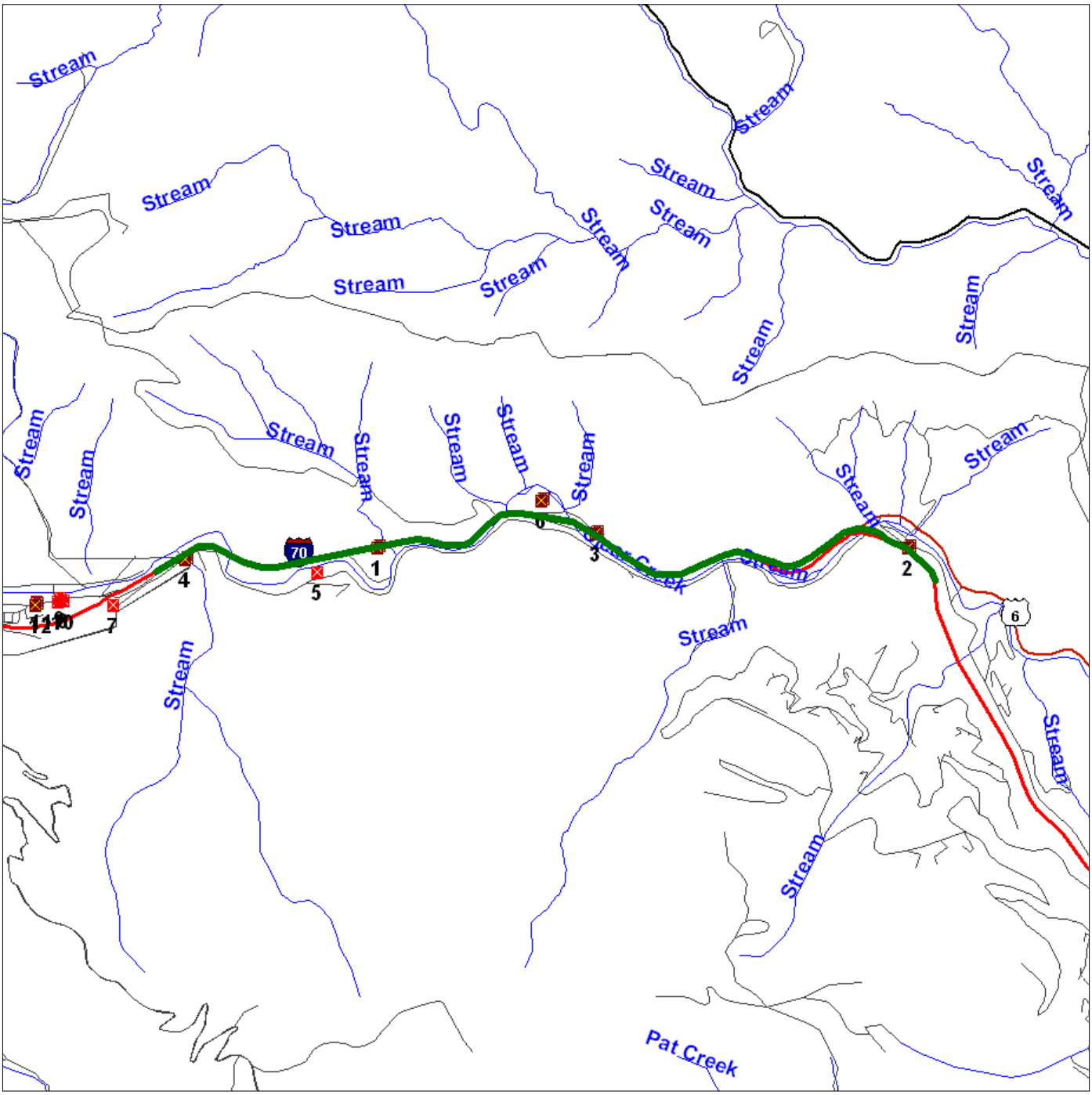
Railroads .....

Environmental FirstSearch

.5 Mile Radius from Line

Single Map:

, IDAHO SPRINGS CO 80452



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

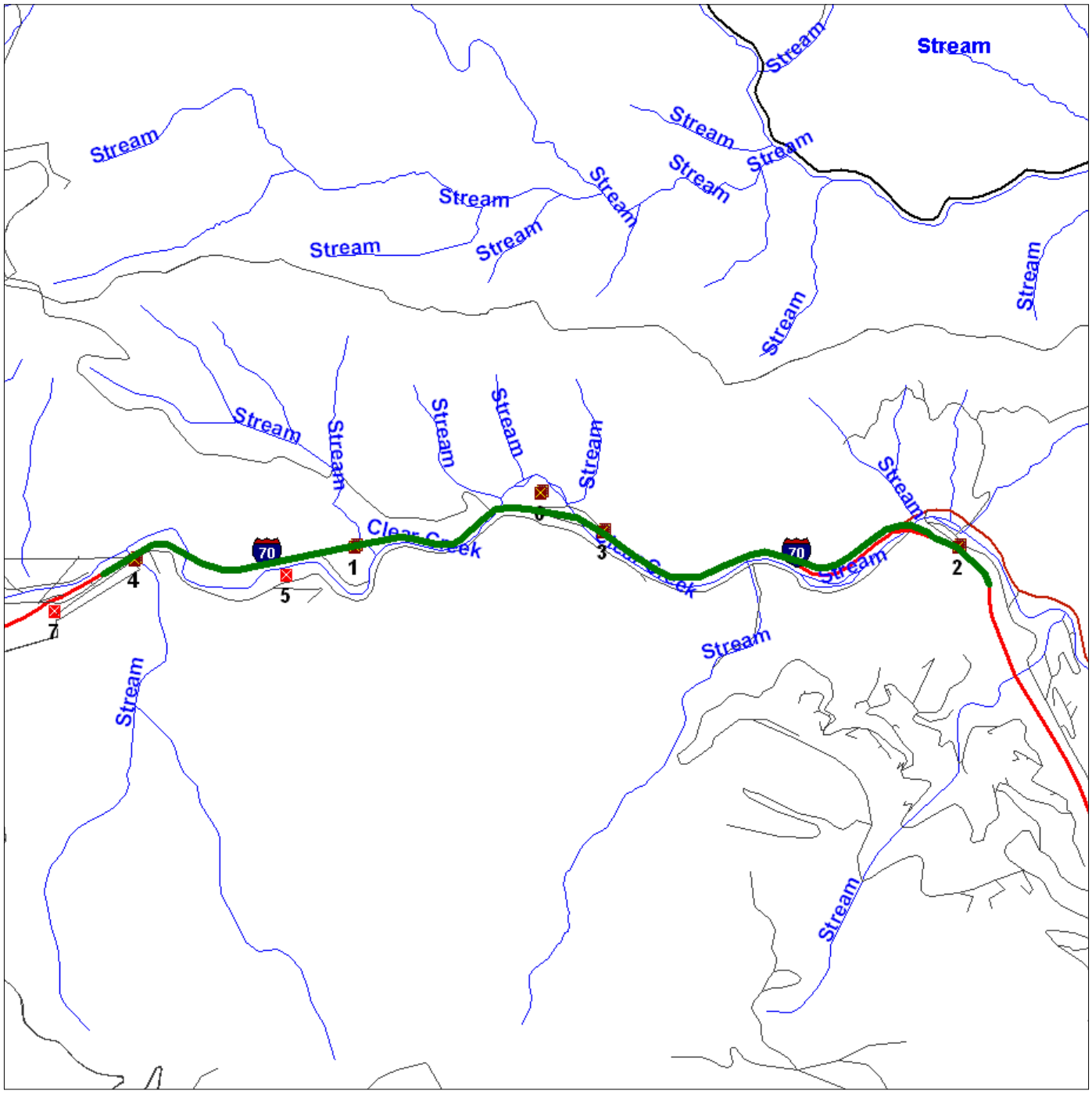
Railroads .....

Environmental FirstSearch

.25 Mile Radius from Line

Single Map:

, IDAHO SPRINGS CO 80452



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

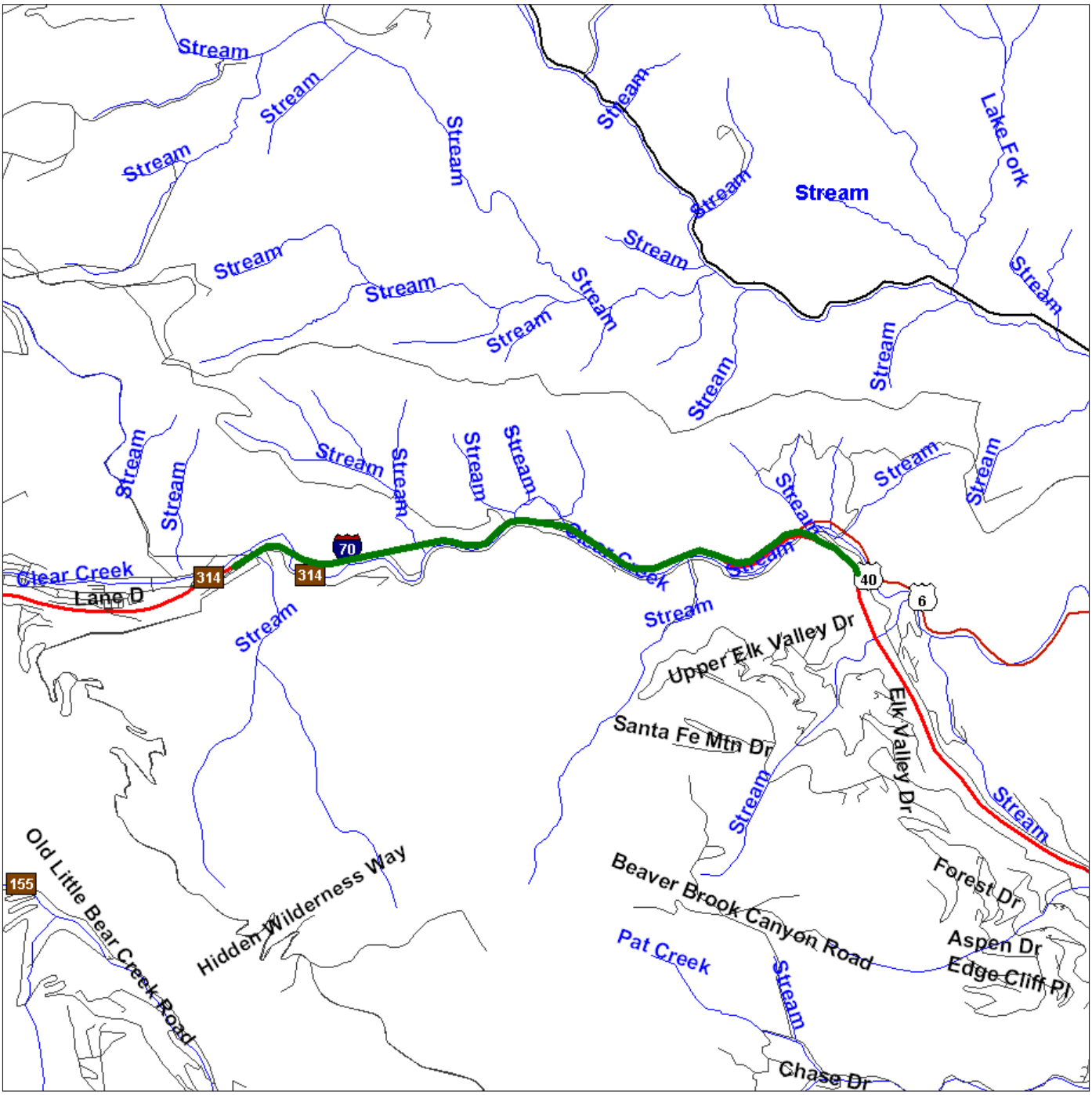
Railroads .....

Environmental FirstSearch

1 Mile Radius from Line

Site Locus Map:

, IDAHO SPRINGS CO 80452



Source: 2005 U.S. Census TIGER Files

Linear Search Line .....

Identified Site, Multiple Sites, Receptor .....

NPL, DELNPL, Brownfield, Solid Waste Landfill (SWL), Hazardous Waste

Triballand.....

Railroads .....

Environmental FirstSearch
Search Summary Report

Target Site:

IDAHO SPRINGS CO 80452

FirstSearch Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	09-30-11	1.00	0	0	0	0	0	0	0
NPL Delisted	Y	09-30-11	0.50	0	0	0	0	-	0	0
CERCLIS	Y	07-26-11	0.50	0	0	0	0	-	0	0
NFRAP	Y	07-26-11	0.50	0	0	0	0	-	0	0
RCRA COR ACT	Y	07-11-11	1.00	0	0	0	0	0	0	0
RCRA TSD	Y	07-11-11	0.50	0	0	0	0	-	0	0
RCRA GEN	Y	07-11-11	0.25	0	1	0	-	-	0	1
RCRA NLR	Y	07-11-11	0.25	0	1	1	-	-	1	3
Federal Brownfield	Y	07-05-11	0.25	0	0	0	-	-	0	0
ERNS	Y	07-18-11	0.25	3	7	0	-	-	0	10
Tribal Lands	Y	12-01-05	1.00	0	0	0	0	0	0	0
State/Tribal Sites	Y	08-01-07	1.00	0	0	0	0	0	0	0
State Spills 90	Y	07-01-11	0.25	0	3	0	-	-	0	3
State/Tribal SWL	Y	07-01-11	0.50	0	0	0	0	-	2	2
State/Tribal LUST	Y	07-05-11	0.50	0	2	0	6	-	0	8
State/Tribal UST/AST	Y	07-05-11	0.25	0	5	0	-	-	1	6
State/Tribal EC	Y	07-05-11	0.25	0	0	0	-	-	0	0
State/Tribal VCP	Y	03-01-11	0.50	0	0	0	0	-	0	0
Federal IC/EC	Y	08-01-11	0.25	0	0	0	-	-	0	0
Meth Labs	Y	02-02-11	0.25	0	0	0	-	-	0	0
- TOTALS -				3	19	1	6	0	4	33

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to InfoMap Technologies, certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in InfoMap Technologies's databases. All EPA sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent NPL and state landfill the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although InfoMap Technologies uses its best efforts to research the actual location of each site, InfoMap Technologies does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of InfoMap Technologies's services proceeding are signifying an understanding of InfoMap Technologies's searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Sites Summary Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

TOTAL: 33 **GEOCODED:** 29 **NON GEOCODED:** 4 **SELECTED:** 33

Map ID	Dist/Dir	DB Type	Site Name/ID/Status	Address	ElevDiff	Page No.
1	*0.00 --*	*ERNS*	*INTERSTATE 70 MILE MARKER 242* *NRC-916971/MOBILE*	*INTERSTATE 70 MILE MARKER 2* *IDAHO SPRINGS CO*	*N/A*	*1*
1	*0.00 --*	*ERNS*	*INTERSTATE 70 WEST BOUND AT MILE M* *NRC-775730/MOBILE*	*IDAHO SPRINGS CO*	*N/A*	*2*
1	*0.00 --*	*ERNS*	*MILE MARKER 242 ON INTERSTATE 70* *NRC-916968/MOBILE*	*MILE MARKER 242 ON INTERSTA* *IDAHO SPRINGS CO*	*N/A*	*5*
2	*0.01 NE*	*ERNS*	*FRANK C KLEIN INC* *500654/HIGHWAY RELATED*	*I-70 MM:244* *IDAHO SPRINGS CO 80452*	*N/A*	*6*
2	*0.01 NE*	*ERNS*	*COLORADO 70 WESTBOUND AT MILEPOST* *NRC-839584/MOBILE*	*IDAHO SPRINGS CO*	*N/A*	*7*
2	*0.01 NE*	*ERNS*	*FULL SERVICE LEASING CORP* *500808/HIGHWAY RELATED*	*I-70 AT MILE 244 EAST OF ID* *IDAHO SPRINGS CO 80452*	*N/A*	*10*
2	*0.01 NE*	*ERNS*	*MILE 244 ON INTERSTATE 70* *NRC-592336/MOBILE*	*IDAHO SPRINGS EXIT* *IDAHO SPRINGS CO*	*N/A*	*11*
2	*0.01 NE*	*ERNS*	*WB I-70, EXIT RAMP AT MP 244* *NRC-917510/MOBILE*	*WB I-70, EXIT RAMP AT* *IDAHO SPRINGS CO*	*N/A*	*14*
3	*0.01 NE*	*ERNS*	*INTERSTATE 70 MILEPOST 243* *NRC-808446/FIXED*	*IDAHO SPRINGS CO*	*N/A*	*15*
3	*0.01 NE*	*ERNS*	*INTERSTATE 70 AT MILE 243* *NRC-775726/MOBILE*	*IDAHO SPRINGS CO*	*N/A*	*18*
4	*0.02 SE*	*SPILLS*	*ECO RESOURCES, INC.* *2005-399*	*IDAHO SPRINGS WASTEWATER TR* *IDAHO SPRINGS CO*	*N/A*	*21*
4	*0.02 SE*	*SPILLS*	*IDAHO SPRINGS CITY HALL* *CO92-159*	*IDAHOSPRINGS SEWAGE TRMT FA* *IDAHO SPRINGS CO*	*N/A*	*22*
4	*0.02 SE*	*SPILLS*	*IDAHO SPRINGS WASTE WATER PLNT* *CO99-188*	*IDAHO SPRINGS WASTE WATER T* *IDAHO SPRINGS CO*	*N/A*	*23*
4	*0.02 SE*	*RCRANLR*	*IDAHO SPRINGS OLD WATER PLANT* *COD983778028/NLR*	*10 COUNTY HWY 314* *EVERGREEN CO 80439*	*N/A*	*24*
5	*0.05 SE*	*UST*	*CAMAS* *16844*	*1039 EAST IDAHO SPRINGS RO* *IDAHO SPRINGS CO 80452*	*N/A*	*25*
6	*0.06 NE*	*LUST*	*HIDDEN VALLEY TEXACO* *3706/CLOSED*	*I-70 and EXIT 243 HIDDEN V* *IDAHO SPRING CO 80452*	*N/A*	*26*
6	*0.06 NE*	*UST*	*CLEAR CREEK DISTRIBUTING* *10633*	*I-70 EXIT 243 HIDDEN VALLEY* *IDAHO SPRINGS CO 80452*	*N/A*	*27*
6	*0.06 NE*	*UST*	*CLEAR CREEK DISTRIBUTING CO INC* *13154*	*I-70 and EXIT 243, HIDDEN V* *IDAHO SPRINGS CO 80452*	*N/A*	*28*
6	*0.06 NE*	*UST*	*HIDDEN VALLEY TEXACO* *13961*	*I-70 and EXIT 243 HIDDEN V* *IDAHO SPRING CO 80452*	*N/A*	*28*
6	*0.06 NE*	*UST*	*CDOT HIDDEN VALLEY* *1786*	*I-70 MP 243.20* *IDAHO SPRINGS CO 80452*	*N/A*	*29*
6	*0.06 NE*	*LUST*	*CLEAR CREEK DISTRIBUTING CO INC* *87/CLOSED*	*I-70 and EXIT 243 HIDDEN VA* *IDAHO SPRINGS CO 80452*	*N/A*	*30*

Environmental FirstSearch
Sites Summary Report

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

TOTAL: 33 **GEOCODED:** 29 **NON GEOCODED:** 4 **SELECTED:** 33

Map ID	Dist/Dir	DB Type	Site Name/ID/Status	Address	ElevDiff	Page No.
6	*0.06 NE*	*RCRAGN*	*COLORADO DEPARTMENT OF TRANSPORTA* *COR000013615/VGN*	*EXIT 243 HIDDEEN VALLEY I-7* *IDAHO SPRINGS CO 80452*	*N/A*	*31*
7	*0.21 SW*	*RCRANLR*	*USDA FOREST SERVICE* *COR000016709/NLR*	*COUNTY ROAD 314* *IDAHO SPRINGS CO 80452*	*N/A*	*32*
8	*0.38 SW*	*LUST*	*CDOT IDAHO SPRINGS CSP* *4126/CLOSED*	*3000 COLORADO BLVD* *IDAHO SPRINGS CO 80452*	*N/A*	*33*
9	*0.39 SW*	*LUST*	*CDOT IDAHO SPRINGS* *3341/CLOSED*	*2931 COLORADO BLVD* *IDAHO SPRINGS CO 80452*	*N/A*	*33*
10	*0.40 SW*	*LUST*	*SPRING STATION LLC* *9879/CLOSED*	*2900 COLORADO BLVD* *IDAHO SPRINGS CO 80452*	*N/A*	*34*
11	*0.48 SW*	*LUST*	*SCORPION SHELL* *9509/CLOSED*	*2808 COLORADO BLVD* *IDAHO SPRINGS CO 80452*	*N/A*	*34*
12	*0.49 SW*	*LUST*	*TALL COUNTRY IDAHO SPRINGS* *7377/CLOSED*	*2806 COLORADO BLVD* *IDAHO SPRINGS CO 80452*	*N/A*	*35*
12	*0.49 SW*	*LUST*	*TALL COUNTRY IDAHO SPRINGS* *9276/CLOSED*	*2806 COLORADO BLVD* *IDAHO SPRINGS CO 80452*	*N/A*	*35*

Environmental FirstSearch
Sites Summary Report

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

TOTAL: 33 **GEOCODED:** 29 **NON GEOCODED:** 4 **SELECTED:** 33

Map ID	Dist/Dir	DB Type	Site Name/ID/Status	Address	ElevDiff	Page No.
	NON GC	*RCRANLR*	*CONCORD MINERALS CORP-HIDDEN VALLE*			
			COD007805385/NLR	*SEC 32 T3S R72W-2 MI E OF S IDAHO SPRINGS CO 80452*	*N/A*	*36*
	NON GC	*UST*	*CLEAR CREEK VILLAGE CONOCO 2273*	*I-70 and HWY JCT IDAHO SPRINGS CO 80452*	*N/A*	*38*
	NON GC	*SWL*	*HUKILL GULCH MILL WASTE FACILITY 010-MLL-001*	*SEE LOCATION BOX IDAHO SPRINGS CO 80452*	*N/A*	*39*
	NON GC	*SWL*	*CONCORD MINERALS HIDDEN V.MIL 12-0291/HISTORIC*	*ADDRESS NOT REPORTED IDAHO SPRINGS CO*	*N/A*	*39*

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 21 **DIST/DIR:** 0.00 -- **ELEVATION:** **MAP ID:** 1

NAME: INTERSTATE 70 MILE MARKER 242
ADDRESS: INTERSTATE 70 MILE MARKER 242
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/10/09
ID1: NRC-916971
ID2:
STATUS: MOBILE
PHONE:

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

INCIDENT DATE: 04-SEP-2009 11:20
REPORTED DATE: **05-SEP-2009 01:42**
TYPE OF INCIDENT: MOBILE
CAUSE OF INCIDENT: TRANSPORT ACCIDENT
MEDIUM AFFECTED: WATER
MATERIAL NAME: OIL, FUEL: NO. 1-D
LOCATION: INTERSTATE 70 MILE MARKER 242
SUSPECTED COMPANY: WESTERN EXPRESS

DESCRIPTION: ///PLEASE REFER TO REPORT 916968/// CALLER IS REPORTING A SPILL OF DIESEL FUEL FROM TRACTOR TRAILER TRUCK S FUEL TANK DUE TO THE TRACTOR TRAILER RUNNING OFF THE ROAD AND INTO A CREEK.

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 23 **DIST/DIR:** 0.00 -- **ELEVATION:** **MAP ID:** 1

NAME:	INTERSTATE 70 WEST BOUND AT MILE MARKER 242	**REV:**	12/31/05
ADDRESS:		**ID1:**	NRC-775730
	IDAHO SPRINGS CO	**ID2:**	
	CLEAR CREEK	**STATUS:**	MOBILE
CONTACT:	GREG UNKNOWN	**PHONE:**	3038594935
SOURCE:	NRC		

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

DATE RECEIVED: 10/11/2005 3:44:38 PM **DATE COMPLETE:** 10/11/2005 3:49:29 PM
CALL TAKER: TMM0760 **CALL TYPE:** INC

RESPONSIBLE PARTY: GREG UNKNOWN
PHONE 1: 3038594935 PRIMARY
PHONE 2:
PHONE 3:

RESPONSIBLE COMPANY: AMERICAN FURNITURE WAREHOUSE
ORGANIZATION TYPE: PRIVATE ENTERPRISE

ADDRESS: 8501 GRANT STREET
THORNTON CO

SOURCE: TELEPHONE

INCIDENT INFORMATION

INCIDENT DESCRIPTION: CALLER STATED THERE WAS A RELEASE OF MATERIALS FROM THE SADDLE TANK OF A TRACTOR TRAILER DUE TO A TRANSPORT ACCIDENT.

INCIDENT TYPE:	MOBILE	**INCIDENT CAUSE:**	TRANSPORT ACCIDENT
INCIDENT DATE:	10/11/2005 1:00:00 AM	**INCIDENT DATE DESC:**	OCCURRED
DISTANCE FROM CITY:		**DISTANCE UNITS:**	
DIRECTION FROM CITY:		**LOCATION SECTION:**	
LOCATION TOWNSHIP:		**LOCATION RANGE:**	
AIRCRAFT TYPE:		**AIRCRAFT MODEL:**	
AIRCRAFT ID:		**AIRCRAFT FUEL CAPACITY:**	
AIRCRAFT FUEL CAPACITY UNITS:		**AIRCRAFT FUEL ON BOARD:**	
AIRCRAFT FUEL ON BOARD UNITS:		**AIRCRAFT SPOT NUMBER:**	
AIRCRAFT HANGER:		**AIRCRAFT RUNWAY NUM:**	
ROAD MILE MARKER:		**BUILDING ID:**	
TYPE OF FIXED OBJECT:		**POWER GEN FACILITY:**	UNKNOWN
GENERATING CAPACITY:		**TYPE OF FUEL:**	
NPDES:		**NPDES COMPLIANCE:**	UNKNOWN
PIPELINE TYPE:		**DOT REGULATED:**	UNKNOWN
PIPELINE ABOVE GROUND:	ABOVE	**EXPOSED UNDERWATER:**	NO
PIPELINE COVERED:	UNKNOWN	**GRADE CROSSING:**	NO
LOCATION SUBDIVISION:		**RAILROAD MILEPOST:**	
TYPE VEHICLE INVOLVED:		**CROSSING DEVICE TYPE:**	
DEVICE OPERATIONAL:	YES		
DOT CROSSING NUMBER:		**BRAKE FAILURE:**	NO

- Continued on next page -

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 23 **DIST/DIR:** 0.00 -- **ELEVATION:** **MAP ID:** 1

NAME:	INTERSTATE 70 WEST BOUND AT MILE MARKER 242	**REV:**	12/31/05
ADDRESS:		**ID1:**	NRC-775730
	IDAHO SPRINGS CO	**ID2:**	
	CLEAR CREEK	**STATUS:**	MOBILE
CONTACT:	GREG UNKNOWN	**PHONE:**	3038594935
SOURCE:	NRC		

TANK ABOVE GROUND:	ABOVE	**TRANSPORTABLE CONTAINER:**	UNKNOWN
TANK REGULATED:	UNKNOWN	**TANK REGULATED BY:**	
TANK ID:		**CAPACITY OF TANK:**	
CAPACITY OF TANK UNITS:		**ACTUAL AMOUNT:**	
ACTUAL AMOUNT UNITS:		**PLATFORM RIG NAME:**	
PLATFORM LETTER:		**LOCATION AREA ID:**	
LOCATION BLOCK ID:			

DESCRIPTION OF TANK:

OCSG NUMBER:		**OCSP NUMBER:**	
STATE LEASE NUMBER:		**PIER DOCK NUMBER:**	
BERTH SLIP NUMBER:		**CONTIN RELEASE TYPE:**	
INITIAL CONT RELEASE NUM:		**CONT RELEASE PERMIT:**	
ALLISION:	NO	**TYPE OF STRUCTURE:**	
STRUCTURE NAME:		**STRUCT OPERATIONAL:**	UNKNOWN
AIRBAG DEPLOYED:		**DATE NORMAL SERVICE:**	
SERVICE DISRUPT TIME:		**SERVICE DISRUPT UNITS:**	
TRANSIT BUS FLAG:		**CR BEGIN DATE:**	
CR END DATE:		**CR CHANGE DATE:**	
FIRE INVOLVED:	NO	**FIRE EXTINGUISHED:**	UNKNOWN
ANY EVACUATIONS:	NO	**NUMBER EVACUATED:**	
WHO EVACUATED:		**RADIUS OF EVACUATION:**	
ANY INJURIES:	YES	**NUMBER INJURED:**	1
NUMBER HOSPITALIZED:		**ANY FATALITIES:**	NO
NUMBER FATALITIES:		**ANY DAMAGES:**	NO
DAMAGE AMOUNT:		**AIR CORRIDOR CLOSED:**	NO
AIR CORRIDOR DESC:		**AIR CLOSURE TIME:**	
WATERWAY CLOSED:	NO	**WATERWAY DESC:**	
WATERWAY CLOSURE TIME:		**ROAD CLOSED:**	NO
ROAD DESC:		**ROAD CLOSURE TIME:**	
CLOSURE DIRECTION:		**MAJOR ARTERY:**	NO
TRACK CLOSED:	NO	**TRACK DESC:**	
TRACK CLOSURE TIME:		**MEDIA INTEREST:**	NONE
MEDIUM DESC:	WATER	**ADDTL MEDIUM INFO:**	/ CLEAR CREEK
BODY OF WATER:	CLEAR CREEK	**TRIBUTARY OF:**	SOUTH PLATTE RIVER
NEAREST RIVER MILE MARK:		**RELEASE SECURED:**	YES
EST DUR OF RELEASE:		**RELEASE RATE:**	
TRACK CLOSE DIR:		**ST AGENCY ON SCENE:**	
ST AGENCY RPT NUM:	2005-629	**OTHER AGENCY NOTIFIED:**	
WEATHER CONDITIONS:		**AIR TEMPERATURE:**	
WIND SPEED:		**WIND DIRECTION:**	
WATER SUPPLY CONTAM:	UNKNOWN	**SHEEN SIZE:**	
SHEEN COLOR:		**DIR OF SHEEN TRAVEL:**	
SHEEN ODOR DESCRIPTION:		**WAVE CONDITION:**	
CURRENT SPEED:		**CURRENT DIRECTION:**	
WATER TEMPERATURE:			

DESC OF REMEDIAL ACTION: BOOMS APPLIED,ABSORBENTS APPLIED,CONTRACTOR HAS BEEN HIRED

EMPL FATALITY: **PASS FATALITY:**

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 23 **DIST/DIR:** 0.00 -- **ELEVATION:** **MAP ID:** 1

NAME:	INTERSTATE 70 WEST BOUND AT MILE MARKER 242	**REV:**	12/31/05
ADDRESS:		**ID1:**	NRC-775730
	IDAHO SPRINGS CO	**ID2:**	
	CLEAR CREEK	**STATUS:**	MOBILE
CONTACT:	GREG UNKNOWN	**PHONE:**	3038594935
SOURCE:	NRC		

COMMUNITY IMPACT:	NO	**WIND SPEED UNITS:**	
EMPLOYEE INJURIES:		**PASSENGER INJURIES:**	
OCCUPANT FATALITY:		**CURRENT SPEED UNITS:**	
ROAD CLOSURE UNITS:		**TRACK CLOSURE UNITS:**	
SHEEN SIZE UNITS:		**STATE AGENCY NOTIFIED:**	CO DOH
FED AGENCY NOTIFIED:	NONE	**NEAREST RIVER MILE MARK:**	
SHEEN SIZE LENGTH:		**SHEEN SIZE LENGTH UNITS:**	
SHEEN SIZE WIDTH:		**SHEEN SIZE WIDTH UNITS:**	
OFFSHORE:	N	**DURATION UNIT:**	
RELEASE RATE UNIT:		**RELEASE RATE RATE:**	

ADDITIONAL INFO: THE ONE INJURY WAS TO THE DRIVER AND WAS DUE TO THE WRECK.

MATERIAL INFORMATION

CHRIS CODE:	ODS	**CASE NUMBER:**	000000-00-0
UN NUMBER:		**REACHED WATER:**	YES

NAME OF MATERIAL:	OIL: DIESEL
AMOUNT OF MATERIAL:	80 GALLON(S)
AMOUNT IN WATER:	40 GALLON(S)

OTHER MATERIAL INFORMATION

MOBILE DETAILS INFORMATION

TRAIN INFORMATION

VESSEL INFORMATION

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 25 **DIST/DIR:** 0.00 -- **ELEVATION:** **MAP ID:** 1

NAME: MILE MARKER 242 ON INTERSTATE 70
ADDRESS: MILE MARKER 242 ON INTERSTATE
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/10/09
ID1: NRC-916968
ID2:
STATUS: MOBILE
PHONE:

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

INCIDENT DATE:	04-SEP-2009 21:01
REPORTED DATE:	**04-SEP-2009 23:45**
TYPE OF INCIDENT:	MOBILE
CAUSE OF INCIDENT:	TRANSPORT ACCIDENT
MEDIUM AFFECTED:	WATER
MATERIAL NAME:	OIL, FUEL: NO. 1-D
LOCATION:	MILE MARKER 242 ON INTERSTATE 70
SUSPECTED COMPANY:	WESTERN EXPRESS

DESCRIPTION: CALLER IS REPORTING A SPILL DIESEL FUEL FROM A TRACTOR TRAILER DUE TO A ACCIDENT. CALLER STATED THE TRACTOR TRAILER WENT DOWN AN EMBANKMENT. CALLER HAD VERY LIMITED INFORMATION.

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 18 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME: FRANK C KLEIN INC
ADDRESS: I-70 MM:244
IDAHO SPRINGS CO 80022
GILPIN
CONTACT:
SOURCE: EPA

REV: 7/9/96
ID1: 500654
ID2:
STATUS: HIGHWAY RELATED
PHONE:

SPILL INFORMATION

DATE OF SPILL: 7/9/96 **TIME OF SPILL:** 0245

PRODUCT RELEASED (1): OIL, FUEL: NO. 2-D
QUANTITY (1): 7500
UNITS (1): GAL

PRODUCT RELEASED (2):
QUANTITY (2):
UNITS (2):

PRODUCT RELEASED (3):
QUANTITY (3):
UNITS (3):

MEDIUM/MEDIA AFFECTED

AIR: NO **GROUNDWATER:** NO
LAND: YES **FIXED FACILITY:** NO
WATER: NO **OTHER:** NO
WATERBODY AFFECTED BY RELEASE:

CAUSE OF RELEASE

DUMPING: NO **EQUIPMENT FAILURE:** NO
NATURAL PHENOMENON: NO **OPERATOR ERROR:** NO
OTHER CAUSE: NO **TRANSP. ACCIDENT:** YES
UNKNOWN: NO

ACTIONS TAKEN: LEAK WAS SECURED / CONTRACTOR WAS CALLED IN TO PREFORM CLEAN-UP
RELEASE DETECTION: TANKER TRUCK TANK TRUCK / ROLLED OVER AND RELEASED MATERIAL
MISC. NOTES: SEE REPORT 960519 FOR ADDITIONAL INFORMATION.

DISCHARGER INFORMATION

DISCHARGER ID: 500654
TYPE OF DISCHARGER: PRIVATE ENTERPRISE
NAME OF DISCHARGER: FRANK C KLEIN INC
ADDRESS: 7627 DAHLIA
COMMERCE CITY CO 80022

DUN and BRADSTREET :

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 17 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME: COLORADO 70 WESTBOUND AT MILEPOST 244
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/31/07
ID1: NRC-839584
ID2:
STATUS: MOBILE
PHONE:

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

DATE RECEIVED: 6/22/2007 11:31:42 AM **DATE COMPLETE:** 6/22/2007 11:35:30 AM
CALL TAKER: **CALL TYPE:** INC

RESPONSIBLE PARTY:
PHONE 1:
PHONE 2:
PHONE 3:

RESPONSIBLE COMPANY: VOYAGER EXPRESS
ORGANIZATION TYPE: PRIVATE ENTERPRISE

ADDRESS:
DENVER CO

SOURCE: TELEPHONE

INCIDENT INFORMATION

INCIDENT DESCRIPTION: CALLER STATED THERE WAS A RELEASE OF MATERIALS FROM THE SADDLE TANK ON A TRACTOR TRAILER TRUCK DUE TO A VEHICLE ACCIDENT.

INCIDENT TYPE:	MOBILE	**INCIDENT CAUSE:**	TRANSPORT ACCIDENT
INCIDENT DATE:	6/16/2007 2:45:00 PM	**INCIDENT DATE DESC:**	OCCURRED
DISTANCE FROM CITY:		**DISTANCE UNITS:**	
DIRECTION FROM CITY:		**LOCATION SECTION:**	
LOCATION TOWNSHIP:		**LOCATION RANGE:**	
AIRCRAFT TYPE:		**AIRCRAFT MODEL:**	
AIRCRAFT ID:		**AIRCRAFT FUEL CAPACITY:**	
AIRCRAFT FUEL CAPACITY UNITS:		**AIRCRAFT FUEL ON BOARD:**	
AIRCRAFT FUEL ON BOARD UNITS:		**AIRCRAFT SPOT NUMBER:**	
AIRCRAFT HANGER:		**AIRCRAFT RUNWAY NUM:**	
ROAD MILE MARKER:		**BUILDING ID:**	
TYPE OF FIXED OBJECT:		**POWER GEN FACILITY:**	U
GENERATING CAPACITY:		**TYPE OF FUEL:**	
NPDES:		**NPDES COMPLIANCE:**	U
PIPELINE TYPE:		**DOT REGULATED:**	U
PIPELINE ABOVE GROUND:	ABOVE	**EXPOSED UNDERWATER:**	N
PIPELINE COVERED:	U	**GRADE CROSSING:**	U
LOCATION SUBDIVISION:		**RAILROAD MILEPOST:**	
TYPE VEHICLE INVOLVED:		**CROSSING DEVICE TYPE:**	
DEVICE OPERATIONAL:	Y		
DOT CROSSING NUMBER:		**BRAKE FAILURE:**	U

- Continued on next page -

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 17 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME: COLORADO 70 WESTBOUND AT MILEPOST 244
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/31/07
ID1: NRC-839584
ID2:
STATUS: MOBILE
PHONE:

TANK ABOVE GROUND:	ABOVE	**TRANSPORTABLE CONTAINER:**	U
TANK REGULATED:	U	**TANK REGULATED BY:**	
TANK ID:		**CAPACITY OF TANK:**	
CAPACITY OF TANK UNITS:		**ACTUAL AMOUNT:**	
ACTUAL AMOUNT UNITS:		**PLATFORM RIG NAME:**	
PLATFORM LETTER:		**LOCATION AREA ID:**	
LOCATION BLOCK ID:			

DESCRIPTION OF TANK:

OCSG NUMBER:		**OCSP NUMBER:**	
STATE LEASE NUMBER:		**PIER DOCK NUMBER:**	
BERTH SLIP NUMBER:		**CONTIN RELEASE TYPE:**	
INITIAL CONT RELEASE NUM:		**CONT RELEASE PERMIT:**	
ALLISION:	U	**TYPE OF STRUCTURE:**	
STRUCTURE NAME:		**STRUCT OPERATIONAL:**	U
AIRBAG DEPLOYED:	U	**DATE NORMAL SERVICE:**	
SERVICE DISRUPT TIME:		**SERVICE DISRUPT UNITS:**	
TRANSIT BUS FLAG:		**CR BEGIN DATE:**	
CR END DATE:		**CR CHANGE DATE:**	
FIRE INVOLVED:	N	**FIRE EXTINGUISHED:**	U
ANY EVACUATIONS:	N	**NUMBER EVACUATED:**	
WHO EVACUATED:		**RADIUS OF EVACUATION:**	
ANY INJURIES:	Y	**NUMBER INJURED:**	
NUMBER HOSPITALIZED:		**ANY FATALITIES:**	N
NUMBER FATALITIES:		**ANY DAMAGES:**	N
DAMAGE AMOUNT:		**AIR CORRIDOR CLOSED:**	N
AIR CORRIDOR DESC:		**AIR CLOSURE TIME:**	
WATERWAY CLOSED:	N	**WATERWAY DESC:**	
WATERWAY CLOSURE TIME:		**ROAD CLOSED:**	N
ROAD DESC:		**ROAD CLOSURE TIME:**	
CLOSURE DIRECTION:		**MAJOR ARTERY:**	N
TRACK CLOSED:	N	**TRACK DESC:**	
TRACK CLOSURE TIME:		**MEDIA INTEREST:**	NONE
MEDIUM DESC:	LAND	**ADDTL MEDIUM INFO:**	
BODY OF WATER:		**TRIBUTARY OF:**	
NEAREST RIVER MILE MARK:		**RELEASE SECURED:**	Y
EST DUR OF RELEASE:		**RELEASE RATE:**	
TRACK CLOSE DIR:		**ST AGENCY ON SCENE:**	
ST AGENCY RPT NUM:		**OTHER AGENCY NOTIFIED:**	
WEATHER CONDITIONS:	UNKNOWN	**AIR TEMPERATURE:**	
WIND SPEED:		**WIND DIRECTION:**	
WATER SUPPLY CONTAM:	U	**SHEEN SIZE:**	
SHEEN COLOR:		**DIR OF SHEEN TRAVEL:**	
SHEEN ODOR DESCRIPTION:		**WAVE CONDITION:**	
CURRENT SPEED:		**CURRENT DIRECTION:**	
WATER TEMPERATURE:			

DESC OF REMEDIAL ACTION: CLEAN UP UNDERWAY

EMPL FATALITY: **PASS FATALITY:**

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 17 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME: COLORADO 70 WESTBOUND AT MILEPOST 244
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/31/07
ID1: NRC-839584
ID2:
STATUS: MOBILE
PHONE:

COMMUNITY IMPACT:		**WIND SPEED UNITS:**	
EMPLOYEE INJURIES:		**PASSENGER INJURIES:**	
OCCUPANT FATALITY:		**CURRENT SPEED UNITS:**	
ROAD CLOSURE UNITS:		**TRACK CLOSURE UNITS:**	
SHEEN SIZE UNITS:		**STATE AGENCY NOTIFIED:**	NONE
FED AGENCY NOTIFIED:	NONE	**NEAREST RIVER MILE MARK:**	
SHEEN SIZE LENGTH:		**SHEEN SIZE LENGTH UNITS:**	
SHEEN SIZE WIDTH:		**SHEEN SIZE WIDTH UNITS:**	
OFFSHORE:	N	**DURATION UNIT:**	
RELEASE RATE UNIT:		**RELEASE RATE RATE:**	

ADDITIONAL INFO: CALLER HAD NO FURTHER INFORMATION.

MATERIAL INFORMATION

CHRIS CODE:	ODS	**CASE NUMBER:**	000000-00-0
UN NUMBER:		**REACHED WATER:**	NO

NAME OF MATERIAL: OIL: DIESEL
AMOUNT OF MATERIAL: 40 GALLON(S)
AMOUNT IN WATER:

OTHER MATERIAL INFORMATION

MOBILE DETAILS INFORMATION

TRAIN INFORMATION

VESSEL INFORMATION

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 19 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME: FULL SERVICE LEASING CORP
ADDRESS: I-70 AT MILE 244 EAST OF IDAHO SPRINGS
IDAHO SPRINGS CO 80022
CONTACT:
SOURCE: EPA

REV: 7/9/96
ID1: 500808
ID2:
STATUS: HIGHWAY RELATED
PHONE:

SPILL INFORMATION

DATE OF SPILL: 7/9/96 **TIME OF SPILL:** 0251

PRODUCT RELEASED (1): OILS,DIESEL
QUANTITY (1): 7500
UNITS (1): GAL

PRODUCT RELEASED (2):
QUANTITY (2):
UNITS (2):

PRODUCT RELEASED (3):
QUANTITY (3):
UNITS (3):

MEDIUM/MEDIA AFFECTED

AIR:	NO	**GROUNDWATER:**	NO
LAND:	YES	**FIXED FACILITY:**	NO
WATER:	NO	**OTHER:**	NO

WATERBODY AFFECTED BY RELEASE:

CAUSE OF RELEASE

DUMPING:	NO	**EQUIPMENT FAILURE:**	NO
NATURAL PHENOMENON:	NO	**OPERATOR ERROR:**	NO
OTHER CAUSE:	NO	**TRANSP. ACCIDENT:**	YES
UNKNOWN:	NO		

ACTIONS TAKEN: NOT SPECIFIED
RELEASE DETECTION: TANKER TRUCK TANKER TRUCK OVERTURNED IN MEDIAN BETWEEN I-70 LANES
MISC. NOTES: SEE REPORT 960519-1 FOR ADDITIONAL INFORMATION.

DISCHARGER INFORMATION

DISCHARGER ID: 500808
TYPE OF DISCHARGER: PRIVATE ENTERPRISE
NAME OF DISCHARGER: FULL SERVICE LEASING CORP
ADDRESS:
ATLANTA GA

DUN and BRADSTREET :

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 24 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME:	MILE 244 ON INTERSTATE 70	**REV:**	12/31/02
ADDRESS:	IDAHO SPRINGS EXIT	**ID1:**	NRC-592336
	IDAHO SPRINGS CO	**ID2:**	
	CLEAR CREEK	**STATUS:**	MOBILE
CONTACT:	TERRY BAIN	**PHONE:**	5802344663
SOURCE:	NRC		

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

DATE RECEIVED:	27-JAN-02	**DATE COMPLETE:**	27-JAN-02
CALL TAKER:	REC7955	**CALL TYPE:**	INC

RESPONSIBLE PARTY: TERRY BAIN
PHONE 1: 5802344663 PRIMARY
PHONE 2:
PHONE 3:

RESPONSIBLE COMPANY: GROENDYKE TRANSPORT
ORGANIZATION TYPE: PRIVATE ENTERPRISE

ADDRESS: PO BOX 632
ENID OK 73702

INITIALLY REPORTED BY: TELEPHONE
PHONE:

INIT REPORTED COMPANY:
ON BEHALF OF:
SOURCE:

INCIDENT INFORMATION

INCIDENT DESCRIPTION: DUE TO AN UNKNOWN CAUSE AC-10 HOT ASPHALT SPILLED ONTO THE PAVEMENT FROM A TANKER TRUCK.

INCIDENT TYPE:	MOBILE	**INCIDENT CAUSE:**	UNKNOWN
INCIDENT DATE:	27-JAN-02	**INCIDENT DATE DESC:**	OCCURRED
DISTANCE FROM CITY:		**DISTANCE UNITS:**	
DIRECTION FROM CITY:		**LOCATION SECTION:**	
LOCATION TOWNSHIP:		**LOCATION RANGE:**	
WMD CHEM FLAG:	F	**RAD FLAG:**	F
BIO FLAG:	F	**OIL FLAG:**	
POTENTIAL_FLAG:		**AMT MATERIAL FLAG:**	
MILITARY ORG FLAG:	N	**LNG FLAG:**	
AIRCRAFT TYPE:	UNKNOWN	**AIRCRAFT MODEL:**	
AIRCRAFT ID:		**AIRCRAFT FUEL CAPACITY:**	
AIRCRAFT FUEL CAPACITY UNITS:		**AIRCRAFT FUEL ON BOARD:**	
AIRCRAFT FUEL ON BOARD UNITS:		**AIRCRAFT SPOT NUMBER:**	
AIRCRAFT HANGER:		**AIRCRAFT RUNWAY NUM:**	
ROAD MILE MARKER:		**BUILDING ID:**	
TYPE OF FIXED OBJECT:	UNKNOWN	**POWER GEN FACILITY:**	U
GENERATING CAPACITY:		**TYPE OF FUEL:**	
NPDES:		**NPDES COMPLIANCE:**	U

- Continued on next page -

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 24 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME: MILE 244 ON INTERSTATE 70
ADDRESS: IDAHO SPRINGS EXIT
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT: TERRY BAIN
SOURCE: NRC

REV: 12/31/02
ID1: NRC-592336
ID2:
STATUS: MOBILE
PHONE: 5802344663

PIPELINE TYPE:		**DOT REGULATED:**	U
PIPELINE ABOVE GROUND:	ABOVE	**EXPOSED UNDERWATER:**	N
PIPELINE COVERED:	U	**RAILROAD HOTLINE:**	
GRADE CROSSING:	N	**LOCATION SUBDIVISION:**	
RAILROAD MILEPOST:		**TYPE VEHICLE INVOLVED:**	
CROSSING DEVICE TYPE:		**DEVICE OPERATIONAL:**	Y
DOT CROSSING NUMBER:		**BRAKE FAILURE:**	N
TANK ABOVE GROUND:	ABOVE	**TRANSPORTABLE CONTAINER:**	U
TANK REGULATED:	U	**TANK REGULATED BY:**	
TANK ID:		**CAPACITY OF TANK:**	
CAPACITY OF TANK UNITS:		**ACTUAL AMOUNT:**	
ACTUAL AMOUNT UNITS:		**PLATFORM RIG NAME:**	
PLATFORM LETTER:		**LOCATION AREA ID:**	
LOCATION BLOCK ID:			
DESCRIPTION OF TANK:			
OCSG NUMBER:		**OCSP NUMBER:**	
STATE LEASE NUMBER:		**PIER DOCK NUMBER:**	
BERTH SLIP NUMBER:		**CONTIN RELEASE TYPE:**	
INITIAL CONT RELEASE NUM:		**CONT RELEASE PERMIT:**	
ALLISION:	N	**TYPE OF STRUCTURE:**	
STRUCTURE NAME:		**STRUCT OPERATIONAL:**	U
AIRBAG DEPLOYED:		**DATE NORMAL SERVICE:**	
SERVICE DISRUPT TIME:		**SERVICE DISRUPT UNITS:**	
TRANSIT BUS FLAG:		**CR BEGIN DATE:**	
CR END DATE:		**CR CHANGE DATE:**	
FIRE INVOLVED:	N	**FIRE EXTINGUISHED:**	U
ANY EVACUATIONS:	N	**NUMBER EVACUATED:**	
WHO EVACUATED:		**RADIUS OF EVACUATION:**	
ANY INJURIES:	N	**NUMBER INJURED:**	
NUMBER HOSPITALIZED:		**ANY FATALITIES:**	N
NUMBER FATALITIES:		**ANY DAMAGES:**	N
DAMAGE AMOUNT:		**AIR CORRIDOR CLOSED:**	N
AIR CORRIDOR DESC:		**AIR CLOSURE TIME:**	
WATERWAY CLOSED:	N	**WATERWAY DESC:**	
WATERWAY CLOSURE TIME:		**ROAD CLOSED:**	N
ROAD DESC:		**ROAD CLOSURE TIME:**	
CLOSURE DIRECTION:		**MAJOR ARTERY:**	N
TRACK CLOSED:	N	**TRACK DESC:**	
TRACK CLOSURE TIME:		**MEDIA INTEREST:**	NONE
MEDIUM DESC:	LAND	**ADDTL MEDIUM INFO:**	PAVEMENT
BODY OF WATER:		**TRIBUTARY OF:**	
NEAREST RIVER MILE MARK:		**RELEASE SECURED:**	Y
EST DUR OF RELEASE:		**RELEASE RATE:**	
TRACK CLOSE DIR:		**ST AGENCY ON SCENE:**	
ST AGENCY RPT NUM:	NO REPORT	**OTHER AGENCY NOTIFIED:**	
WEATHER CONDITIONS:	CLEAR	**AIR TEMPERATURE:**	
WIND SPEED:		**WIND DIRECTION:**	
WATER SUPPLY CONTAM:	U	**SHEEN SIZE:**	

- Continued on next page -

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 24 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME:	MILE 244 ON INTERSTATE 70	**REV:**	12/31/02
ADDRESS:	IDAHO SPRINGS EXIT	**ID1:**	NRC-592336
	IDAHO SPRINGS CO	**ID2:**	
	CLEAR CREEK	**STATUS:**	MOBILE
CONTACT:	TERRY BAIN	**PHONE:**	5802344663
SOURCE:	NRC		

SHEEN COLOR:		**DIR OF SHEEN TRAVEL:**	
SHEEN ODOR DESCRIPTION:		**WAVE CONDITION:**	
CURRENT SPEED:		**CURRENT DIRECTION:**	
WATER TEMPERATURE:			

DESC OF REMEDIAL ACTION: IN THE PROCESS OF REMOVING THE MATERIAL FROM THE PAVEMENT

EMPL FATALITY:		**PASS FATALITY:**	
COMMUNITY IMPACT:	N	**WIND SPEED UNITS:**	
EMPLOYEE INJURIES:		**PASSENGER INJURIES:**	
OCCUPANT FATALITY:		**CURRENT SPEED UNITS:**	
ROAD CLOSURE UNITS:		**TRACK CLOSURE UNITS:**	
SHEEN SIZE UNITS:		**STATE AGENCY NOTIFIED:**	CO HEALTH DEPT.
FED AGENCY NOTIFIED:		**STRUCTURE NAME:**	
TYPE OF STRUCTURE:		**ALLISION:**	
STRUCTURE OPERATIONAL:		**NEAREST RIVER MILE MARK:**	
SHEEN SIZE LENGTH:	N	**SHEEN SIZE LENGTH UNITS:**	
SHEEN SIZE WIDTH:		**SHEEN SIZE WIDTH UNITS:**	
OFFSHORE:		**DURATION UNIT:**	
RELEASE RATE UNIT:		**RELEASE RATE RATE:**	

ADDITIONAL INFO: NONE

MATERIAL INFORMATION

CHRIS CODE:	NCC	**CASE NUMBER:**	000000-00-0
UN NUMBER:		**REACHED WATER:**	NO

NAME OF MATERIAL:	AC-10 HOT ASPHALT MATERIAL
AMOUNT OF MATERIAL:	1000 GALLON(S)
AMOUNT IN WATER:	

OTHER MATERIAL INFORMATION

VEHICLE NUMBER:	N/A	**TRAILER NUMBER:**	
VEHICLE FUEL CAPACITY:		**CARGO CAPACITY:**	
AMOUNT OF CARGO ON BOARD:		**HAZMAT CARRIER:**	U
CARRIER LICENSED:	U	**NONCOMPLIANCE WITH HAZMAT:**	U
MOBILE TYPE:	TANKER TRUCK	**VEHICLE YEAR:**	
VEHICLE MAKE:		**VEHICLE MODEL:**	

MOBILE DETAILS INFORMATION

TRAIN INFORMATION

VESSEL INFORMATION

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 26 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 2

NAME: WB I-70, EXIT RAMP AT MP 244
ADDRESS: WB I-70, EXIT RAMP AT
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/10/09
ID1: NRC-917510
ID2:
STATUS: MOBILE
PHONE:

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

INCIDENT DATE: 10-SEP-2009 10:00
REPORTED DATE: **11-SEP-2009 10:24**
TYPE OF INCIDENT: MOBILE
CAUSE OF INCIDENT: UNKNOWN
MEDIUM AFFECTED: WATER
MATERIAL NAME: OIL: DIESEL
LOCATION: WB I-70, EXIT RAMP AT MP 244
SUSPECTED COMPANY: A.A.O. INC

DESCRIPTION: CALLER STATED THAT A SEMI TRUCK LOADED WITH ROAD BASE (ASPHALT OIL MIXTURE) VAULTED OFF OF AN EMBANKMENT INTO CLEAR CREEK DUE TO UNKNOWN CAUSES.

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

INCIDENT DATE: 10-SEP-2009 10:00
REPORTED DATE: **11-SEP-2009 10:24**
TYPE OF INCIDENT: MOBILE
CAUSE OF INCIDENT: UNKNOWN
MEDIUM AFFECTED: WATER
MATERIAL NAME: ASPHALT AND OIL MIXTURE
LOCATION: WB I-70, EXIT RAMP AT MP 244
SUSPECTED COMPANY: A.A.O. INC

DESCRIPTION: CALLER STATED THAT A SEMI TRUCK LOADED WITH ROAD BASE (ASPHALT OIL MIXTURE) VAULTED OFF OF AN EMBANKMENT INTO CLEAR CREEK DUE TO UNKNOWN CAUSES.

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 22 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 3

NAME: INTERSTATE 70 MILEPOST 243
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/31/06
ID1: NRC-808446
ID2:
STATUS: FIXED
PHONE:

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

DATE RECEIVED: 8/20/2006 9:44:39 AM **DATE COMPLETE:** 8/20/2006 10:01:27 AM
CALL TAKER: **CALL TYPE:** INC

RESPONSIBLE PARTY:
PHONE 1:
PHONE 2:
PHONE 3:

RESPONSIBLE COMPANY: DILLON TOWING
ORGANIZATION TYPE: PRIVATE ENTERPRISE

ADDRESS:
DILLON CO 80435

SOURCE: TELEPHONE

INCIDENT INFORMATION

INCIDENT DESCRIPTION: CALLER STATES THAT PLASTIC PIPING ASH PARTICULATE HAS DISCHARGED INTO THE CLEAR CREEK WATERWAY. A TOWING/TRACTOR TRAILOR COMBO HAD A LOAD OF EBS CELL CORE PLASTIC PIPING. WHILE THE MATERIAL WAS BEING TOWED IT HAD A WHEEL BRAKE CATCH ON FIRE, WHICH LIT TH

INCIDENT TYPE:	FIXED	**INCIDENT CAUSE:**	OPERATOR ERROR
INCIDENT DATE:	8/18/2006 10:02:00 PM	**INCIDENT DATE DESC:**	OCCURRED
DISTANCE FROM CITY:		**DISTANCE UNITS:**	
DIRECTION FROM CITY:		**LOCATION SECTION:**	
LOCATION TOWNSHIP:		**LOCATION RANGE:**	
AIRCRAFT TYPE:		**AIRCRAFT MODEL:**	
AIRCRAFT ID:		**AIRCRAFT FUEL CAPACITY:**	
AIRCRAFT FUEL CAPACITY UNITS:		**AIRCRAFT FUEL ON BOARD:**	
AIRCRAFT FUEL ON BOARD UNITS:		**AIRCRAFT SPOT NUMBER:**	
AIRCRAFT HANGER:		**AIRCRAFT RUNWAY NUM:**	
ROAD MILE MARKER:		**BUILDING ID:**	
TYPE OF FIXED OBJECT:	OTHER	**POWER GEN FACILITY:**	UNKNOWN
GENERATING CAPACITY:		**TYPE OF FUEL:**	
NPDES:		**NPDES COMPLIANCE:**	UNKNOWN
PIPELINE TYPE:		**DOT REGULATED:**	UNKNOWN
PIPELINE ABOVE GROUND:	ABOVE	**EXPOSED UNDERWATER:**	NO
PIPELINE COVERED:	UNKNOWN	**GRADE CROSSING:**	NO
LOCATION SUBDIVISION:		**RAILROAD MILEPOST:**	
TYPE VEHICLE INVOLVED:		**CROSSING DEVICE TYPE:**	
DEVICE OPERATIONAL:	YES		

- Continued on next page -

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 22 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 3

NAME: INTERSTATE 70 MILEPOST 243
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/31/06
ID1: NRC-808446
ID2:
STATUS: FIXED
PHONE:

DOT CROSSING NUMBER:		**BRAKE FAILURE:**	NO
TANK ABOVE GROUND:	ABOVE	**TRANSPORTABLE CONTAINER:**	UNKNOWN
TANK REGULATED:	UNKNOWN	**TANK REGULATED BY:**	
TANK ID:		**CAPACITY OF TANK:**	
CAPACITY OF TANK UNITS:		**ACTUAL AMOUNT:**	
ACTUAL AMOUNT UNITS:		**PLATFORM RIG NAME:**	
PLATFORM LETTER:		**LOCATION AREA ID:**	
LOCATION BLOCK ID:			
DESCRIPTION OF TANK:			
OCSG NUMBER:		**OCSP NUMBER:**	
STATE LEASE NUMBER:		**PIER DOCK NUMBER:**	
BERTH SLIP NUMBER:		**CONTIN RELEASE TYPE:**	
INITIAL CONT RELEASE NUM:		**CONT RELEASE PERMIT:**	
ALLISION:	NO	**TYPE OF STRUCTURE:**	
STRUCTURE NAME:		**STRUCT OPERATIONAL:**	UNKNOWN
AIRBAG DEPLOYED:		**DATE NORMAL SERVICE:**	
SERVICE DISRUPT TIME:		**SERVICE DISRUPT UNITS:**	
TRANSIT BUS FLAG:		**CR BEGIN DATE:**	
CR END DATE:		**CR CHANGE DATE:**	
FIRE INVOLVED:	YES	**FIRE EXTINGUISHED:**	YES
ANY EVACUATIONS:	NO	**NUMBER EVACUATED:**	
WHO EVACUATED:		**RADIUS OF EVACUATION:**	
ANY INJURIES:	NO	**NUMBER INJURED:**	
NUMBER HOSPITALIZED:		**ANY FATALITIES:**	NO
NUMBER FATALITIES:		**ANY DAMAGES:**	NO
DAMAGE AMOUNT:		**AIR CORRIDOR CLOSED:**	NO
AIR CORRIDOR DESC:		**AIR CLOSURE TIME:**	
WATERWAY CLOSED:	NO	**WATERWAY DESC:**	
WATERWAY CLOSURE TIME:		**ROAD CLOSED:**	YES
ROAD DESC:	INTERSTATE 70	**ROAD CLOSURE TIME:**	
CLOSURE DIRECTION:	E/W	**MAJOR ARTERY:**	YES
TRACK CLOSED:	NO	**TRACK DESC:**	
TRACK CLOSURE TIME:		**MEDIA INTEREST:**	NONE
MEDIUM DESC:	WATER	**ADDTL MEDIUM INFO:**	CLEAR CREEK
BODY OF WATER:	CLEAR CREEK	**TRIBUTARY OF:**	SOUTH PLAT RIVER
NEAREST RIVER MILE MARK:		**RELEASE SECURED:**	YES
EST DUR OF RELEASE:		**RELEASE RATE:**	
TRACK CLOSE DIR:		**ST AGENCY ON SCENE:**	FIRE DEPT., POLICE DEPT.
ST AGENCY RPT NUM:		**OTHER AGENCY NOTIFIED:**	
WEATHER CONDITIONS:	CLEAR	**AIR TEMPERATURE:**	62
WIND SPEED:	7	**WIND DIRECTION:**	ESE
WATER SUPPLY CONTAM:	UNKNOWN	**SHEEN SIZE:**	
SHEEN COLOR:	UNKNOWN	**DIR OF SHEEN TRAVEL:**	
SHEEN ODOR DESCRIPTION:		**WAVE CONDITION:**	
CURRENT SPEED:		**CURRENT DIRECTION:**	
WATER TEMPERATURE:			

DESC OF REMEDIAL ACTION: EXTINGUISHED FIRE. DEBRIS REMOVED.

- Continued on next page -

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 22 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 3

NAME: INTERSTATE 70 MILEPOST 243
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: NRC

REV: 12/31/06
ID1: NRC-808446
ID2:
STATUS: FIXED
PHONE:

EMPL FATALITY:		**PASS FATALITY:**	
COMMUNITY IMPACT:	NO	**WIND SPEED UNITS:**	MPH
EMPLOYEE INJURIES:		**PASSENGER INJURIES:**	
OCCUPANT FATALITY:		**CURRENT SPEED UNITS:**	
ROAD CLOSURE UNITS:		**TRACK CLOSURE UNITS:**	
SHEEN SIZE UNITS:		**STATE AGENCY NOTIFIED:**	NONE
FED AGENCY NOTIFIED:	NONE	**NEAREST RIVER MILE MARK:**	
SHEEN SIZE LENGTH:		**SHEEN SIZE LENGTH UNITS:**	
SHEEN SIZE WIDTH:		**SHEEN SIZE WIDTH UNITS:**	
OFFSHORE:	N	**DURATION UNIT:**	
RELEASE RATE UNIT:		**RELEASE RATE RATE:**	

ADDITIONAL INFO: CALLER WILL NOTIFY THE COLORADO DEPT. OF HEALTH

MATERIAL INFORMATION

CHRIS CODE:	NCC	**CASE NUMBER:**	000000-00-0
UN NUMBER:		**REACHED WATER:**	YES

NAME OF MATERIAL: PARTICULATE PLASTIC PIPING
AMOUNT OF MATERIAL: 0 UNKNOWN AMOUNT
AMOUNT IN WATER: 0 UNKNOWN AMOUNT

OTHER MATERIAL INFORMATION

MOBILE DETAILS INFORMATION

TRAIN INFORMATION

VESSEL INFORMATION

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

ERNS

SEARCH ID: 20 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 3

NAME: INTERSTATE 70 AT MILE 243
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT: J.R. BENAVIDES
SOURCE: NRC

REV: 12/31/05
ID1: NRC-775726
ID2:
STATUS: MOBILE
PHONE: 3032394546

SITE INFORMATION

THIS INFORMATION WAS OBTAINED FROM THE NATIONAL RESPONSE CENTER

DATE RECEIVED: 10/11/2005 3:27:24 PM **DATE COMPLETE:** 10/11/2005 3:31:48 PM
CALL TAKER: JWF5396 **CALL TYPE:** INC

RESPONSIBLE PARTY: J.R. BENAVIDES
PHONE 1: 3032394546 PRIMARY
PHONE 2:
PHONE 3:

RESPONSIBLE COMPANY: COLORADO STATE PATROL
ORGANIZATION TYPE: STATE GOVERNMENT

ADDRESS: 700 KIPLING STREET
DENVER CO 80215

SOURCE: TELEPHONE

INCIDENT INFORMATION

INCIDENT DESCRIPTION: A COLLISION RESULTED IN THE PUNCTURE OF A FUEL TANK CAUSING A RELEASE.

INCIDENT TYPE: MOBILE
INCIDENT CAUSE: TRANSPORT ACCIDENT
INCIDENT DATE: 10/11/2005 1:05:00 AM
INCIDENT DATE DESC: DISCOVERED
DISTANCE FROM CITY:
DISTANCE UNITS:
DIRECTION FROM CITY:
LOCATION SECTION:
LOCATION TOWNSHIP:
LOCATION RANGE:

AIRCRAFT TYPE:
AIRCRAFT MODEL:
AIRCRAFT ID:
AIRCRAFT FUEL CAPACITY:
AIRCRAFT FUEL CAPACITY UNITS:
AIRCRAFT FUEL ON BOARD:
AIRCRAFT FUEL ON BOARD UNITS:
AIRCRAFT SPOT NUMBER:
AIRCRAFT HANGER:
AIRCRAFT RUNWAY NUM:
ROAD MILE MARKER:
BUILDING ID:
TYPE OF FIXED OBJECT:
POWER GEN FACILITY: UNKNOWN
GENERATING CAPACITY:
TYPE OF FUEL:
NPDES:
NPDES COMPLIANCE: UNKNOWN
PIPELINE TYPE:
DOT REGULATED: UNKNOWN
PIPELINE ABOVE GROUND: ABOVE
EXPOSED UNDERWATER: NO
PIPELINE COVERED: UNKNOWN
GRADE CROSSING: NO
LOCATION SUBDIVISION:
RAILROAD MILEPOST:
TYPE VEHICLE INVOLVED:
CROSSING DEVICE TYPE:
DEVICE OPERATIONAL: YES

DOT CROSSING NUMBER:
BRAKE FAILURE: NO
TANK ABOVE GROUND: ABOVE
TRANSPORTABLE CONTAINER: UNKNOWN

- Continued on next page -

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 20 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 3

NAME:	INTERSTATE 70 AT MILE 243	**REV:**	12/31/05
ADDRESS:		**ID1:**	NRC-775726
	IDAHO SPRINGS CO	**ID2:**	
	CLEAR CREEK	**STATUS:**	MOBILE
CONTACT:	J.R. BENAVIDES	**PHONE:**	3032394546
SOURCE:	NRC		

TANK REGULATED:	UNKNOWN	**TANK REGULATED BY:**	
TANK ID:		**CAPACITY OF TANK:**	
CAPACITY OF TANK UNITS:		**ACTUAL AMOUNT:**	
ACTUAL AMOUNT UNITS:		**PLATFORM RIG NAME:**	
PLATFORM LETTER:		**LOCATION AREA ID:**	
LOCATION BLOCK ID:			

DESCRIPTION OF TANK:

OCSG NUMBER:		**OCSP NUMBER:**	
STATE LEASE NUMBER:		**PIER DOCK NUMBER:**	
BERTH SLIP NUMBER:		**CONTIN RELEASE TYPE:**	
INITIAL CONT RELEASE NUM:		**CONT RELEASE PERMIT:**	
ALLISION:	NO	**TYPE OF STRUCTURE:**	
STRUCTURE NAME:		**STRUCT OPERATIONAL:**	UNKNOWN
AIRBAG DEPLOYED:		**DATE NORMAL SERVICE:**	
SERVICE DISRUPT TIME:		**SERVICE DISRUPT UNITS:**	
TRANSIT BUS FLAG:		**CR BEGIN DATE:**	
CR END DATE:		**CR CHANGE DATE:**	
FIRE INVOLVED:	NO	**FIRE EXTINGUISHED:**	UNKNOWN
ANY EVACUATIONS:	NO	**NUMBER EVACUATED:**	
WHO EVACUATED:		**RADIUS OF EVACUATION:**	
ANY INJURIES:	NO	**NUMBER INJURED:**	
NUMBER HOSPITALIZED:		**ANY FATALITIES:**	NO
NUMBER FATALITIES:		**ANY DAMAGES:**	NO
DAMAGE AMOUNT:		**AIR CORRIDOR CLOSED:**	NO
AIR CORRIDOR DESC:		**AIR CLOSURE TIME:**	
WATERWAY CLOSED:	NO	**WATERWAY DESC:**	
WATERWAY CLOSURE TIME:		**ROAD CLOSED:**	NO
ROAD DESC:		**ROAD CLOSURE TIME:**	
CLOSURE DIRECTION:		**MAJOR ARTERY:**	NO
TRACK CLOSED:	NO	**TRACK DESC:**	
TRACK CLOSURE TIME:		**MEDIA INTEREST:**	NONE
MEDIUM DESC:	WATER	**ADDTL MEDIUM INFO:**	CLEAR CREEK
BODY OF WATER:	CLEAR CREEK	**TRIBUTARY OF:**	
NEAREST RIVER MILE MARK:		**RELEASE SECURED:**	YES
EST DUR OF RELEASE:		**RELEASE RATE:**	
TRACK CLOSE DIR:		**ST AGENCY ON SCENE:**	
ST AGENCY RPT NUM:		**OTHER AGENCY NOTIFIED:**	
WEATHER CONDITIONS:		**AIR TEMPERATURE:**	
WIND SPEED:		**WIND DIRECTION:**	
WATER SUPPLY CONTAM:	UNKNOWN	**SHEEN SIZE:**	
SHEEN COLOR:		**DIR OF SHEEN TRAVEL:**	
SHEEN ODOR DESCRIPTION:		**WAVE CONDITION:**	
CURRENT SPEED:		**CURRENT DIRECTION:**	
WATER TEMPERATURE:			

DESC OF REMEDIAL ACTION: PLUGGED THE LEAK, AND UNLOADED THE REMAINING FUEL, CONTRACTOR HIRED AND ON SCENE.

EMPL FATALITY: **PASS FATALITY:**

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

ERNS

SEARCH ID: 20 **DIST/DIR:** 0.01 NE **ELEVATION:** **MAP ID:** 3

NAME: INTERSTATE 70 AT MILE 243
ADDRESS:
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT: J.R. BENAVIDES
SOURCE: NRC

REV: 12/31/05
ID1: NRC-775726
ID2:
STATUS: MOBILE
PHONE: 3032394546

COMMUNITY IMPACT:	NO	**WIND SPEED UNITS:**	
EMPLOYEE INJURIES:		**PASSENGER INJURIES:**	
OCCUPANT FATALITY:		**CURRENT SPEED UNITS:**	
ROAD CLOSURE UNITS:		**TRACK CLOSURE UNITS:**	
SHEEN SIZE UNITS:		**STATE AGENCY NOTIFIED:**	CO DOH
FED AGENCY NOTIFIED:		**NEAREST RIVER MILE MARK:**	
SHEEN SIZE LENGTH:		**SHEEN SIZE LENGTH UNITS:**	
SHEEN SIZE WIDTH:		**SHEEN SIZE WIDTH UNITS:**	
OFFSHORE:	N	**DURATION UNIT:**	
RELEASE RATE UNIT:		**RELEASE RATE RATE:**	

ADDITIONAL INFO: NO ADDITIONAL INFORMATION.

MATERIAL INFORMATION

CHRIS CODE:	OTD	**CASE NUMBER:**	000000-00-0
UN NUMBER:		**REACHED WATER:**	YES

NAME OF MATERIAL: OIL, FUEL: NO. 2-D
AMOUNT OF MATERIAL: 80 GALLON(S)
AMOUNT IN WATER: 0 UNKNOWN AMOUNT

OTHER MATERIAL INFORMATION

MOBILE DETAILS INFORMATION

TRAIN INFORMATION

VESSEL INFORMATION

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

SPILLS

SEARCH ID: 27 **DIST/DIR:** 0.02 SE **ELEVATION:** **MAP ID:** 4

NAME: ECO RESOURCES, INC.
ADDRESS: IDAHO SPRINGS WASTEWATER TREATMENT PLANT
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: CDPHE

REV:
ID1: 2005-399
ID2:
STATUS:
PHONE:

PRP INFORMATION

PRP NAME: ECO RESOURCES, INC.
PRP CONTACT: TERRY MIERS
PRP ADDRESS: 6050 W. 54TH AVENUE
ARVADA CO 80002-

SPILL INFORMATION

EVENT DATE: 5/13/2005
MATERIAL TYPE: SANITARY SEWER OVERFLOW

MATERIAL1: EFFLUENT
QUANTITY1: 6000 GALLONS
WATER QUANTITY1: 6000 GALLONS

MATERIAL2:
QUANTITY2:
WATER QUANTITY2:

MATERIAL3:
QUANTITY3:
WATER QUANTITY3:

SOURCE: FIXED FACILITY
SOURCE TYPE: UPSET WASTEWATER TREATMENT PLANT
MEDIUM: WATER AND LAND
WATERWAY: CLEAR CREEK
CAUSE: FAILURE EQUIPMENT
CAUSE INFO: FLOW METER BURST DUE TO HIGH WATER PRESSURE. CHLORINE ROOM FILLED WITH A COUPLE FEET OF WATER.

ACTION: UPON PLANT FILLING, MANUAL DECANT WAS ENACTED. DURING FIRST DISCHARGE A VISUAL IMPACT FROM CHLORINE WAS NOTED IN CREEK NO FURTHER IMPACT NOTED DURING ADDITIONAL MANUAL DECANTS. REPAIRS BEING MADE TO VALVE, NOTED DECANTERS MAY NOT BE SEALING PROPERLY.

RESPONSE COMMENTS:

COMMENTS: OTHER PROBLEMS NOTED: THE BYPASS VALVE WAS NOT CLOSING AND WAS DEADHEADED. THE MAIN VALVE TO THE PLANT WAS CLOSED AND COULD NOT BE REOPENED. WILL INVESTIGATE DECANTER SEALS FURTHER.

ADDITIONAL COMMENTS: PER VOICEMAIL FROM TERRY MEIRS AND FOLLOW BY TOM ARMITAGE THE AMOUNT RELEASED IN THE MANUAL DISCHARGE IS CHANGED FROM 20000 GALLONS TO 6000 GALLONS AND THE REPORT HAS BEEN CHANGED TO REFLECT AN UPSET WASTEWATER TREATEMENT PLANT INSTEAD OF A SANITARY SEWE

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

SPILLS

SEARCH ID: 28 **DIST/DIR:** 0.02 SE **ELEVATION:** **MAP ID:** 4

NAME: IDAHO SPRINGS CITY HALL
ADDRESS: IDAHOSPRINGS SEWAGE TRMT FAC-1/4MI ETOWN
IDAHO SPRINGS CO
GILPIN
CONTACT:
SOURCE: CDPHE

REV:
ID1: CO92-159
ID2:
STATUS:
PHONE:

PRP INFORMATION

PRP NAME: IDAHO SPRINGS CITY HALL
PRP CONTACT:
PRP ADDRESS: IDAHO SPRINGS SEWAGE TRMT FAC
IDAHO SPRINGS CO

SPILL INFORMATION

EVENT DATE: 6/30/1992
MATERIAL TYPE: SANITARY SEWER OVERFLOW

MATERIAL1: SEWAGE EFFLUENT
QUANTITY1: 1900 GALLONS
WATER QUANTITY1: 0

MATERIAL2:
QUANTITY2: 0
WATER QUANTITY2: 0

MATERIAL3:
QUANTITY3: 0
WATER QUANTITY3: 0

SOURCE: FIXED FACILITY
SOURCE TYPE: SEWAGE TREATMENT PLANT
MEDIUM: WATER AND LAND
WATERWAY: CLEAR CREEK
CAUSE: FAILURE EQUIPMENT
CAUSE INFO: UNKNOWN

ACTION: NOTIFIED WQCD

RESPONSE COMMENTS: REFERRED TO WQCD

COMMENTS:

ADDITIONAL COMMENTS:

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

SPILLS

SEARCH ID: 29 **DIST/DIR:** 0.02 SE **ELEVATION:** **MAP ID:** 4

NAME: IDAHO SPRINGS WASTE WATER PLNT
ADDRESS: IDAHO SPRINGS WASTE WATER TREATMENT PLANT
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: CDPHE

REV:
ID1: CO99-188
ID2:
STATUS:
PHONE:

PRP INFORMATION

PRP NAME: IDAHO SPRINGS WASTE WATER PLNT
PRP CONTACT: ROBERT DEY
PRP ADDRESS:
IDAHO SPRINGS CO

SPILL INFORMATION

EVENT DATE: 5/29/1999
MATERIAL TYPE: SANITARY SEWER OVERFLOW

MATERIAL1: SEWAGE, RAW
QUANTITY1: 0 UNKNOWN
WATER QUANTITY1: 0 UNKNOWN

MATERIAL2:
QUANTITY2: 0
WATER QUANTITY2: 0

MATERIAL3:
QUANTITY3: 0
WATER QUANTITY3: 0

SOURCE: FIXED FACILITY
SOURCE TYPE: TREATMENT PLANT
MEDIUM: WATER
WATERWAY: CLEAR CREEK
CAUSE: FAILURE EQUIPMENT
CAUSE INFO: POWER FAILURE

ACTION: 5/29/99 2225 HRS-ROBERT DEY CALLED TO REPORT THAT POWER HAD BEEN RESTORED TO THE PLANT AS OF 2130 HRS and THE OVERFLOW WAS UNDER CONTROL.

RESPONSE COMMENTS:

COMMENTS: DUE TO A POWER OUTAGE, PUMPS AT THE PLANT FAILED TO OPERATE ALLOWING RAW SEWAGE TO OVERFLOW INTO CLEAR CREEK. CALLER REPORTED THAT PUBLIC WORKS HAD BEEN CALLED and A PUMP HAD BEEN ORDERED. AMT OF SEWAGE ENTERING CLEAR CREEK IS MINIMAL.

ADDITIONAL COMMENTS:

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

RCRANLR

SEARCH ID: 1 **DIST/DIR:** 0.02 SE **ELEVATION:** 7479 **MAP ID:** 4

NAME: IDAHO SPRINGS OLD WATER PLANT
ADDRESS: 10 COUNTY HWY 314
IDAHO SPRINGS CO 80452
CLEAR CREEK
CONTACT:
SOURCE: EPA

REV: 7/11/11
ID1: COD983778028
ID2:
STATUS: NLR
PHONE:

SITE INFORMATION

UNIVERSE INFORMATION:

SUBJECT TO CORRECTIVE ACTION (SUBJCA)

SUBJCA:	N - NO
SUBJCA TSD 3004:	N - NO
SUBJCA NON TSD:	N - NO
SIGNIFICANT NON-COMPLIANCE(SNC):	N - NO
BEGINNING OF THE YEAR SNC:	N - NO
PERMIT WORKLOAD:	-----
CLOSURE WORKLOAD:	-----
POST CLOSURE WORKLOAD:	-----
PERMITTING /CLOSURE/POST-CLOSURE PROGRESS:	-----
CORRECTIVE ACTION WORKLOAD:	N - NO
GENERATOR STATUS:	N

NAIC INFORMATION

22132 - SEWAGE TREATMENT FACILITIES

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

U051 - Creosote

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

UST

SEARCH ID: 32 **DIST/DIR:** 0.05 SE **ELEVATION:** **MAP ID:** 5

NAME: CAMAS
ADDRESS: 1039 EAST IDAHO SPRINGS ROAD
IDAHO SPRINGS CO 80452
CLEAR CREEK
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 16844
ID2:
STATUS:
PHONE:

OWNER INFORMATION

OWNER ID NUMBER: 19523
OWNER NAME:
OWNER ADDRESS: DIVISION OF OIL and PUBLIC SAFETY
DENVER CO 80202

TANK INFORMATION

TANK TYPE: LPG-AG
TANK CONTENTS: LPG
TANK CAPACITY: 2500
TANK ID: 36825
TANK TAG: 16844-1

LINK: http://costis.cdle.state.co.us/facility.asp?h_id=16844

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

LUST

SEARCH ID: 14 **DIST/DIR:** 0.06 NE **ELEVATION:** 7336 **MAP ID:** 6

NAME: HIDDEN VALLEY TEXACO
ADDRESS: I-70 and EXIT 243 HIDDEN VALLEY EXIT
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 3706
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 4/13/1990

LINK: http://costis.cdle.state.co.us/event.asp?h_id=3706

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

UST

SEARCH ID: 3 **DIST/DIR:** 0.06 NE **ELEVATION:** 7335 **MAP ID:** 6

NAME: CLEAR CREEK DISTRIBUTING
ADDRESS: I-70 EXIT 243 HIDDEN VALLEY
IDAHO SPRINGS CO 80452

CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 10633
ID2:
STATUS:
PHONE:

OWNER INFORMATION

OWNER ID NUMBER: 1066
OWNER NAME: CLEAR CREEK DIST;
OWNER ADDRESS: 4330 MARK DABLING BLVD
COLORADO SPRINGS CO 80907

TANK INFORMATION

TANK TYPE: UST
TANK CONTENTS: Gasoline
TANK CAPACITY: 2000
TANK ID: 28955
TANK TAG: 10633-1

TANK TYPE: UST
TANK CONTENTS: Gasoline
TANK CAPACITY: 4000
TANK ID: 28956
TANK TAG: 10633-2

LINK: http://costis.cdle.state.co.us/facility.asp?h_id=10633

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

UST

SEARCH ID: 4 **DIST/DIR:** 0.06 NE **ELEVATION:** 7335 **MAP ID:** 6

NAME: CLEAR CREEK DISTRIBUTING CO INC
ADDRESS: I-70 and EXIT 243, HIDDEN VALLEY
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV:
ID1: 13154
ID2:
STATUS:
PHONE:

OWNER INFORMATION
OWNER ID NUMBER: 16304
OWNER NAME: CLEAR CREEK DISTRIBUTING CO INC,
OWNER ADDRESS: PO BOX 3160
IDAHO SPRINGS CO 80452

TANK INFORMATION

UST

SEARCH ID: 5 **DIST/DIR:** 0.06 NE **ELEVATION:** 7336 **MAP ID:** 6

NAME: HIDDEN VALLEY TEXACO
ADDRESS: I-70 and EXIT 243 HIDDEN VALLEY EXIT
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 13961
ID2:
STATUS:
PHONE:

OWNER INFORMATION
OWNER ID NUMBER: 16737
OWNER NAME: HIDDEN VALLEY TEXACO;
OWNER ADDRESS: HIDDEN VALLEY EXIT
IDAHO SPRINGS CO 80452

TANK INFORMATION

LINK: http://costis.cdle.state.co.us/facility.asp?h_id=13961

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

UST

SEARCH ID: 6 **DIST/DIR:** 0.06 NE **ELEVATION:** 7332 **MAP ID:** 6

NAME: CDOT HIDDEN VALLEY
ADDRESS: I-70 MP 243.20
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 1786
ID2:
STATUS:
PHONE:

OWNER INFORMATION

OWNER ID NUMBER: 1050
OWNER NAME:
OWNER ADDRESS: 18500 E COLFAX AVE
AURORA CO 80011

TANK INFORMATION

TANK TYPE: AST
TANK CONTENTS: 4 - Diesel
TANK CAPACITY: 3000
TANK ID: 4998
TANK TAG: 1786-1

LINK: http://costis.cdle.state.co.us/facility.asp?h_id=1786

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

LUST

SEARCH ID: 13 **DIST/DIR:** 0.06 NE **ELEVATION:** 7335 **MAP ID:** 6

NAME: CLEAR CREEK DISTRIBUTING CO INC
ADDRESS: I-70 and EXIT 243 HIDDEN VALLEY
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 87
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 10/26/1993

LINK: http://costis.cdle.state.co.us/event.asp?h_id=87

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

RCRAGN

SEARCH ID: 15 **DIST/DIR:** 0.06 NE **ELEVATION:** **MAP ID:** 6

NAME: COLORADO DEPARTMENT OF TRANSPORTATION
ADDRESS: EXIT 243 HIDDEEN VALLEY I-70
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: EPA

REV: 7/11/11
ID1: COR000013615
ID2:
STATUS: VGN
PHONE:

SITE INFORMATION

UNIVERSE INFORMATION:

SUBJECT TO CORRECTIVE ACTION (SUBJCA)

SUBJCA:	N - NO
SUBJCA TSD 3004:	N - NO
SUBJCA NON TSD:	N - NO
SIGNIFICANT NON-COMPLIANCE(SNC):	N - NO
BEGINNING OF THE YEAR SNC:	N - NO
PERMIT WORKLOAD:	-----
CLOSURE WORKLOAD:	-----
POST CLOSURE WORKLOAD:	-----
PERMITTING /CLOSURE/POST-CLOSURE PROGRESS:	-----
CORRECTIVE ACTION WORKLOAD:	N - NO
GENERATOR STATUS:	CEG - CONDITIONALLY EXEMPT SMALL QUANTITY GENERATORS: GENERATES LESS THAN 100 KG/MONTH OF HAZARDOUS WASTE

NAIC INFORMATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

D008 - Lead

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

RCRANLR

SEARCH ID: 2 **DIST/DIR:** 0.21 SW **ELEVATION:** 7481 **MAP ID:** 7

NAME: USDA FOREST SERVICE
ADDRESS: COUNTY ROAD 314
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: EPA

REV: 7/11/11
ID1: COR000016709
ID2:
STATUS: NLR
PHONE:

SITE INFORMATION

UNIVERSE INFORMATION:

SUBJECT TO CORRECTIVE ACTION (SUBJCA)

SUBJCA:	N - NO
SUBJCA TSD 3004:	N - NO
SUBJCA NON TSD:	N - NO
SIGNIFICANT NON-COMPLIANCE(SNC):	N - NO
BEGINNING OF THE YEAR SNC:	N - NO
PERMIT WORKLOAD:	-----
CLOSURE WORKLOAD:	-----
POST CLOSURE WORKLOAD:	-----
PERMITTING /CLOSURE/POST-CLOSURE PROGRESS:	-----
CORRECTIVE ACTION WORKLOAD:	N - NO
GENERATOR STATUS:	N

NAIC INFORMATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

HAZARDOUS WASTE INFORMATION:

D007 - Chromium
F005 - The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before us
F003 - The following spent non-halogenated solvents: Xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/ blends contai
D035 - Methyl ethyl ketone
D018 - Benzene
D002 - Corrosive waste
D001 - Ignitable waste
D008 - Lead

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

LUST

SEARCH ID: 8 **DIST/DIR:** 0.38 SW **ELEVATION:** 7497 **MAP ID:** 8

NAME: CDOT IDAHO SPRINGS CSP
ADDRESS: 3000 COLORADO BLVD
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 4126
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 12/24/1992

LINK: http://costis.cdle.state.co.us/event.asp?h_id=4126

LUST

SEARCH ID: 7 **DIST/DIR:** 0.39 SW **ELEVATION:** 7499 **MAP ID:** 9

NAME: CDOT IDAHO SPRINGS
ADDRESS: 2931 COLORADO BLVD
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 3341
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 10/18/1991

LINK: http://costis.cdle.state.co.us/event.asp?h_id=3341

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

LUST

SEARCH ID: 10 **DIST/DIR:** 0.40 SW **ELEVATION:** 7501 **MAP ID:** 10

NAME: SPRING STATION LLC
ADDRESS: 2900 COLORADO BLVD
IDAHO SPRINGS CO 80452
CLEAR CREEK
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 9879
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 8/23/2005 7:38:51 AM

LINK: http://costis.cdle.state.co.us/event.asp?h_id=9879

LUST

SEARCH ID: 9 **DIST/DIR:** 0.48 SW **ELEVATION:** 7506 **MAP ID:** 11

NAME: SCORPION SHELL
ADDRESS: 2808 COLORADO BLVD
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 9509
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 5/26/2004 8:05:14 AM

LINK: http://costis.cdle.state.co.us/event.asp?h_id=9509

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

LUST

SEARCH ID: 11 **DIST/DIR:** 0.49 SW **ELEVATION:** 7507 **MAP ID:** 12

NAME: TALL COUNTRY IDAHO SPRINGS
ADDRESS: 2806 COLORADO BLVD
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 7377
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 4/1/1999

LINK: http://costis.cdle.state.co.us/event.asp?h_id=7377

LUST

SEARCH ID: 12 **DIST/DIR:** 0.49 SW **ELEVATION:** 7507 **MAP ID:** 12

NAME: TALL COUNTRY IDAHO SPRINGS
ADDRESS: 2806 COLORADO BLVD
IDAHO SPRINGS CO 80452
CLEAR CREEK
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 9276
ID2:
STATUS: CLOSED
PHONE:

LUST INFORMATION
STATUS: Closed
LOG DATE: 7/22/2003 9:24:49 AM

LINK: http://costis.cdle.state.co.us/event.asp?h_id=9276

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

RCRANLR

SEARCH ID: 16 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME: CONCORD MINERALS CORP-HIDDEN VALLEY
ADDRESS: SEC 32 T3S R72W-2 MI E OF SPGS
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: EPA

REV: 7/11/11
ID1: COD007805385
ID2:
STATUS: NLR
PHONE:

SITE INFORMATION

UNIVERSE INFORMATION:

SUBJECT TO CORRECTIVE ACTION (SUBJCA)

SUBJCA:	N - NO
SUBJCA TSD 3004:	N - NO
SUBJCA NON TSD:	N - NO
SIGNIFICANT NON-COMPLIANCE(SNC):	N - NO
BEGINNING OF THE YEAR SNC:	N - NO
PERMIT WORKLOAD:	-----
CLOSURE WORKLOAD:	-----
POST CLOSURE WORKLOAD:	-----
PERMITTING /CLOSURE/POST-CLOSURE PROGRESS:	-----
CORRECTIVE ACTION WORKLOAD:	N - NO
GENERATOR STATUS:	N

NAIC INFORMATION

RAATS INFORMATION:

DOCKET NUMBER:	RCRA VIII 82-7	**INITIAL DATE:**	9271982
DATE RECEIVED:	1271983	**AMOUNT:**	7500.00
ORDER TYPE:	3008(A)	**FACILITY:**	PRIVATELY HELD FACILITY
COMMENTS:			

ENFORCEMENT INFORMATION:

AGENCY:	E - EPA	**DATE:**	9/28/1982
TYPE:	210 - INITIAL 3008(A) COMPLIANCE ORDER		
AGENCY:	E - EPA	**DATE:**	2/4/1983
TYPE:	310 - FINAL 3008(A) COMPLIANCE ORDER		

VIOLATION INFORMATION:

VIOLATION NUMBER:	0001	**RESPONSIBLE:**	E - EPA
DETERMINED:	2/18/1982	**DETERMINED BY:**	E - EPA
CITATION:		**RESOLVED:**	2/4/1983
TYPE:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)		
VIOLATION NUMBER:	0002	**RESPONSIBLE:**	E - EPA
DETERMINED:	2/18/1982	**DETERMINED BY:**	E - EPA
CITATION:		**RESOLVED:**	2/4/1983

- Continued on next page -

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

RCRANLR

SEARCH ID: 16 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME: CONCORD MINERALS CORP-HIDDEN VALLEY
ADDRESS: SEC 32 T3S R72W-2 MI E OF SPGS
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: EPA

REV: 7/11/11
ID1: COD007805385
ID2:
STATUS: NLR
PHONE:

TYPE: GENERATOR-ALL REQUIREMENTS (OVERSIGHT)

VIOLATION NUMBER:	0003	**RESPONSIBLE:**	E - EPA
DETERMINED:	2/25/1982	**DETERMINED BY:**	E - EPA
CITATION:		**RESOLVED:**	5/13/2002
TYPE:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)		

VIOLATION NUMBER:	0004	**RESPONSIBLE:**	E - EPA
DETERMINED:	2/25/1982	**DETERMINED BY:**	E - EPA
CITATION:		**RESOLVED:**	5/13/2002
TYPE:	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)		

Environmental FirstSearch
Site Detail Report

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

UST

SEARCH ID: 33 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME: CLEAR CREEK VILLAGE CONOCO
ADDRESS: I-70 and HWY JCT
IDAHO SPRINGS CO 80452
CONTACT:
SOURCE: COSTIS

REV: 07/05/11
ID1: 2273
ID2:
STATUS:
PHONE:

OWNER INFORMATION

OWNER ID NUMBER: 17701
OWNER NAME: UNKNOWN;
OWNER ADDRESS: UNKNOWN
ZIPCODE UNKNOWN XX 99999

TANK INFORMATION

TANK TYPE: UST
TANK CONTENTS: Gasoline
TANK CAPACITY: 3000
TANK ID: 6367
TANK TAG: 2273-1

TANK TYPE: UST
TANK CONTENTS: Gasoline
TANK CAPACITY: 2000
TANK ID: 6368
TANK TAG: 2273-2

TANK TYPE: UST
TANK CONTENTS: Gasoline
TANK CAPACITY: 2000
TANK ID: 6369
TANK TAG: 2273-3

TANK TYPE: UST
TANK CONTENTS: 4 - Diesel
TANK CAPACITY: 2000
TANK ID: 6370
TANK TAG: 2273-4

LINK: http://costis.cdle.state.co.us/facility.asp?h_id=2273

Target Property: IDAHO SPRINGS CO 80452 **JOB:** 11175002

SWL

SEARCH ID: 31 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME: HUKILL GULCH MILL WASTE FACILITY
ADDRESS: SEE LOCATION BOX
IDAHO SPRINGS CO 80452
CLEAR CREEK
CONTACT:
SOURCE: CDPHE

REV: 12/01/08
ID1: 010-MLL-001
ID2:
STATUS:
PHONE:

STATUS : Per CDPHE: Currently Open

Type- MLL
Opened- 6/21/2007
Closed- Currently Open

OWN-Venture Resources, Inc 7202018887, Paul E Dani

SWL

SEARCH ID: 30 **DIST/DIR:** NON GC **ELEVATION:** **MAP ID:**

NAME: CONCORD MINERALS HIDDEN V.MIL
ADDRESS: ADDRESS NOT REPORTED
IDAHO SPRINGS CO
CLEAR CREEK
CONTACT:
SOURCE: CDPHE/COUNTY

REV: 12/01/08
ID1: 12-0291
ID2: 00070-0001121
STATUS: HISTORIC
PHONE:

COLORADO HISTORIC LANDFILLS

STATUS : CO Old Waste Sites

7A 1POND ,D CO-0036951 10F TAILINGS. HAZARD TYPE: OTHER. IMPACT: SW.; TRS- T03 R72 S32; Acres- <1
Type- IMPOUNDMENT
Fill- LIQUIDS.
Oper/Ownr/Othr- / / TOM COCHRAN IDAHO SP, ,

Environmental FirstSearch Descriptions

NPL: ***EPA*** NATIONAL PRIORITY LIST - The National Priorities List is a list of the worst hazardous waste sites that have been identified by Superfund. Sites are only put on the list after they have been scored using the Hazard Ranking System (HRS), and have been subjected to public comment. Any site on the NPL is eligible for cleanup using Superfund Trust money.
A Superfund site is any land in the United States that has been contaminated by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.
FINAL - Currently on the Final NPL
PROPOSED - Proposed for NPL

NPL DELISTED: ***EPA*** NATIONAL PRIORITY LIST Subset - Database of delisted NPL sites. 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.
DELISTED - Deleted from the Final NPL

CERCLIS: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM (CERCLIS)- CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL.
PART OF NPL- Site is part of NPL site
DELETED - Deleted from the Final NPL
FINAL - Currently on the Final NPL
NOT PROPOSED - Not on the NPL
NOT VALID - Not Valid Site or Incident
PROPOSED - Proposed for NPL
REMOVED - Removed from Proposed NPL
SCAN PLAN - Pre-proposal Site
WITHDRAWN - Withdrawn

NFRAP: ***EPA*** COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY INFORMATION SYSTEM ARCHIVED SITES - database of Archive designated CERCLA sites that, to the best of EPA's knowledge, assessment has been completed and has determined no further steps will be taken to list this site on the National Priorities List (NPL). This 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 a potential NPL site.
NFRAP – No Further Remedial Action Plan
P - Site is part of NPL site
D - Deleted from the Final NPL
F - Currently on the Final NPL
N - Not on the NPL
O - Not Valid Site or Incident
P - Proposed for NPL
R - Removed from Proposed NPL
S - Pre-proposal Site
W – Withdrawn

RCRA COR ACT: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.
RCRAInfo facilities that have reported violations and subject to corrective actions.

RCRA TSD: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM TREATMENT, STORAGE, and DISPOSAL FACILITIES. - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.
Facilities that treat, store, dispose, or incinerate hazardous waste.

RCRA GEN: ***EPA/MA DEP/CT DEP*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM GENERATORS - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.
Facilities that generate or transport hazardous waste or meet other RCRA requirements.
LGN - Large Quantity Generators
SGN - Small Quantity Generators
VGN – Conditionally Exempt Generator.
Included are RAATS (RCRA Administrative Action Tracking System) and CMEL (Compliance Monitoring & Enforcement List) facilities.
CONNECTICUT HAZARDOUS WASTE MANIFEST – Database of all shipments of hazardous waste within, into or from Connecticut. The data includes date of shipment, transporter and TSD info, and material shipped and quantity. This data is appended to the details of existing generator records.
MASSACHUSETTES HAZARDOUS WASTE GENERATOR – database of generators that are regulated under the MA DEP.
VQN-MA = generates less than 220 pounds or 27 gallons per month of hazardous waste or waste oil.
SQN-MA = generates 220 to 2,200 pounds or 27 to 270 gallons per month of waste oil.
LQG-MA = generates greater than 2,200 lbs of hazardous waste or waste oil per month.

RCRA NLR: ***EPA*** RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM SITES - Database of hazardous waste information contained in the Resource Conservation and Recovery Act Information (RCRAInfo), a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national EPA offices. This regulation is governed by the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984.
Facilities not currently classified by the EPA but are still included in the RCRAInfo database. Reasons for non classification:
Failure to report in a timely matter.
No longer in business.
No longer in business at the listed address.
No longer generating hazardous waste materials in quantities which require reporting.

ERNS: ***EPA/NRC*** EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS) - Database of incidents reported to the National Response Center. These incidents include chemical spills, accidents involving chemicals (such as fires or explosions), oil spills, transportation accidents that involve oil or chemicals, releases of radioactive materials, sightings of oil sheens on bodies of water, terrorist incidents involving chemicals, incidents where illegally dumped chemicals have been found, and drills intended to prepare responders to handle these kinds of incidents. Data since January 2001 has been received from the National Response System database as the EPA no longer maintains this data.

Tribal Lands: ***DOI/BIA*** INDIAN LANDS OF THE UNITED STATES - Database of areas with boundaries established by treaty, statute, and (or) executive or court order, recognized by the Federal Government as territory in which American Indian tribes have primary governmental authority. The Indian Lands of the United States map layer shows areas of 640 acres or more, administered by the Bureau of Indian Affairs. Included are

Federally-administered lands within a reservation which may or may not be considered part of the reservation.
BUREAU OF INDIAN AFFIARS CONTACT - Regional contact information for the Bureau of Indian Affairs offices.

State/Tribal Sites: ***CDPHE*** CO SPL - Colorado does not have an official State Priority List (SPL). However, there are a number of sites that the state seems to place in this sort of category. Some are officially a Natural Resource Damages Site (NRDS) or Private Cleanup Site (Non-Superfund), but they're listed on the state's web page of Superfund sites (www.cdphe.state.co.us/hm/sf_sites.htm). Others are UMTRA (Uranium Mill Tailing Remedial Action) mill tailing cleanup sites (www.cdphe.state.co.us/hm/umsites.htm). Thousands of UMTRA "vicinity properties" have also been identified where mill tailings were used as sand in concrete, roadbase, trenches, bricks, etc. Such properties have been remediated in Durango, Grand Junction, Fruita, Palisade, Gunnison, Maybell, Naturita and Rifle, but some unidentified tailings may still remain in and around these communities. CDPHE's list of vicinity properties is not publicly available and was not searched for this report. Property-specific information is available through the CDPHE Grand Junction office. See www.cdphe.state.co.us/hm/rptailng.htm.

State Spills 90: ***CDPHE*** ENVIRONMENTAL RELEASE AND INCIDENT DATABASE - This is a database of reported spills in Colorado.

State/Tribal SWL: ***CDPHE*** DATABASE OF ACTIVE SOLID WASTE MANAGEMENT FACILITIES - Listing of Active solid waste facilities and transfer stations.
DATABASE OF ACTIVE SOLID WASTE MANAGEMENT FACILITIES - Listing of Active solid waste facilities and transfer stations.
CO Historic Landfills - This proprietary database represents a compilation of eleven local, regional and state agency sources. The agencies generated these lists on a one-time basis and do not expect to update them. A more detailed description of the applicable source is included with any findings reported from this database. The eleven sources are:
1. Adams County CO Old Landfills
2. Arapahoe County CO Old Landfills
3. Douglas County CO Old Landfills
4. Weld County CO Old Landfills
5. Boulder County CO Old Landfills
6. Jefferson County CO Old Landfills
7. Denver CO Methane Study
8. CO Methane Study
9. DRCOG Methane Study
10. Denver CO Old Fil Sites
11. CO Old Waste Sites

State/Tribal LUST: ***COSTIS*** DATABASE OF LEAKING UNDERGROUND STORAGE TANKS - Colorado Department of Labor and Employment’s Colorado Storage Tank Information System (COSTIS) provides this data.
LUST Trust Tanks - This is an old list of locations where tank leaks were suspected and LUST (Leaking Underground Storage Tank) Trust funds were used in an effort to identify the source. Often, the facility responsible for the leak was found nearby, and that facility was then entered into the LUST database. In other cases, however, the source was never identified, and nothing was ever entered into the LUST database. When responsibility for the tank program was transferred from CDPHE (Colorado Department of Public Health & Environment) to CDLE (Colorado Department of Labor & Employment) in the '90s, this old LUST Trust list was never entered into the new COSTIS database (Colorado Storage Tank Information System). Few people at CDLE are aware of this old list, and any files associated with the listings have apparently been discarded or misplaced.

State/Tribal UST/AST: ***COSTIS*** DATABASE OF UNDERGROUND STORAGE TANKS - Colorado Department of Labor and Employment’s Colorado Storage Tank Information System (COSTIS) provides this data.

State/Tribal EC: ***CDPHE*** ENVIRONMENTAL COVENANTS - 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.

State/Tribal VCP: ***CDPHE*** THE VOLUNTARY CLEANUP AND REDEVELOPMENT PROGRAM PROGRAM - The Voluntary Cleanup and Redevelopment program was created in 1994. The objective of the program is to facilitate the redevelopment and transfer of contaminated properties. Cleanup decisions are based on existing standards and the proposed use of the property. The actual cleanup and verification is the owner's responsibility.

RADON: ***NTIS*** NATIONAL RADON DATABASE - EPA radon data from 1990-1991 national radon project collected for a variety of zip codes across the United States.

Meth Labs: ***US DOJ*** NATIONAL CLANDESTINE LABORATORY REGISTER - Database of 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 U.S. Department of Justice ("the Department"), and the Department has not verified the entry and does not guarantee its accuracy. All sites that are included in this data set will have an id that starts with NCLR.

Environmental FirstSearch Database Sources

NPL: ***EPA*** Environmental Protection Agency

Updated quarterly

NPL DELISTED: ***EPA*** Environmental Protection Agency

Updated quarterly

CERCLIS: ***EPA*** Environmental Protection Agency

Updated quarterly

NFRAP: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA COR ACT: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA TSD: ***EPA*** Environmental Protection Agency.

Updated quarterly

RCRA GEN: ***EPA/MA DEP/CT DEP*** Environmental Protection Agency, Massachusetts Department of Environmental Protection, Connecticut Department of Environmental Protection

Updated quarterly

RCRA NLR: ***EPA*** Environmental Protection Agency

Updated quarterly

ERNS: ***EPA/NRC*** Environmental Protection Agency

Updated annually

Tribal Lands: ***DOI/BIA*** United States Department of the Interior

Updated annually

State/Tribal Sites: ***CDPHE*** The Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division

Updated annually

State Spills 90: ***CDPHE*** CDPHE Hazardous Materials and Waste Management Division

Updated annually

State/Tribal SWL: ***CDPHE*** The Colorado Department of Public Health and Environment Hazardous Materials and Waste Management DivisionPublic Safety

Updated annually

State/Tribal LUST: ***COSTIS*** The Colorado Department of Labor and Employment/Division of Oil and Public Safety

Updated semi-annually

State/Tribal UST/AST: ***COSTIS*** The Colorado Department of Labor and Employment/Division of Oil and Public Safety

Updated semi-annually

State/Tribal EC: ***CDPHE*** rado Department of Public Health and Environment Hazardous Materials and Waste Management Division

Updated annually

State/Tribal VCP: ***CDPHE*** The Colorado Department of Public Health and Environment Hazardous Materials and Waste Management Division

Updated annually

RADON: ***NTIS*** Environmental Protection Agency, National Technical Information Services

Updated periodically

Meth Labs: ***US DOJ*** U.S. Department of Justice

Updated when available

Environmental FirstSearch
Street Name Report for Streets within .5 Mile(s) of Target Property

Target Property: IDAHO SPRINGS CO 80452

JOB: 11175002

Street Name	Dist/Dir	Street Name	Dist/Dir
Central City Pky	0.02 NW		
Clear Creek Rd	0.50 SE		
Colorado Blvd	0.27 SW		
County Highway 314	0.00 --		
Elk Valley Dr	0.46 SE		
Gilson Ave	0.43 SW		
I-70	0.00 --		
Miner Cir	0.50 SW		
Riverside Dr	0.07 NW		
United States Highwa	0.00 --		
United States Highwa	0.00 --		
Upper Elk Valley Dr	0.37 SE		

Pinyon Environmental inc

9100 W Jewell Ave, Suite 200
Lakewood, CO 80232

303.980.5200 1.888.641.7337
303.980.0089 fax

www.pinyon-env.com

Pinyon Phase I Report User Information

To: **Brian Partington** **From:** **Marc Morton**
At: Pinyon Environmental **At: CDOT Region 1**
Fax: 303-980-0089 **Pages:**
Phone: 303-980-5200 **Date: April 6, 2012**
Site Name: **CDOT Project No. C 0703-54**
Address: **Interstate 70 in Clear Creek County, Colorado between East Idaho Springs and Base of Floyd Hill, and I-70 Frontage Road (CR-314) within that segment of I-70.**

The person who will use, or rely on, the Phase I must provide the information outlined below. Please fill out this form to the best of your ability. For any questions where the answer is Ayes,@ please provide additional information on a separate sheet. Without the answers to these questions, Pinyon=s Phase I report will have to note that the Phase I report is incomplete, and your Landowner Liability Protections could be at risk. If you have any questions, please contact Pinyon for assistance.

1. What is the purpose of the Phase I ESA? Is it for a loan? What is the planned use?

The purpose of the Phase I ESA is to document past land use and identify RECs and other environmental concerns that may affect planed project construction, or worker health and safety during planned construction

2. *Environmental Cleanup Liens.* ASTM requires the User to check for environmental liens that may be filed or recorded against the site, whether under federal, tribal, state or local law. In most states, a review of the Aexceptions to coverage@ in the title insurance commitment or policy may be sufficient. Failure to check for these liens could put your Landowner Liability Protection at risk.

   A. Have you obtained a title insurance commitment?
   B. Have you checked for environmental cleanup liens?
   C. Are you aware of any such liens against the subject property?

Since CDOT's need for ROW acquisition or easement has not yet been fully determined, CDOT has not obtained title insurance commitment, or checked for environmental cleanup liens that I am aware of. You may want to check with ROW staff on this.

3. *Activity and Use Limitations (AULs).* AULs include engineering controls, land use restrictions or institutional controls that may be in place at the site, or filed or recorded with a

federal, tribal, state or local agency.

A. Do you know of any possible AULs involving the subject site? **No**

CDOT is not aware of any AULs associated with any of the properties within the project limits.

4. *Specialized Knowledge.* This question relates to personal knowledge or experience related to the subject property or nearby properties. For example, if you are involved in the same line of business as the current or former occupants of the property or an adjacent property, you would probably know of any chemicals, oil, degreasers, gasoline or other hazardous substances commonly used in that type of business.

   A. Do you have any specialized knowledge that might indicate the past or present use of these types of materials on the property, or an adjacent property? **Yes**

It has been reported to CDOT (by Ed Rapp of Clear Creek County) that mining waste and features (subsurface voids, for example) may be present in the subsurface underlying the Frontage Road and I-70 within the project limits. In addition, the subject property is within the 400 square mile study area of the Clear Creek Central City Superfund site.

5. Fair Market Value (FMV). A purchase price that is significantly below the FMV may indicate an environmental problem. Please note that this question does not require an appraisal of the property, but is based on the experience of the User.

   A. Is the purchase price significantly below the FMV?
   B. If yes, could the site be contaminated?

Since CDOT's need for ROW acquisition or easement has not yet been determined, CDOT has not evaluated any property for FMV.

6. *Obvious Indicators.* Do you have any knowledge of past or present spills, stains, releases, cleanups, or other indicators of contamination at the site?

I am not aware of any of these items along the I-70 within the project limits, except that the project is within the Study Area of The Clear Creek Central City Superfund site, and various spills have been reported in the study area. To my knowledge, none required cleanup or remediation beyond initial response actions...

7. Common Knowledge. Please provide the following information. (Note page number for additional information, if necessary: _____.)

A. Describe the past uses of the property: ***The area formerly operated as old US-Highway 40 within a portion or all of the study area boundary. A game check station also operated adjacent to or on the Frontage Road during its past.***

B. Describe any specific chemicals that may have been present at the property***: I am not aware of specific chemicals that may have been used in the project limits, although various spills have been reported on I-70 in the past. A gas station is reported to have formerly operated at the location of the Kermitts Restaurant at the eastern project limits***

C. Describe any other information that may help Pinyon identify possible contamination (i.e, contacts for previous owners or occupants, etc.):

A list of prior-generated environmental reports have previously been provided to Pinyon and should be evaluated. See list provided in Frontage Road User Questionnaire, and results of i-70 Frontage Road Phase I ESA also completed by Pinyon.

Completed by:

Marc K. Morton — April 6, 2012

Name — Date

Signature

ORIGINS LABORATORY, INC

December 27, 2011

Pinyon

Brian Partington

9100 West Jewell Avenue, Suite 200

Lakewood CO 80232

Project Name - Twin Tunnels

Project Number - 1/11-750-02.8000

Attached are you analytical results for Twin Tunnels received by Origins Laboratory, Inc. December 12, 2011. This project is associated with Origins project number X112049-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods specified in SW-846. The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YA-1,0-25'	X112049-01	Soil	December 5, 2011 22:00	12/12/2011 16:50
YA-1,0-25' Duplicate	X112049-02	Soil	December 5, 2011 22:00	12/12/2011 16:50
YA-6,0-10'	X112049-03	Soil	December 1, 2011 10:45	12/12/2011 16:50
YA-6,0-10' Duplicate	X112049-04	Soil	December 1, 2011 10:45	12/12/2011 16:50
YA-6,10-20'	X112049-05	Soil	December 1, 2011 11:00	12/12/2011 16:50
YA-2, 0-10'	X112049-06	Soil	December 6, 2011 0:30	12/12/2011 16:50
YA-3, 0-5'	X112049-07	Soil	December 6, 2011 21:00	12/12/2011 16:50
YA-3, 5-20'	X112049-08	Soil	December 6, 2011 21:30	12/12/2011 16:50
YA-3, 5-20' Duplicate	X112049-09	Soil	December 6, 2011 21:30	12/12/2011 16:50
YA-4, 0-20'	X112049-10	Soil	December 7, 2011 0:30	12/12/2011 16:50
YA-8, 0-15'	X112049-11	Soil	December 7, 2011 3:15	12/12/2011 16:50
YA-10, 0-10'	X112049-12	Soil	December 7, 2011 21:00	12/12/2011 16:50
YA-10, 0-10' Duplicate	X112049-13	Soil	December 7, 2011 21:00	12/12/2011 16:50
YA-5, 0-15'	X112049-14	Soil	December 7, 2011 23:55	12/12/2011 16:50

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
YA-9, 0-10'	X112049-15	Soil	December 9, 2011 21:00	12/12/2011 16:50
YA-9, 0-10' Duplicate	X112049-16	Soil	December 9, 2011 21:00	12/12/2011 16:50
YA-7, 0-15'	X112049-17	Soil	December 9, 2011 12:30	12/12/2011 16:50
YA-7, 0-15' Duplicate	X112049-18	Soil	December 9, 2011 12:30	12/12/2011 16:50

Origins Laboratory, Inc.

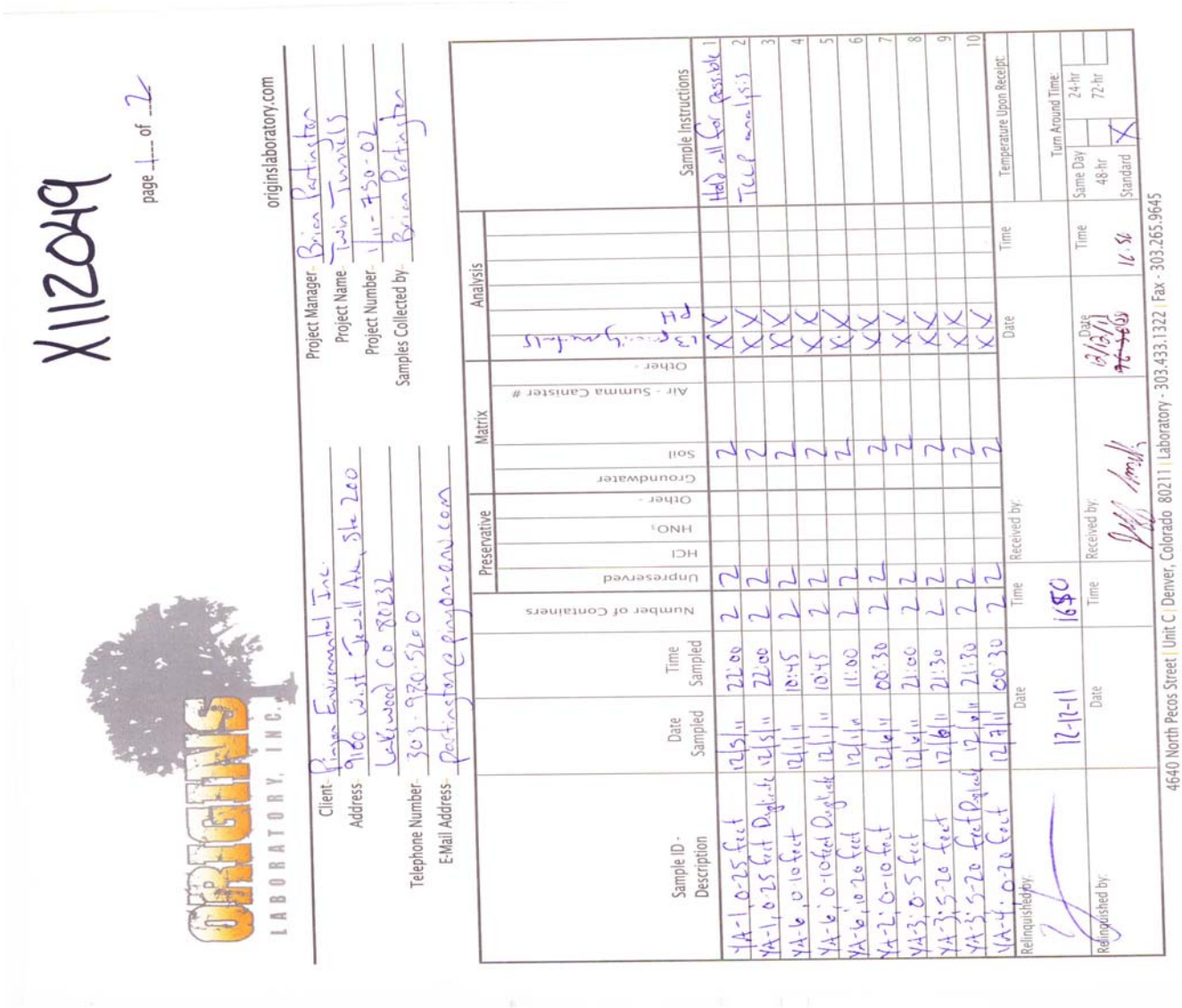
Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels



Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Origins Laboratory

F-012207-01
Effective Date: 01/22/07

Sample Receipt Checklist

Origins Work Order: X112049

Client: Pinyon Client Project ID: Twin Tunnels

Shipped Via: HD (UPS, FedEx, Hand Delivered, Pick-up, etc.) Airbill #: NA

Matrix (Check all that apply): ✓ Soil/Solid _____ Water _____ Other: _____ (Describe)

Cooler ID					
Temp (°C)	3.6				

Thermometer ID: _____

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C[1]? NOTE: If samples are delivered within 5 hours of sampling, this requirement is waived provided that there is evidence that cooling has begun.	✓			On ICE
Were all samples received intact[1]?	✓			
Was adequate sample volume provided[1]?	✓			
If custody seals are present, are they intact[1]?			✓	
Are short holding time analytes or samples with HTs due within 48 hours present[1]?		✓ ④		
Is a chain-of-custody (COC) present and filled out completely[1]?	✓			
Does the COC agree with the number and type of sample bottles received[1]?	✓			
Do the sample IDs on the bottle labels match the COC[1]?	✓			
Is the COC properly relinquished by the client with date and time recorded[1]?	✓			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation (excluding cooling)[1]? Note the type of preservation in the Comments column (e.g., HCl).			✓	
Additional Comments (if any):				

④ pH in soil 7 day hold, recieved after hold expired. Contacted B. Partington 12.12.11 - Send to rush pH or hold

[1]**If NO, then contact the client before proceeding with analysis and note in the case narrative.**

Jeff Smith
Custodian Printed Name

Jeff Smith
Signature or Initials of Custodian

12/12/11 16:53
Date/Time

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-1.0-25'
12/5/2011 10:00:00PM

XENCO
X112049-01 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.00863	0.00146	0.0104	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	3.83	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.17	10.4	mg/kg	5	877374	12/16/2011	12/19/2011	J
Arsenic	ND	3.93	5.2	"	"	"	"	"	
Beryllium	ND	0.197	2.08	"	"	"	"	"	
Cadmium	ND	0.212	2.6	"	"	"	"	"	
Chromium	14	1.84	5.2	"	"	"	"	"	
Copper	72.6	1.5	10.4	"	"	"	"	"	J
Lead	20.2	4.79	5.2	"	"	"	"	"	
Nickel	11.5	0.463	5.2	"	"	"	"	"	
Selenium	ND	2.81	15.6	"	"	"	"	"	
Silver	62.8	1	10.4	"	"	"	"	"	J
Thallium	ND	3.23	10.4	"	"	"	"	"	
Zinc	104	0.786	15.6	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.69			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-1.0-25' Duplicate
12/5/2011 10:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-02 (Soil)									
Mercury by SW-846 7471A									
Mercury	0.00911	0.00147	0.0105	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	4.55	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.1	10.1	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.81	5.04	"	"	"	"	"	
Beryllium	ND	0.191	2.01	"	"	"	"	"	
Cadmium	0.407	0.206	2.52	"	"	"	"	"	V, I
Chromium	18.6	1.79	5.04	"	"	"	"	"	
Copper	43.9	1.45	10.1	"	"	"	"	"	
Lead	19	4.64	5.04	"	"	"	"	"	
Nickel	14.5	0.448	5.04	"	"	"	"	"	
Selenium	ND	2.72	15.1	"	"	"	"	"	
Silver	90.5	0.973	10.1	"	"	"	"	"	
Thallium	ND	3.13	10.1	"	"	"	"	"	
Zinc	116	0.761	15.1	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.72			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-6.0-10'
12/1/2011 10:45:00AM

XENCO
X112049-03 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.0171	0.00141	0.0101	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	4.46	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.14	10.3	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.88	5.13	"	"	"	"	"	
Beryllium	ND	0.194	2.05	"	"	"	"	"	
Cadmium	0.486	0.209	2.57	"	"	"	"	"	V, I
Chromium	11.3	1.82	5.13	"	"	"	"	"	
Copper	23.8	1.48	10.3	"	"	"	"	"	
Lead	24.1	4.72	5.13	"	"	"	"	"	
Nickel	8.46	0.457	5.13	"	"	"	"	"	
Selenium	ND	2.77	15.4	"	"	"	"	"	
Silver	54.6	0.991	10.3	"	"	"	"	"	
Thallium	ND	3.19	10.3	"	"	"	"	"	
Zinc	82.7	0.775	15.4	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.54			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-6.0-10' Duplicate
12/1/2011 10:45:00AM

XENCO
X112049-04 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.0129	0.00143	0.0102	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	3.94	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.17	10.4	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.94	5.21	"	"	"	"	"	
Beryllium	ND	0.197	2.08	"	"	"	"	"	
Cadmium	0.33	0.212	2.6	"	"	"	"	"	V, I
Chromium	9.97	1.85	5.21	"	"	"	"	"	
Copper	23.3	1.5	10.4	"	"	"	"	"	
Lead	19.4	4.79	5.21	"	"	"	"	"	
Nickel	7.35	0.463	5.21	"	"	"	"	"	
Selenium	ND	2.81	15.6	"	"	"	"	"	
Silver	61.9	1.01	10.4	"	"	"	"	"	
Thallium	ND	3.23	10.4	"	"	"	"	"	
Zinc	82.4	0.786	15.6	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.47			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-6.10-20'
12/1/2011 11:00:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-05 (Soil)									
Mercury by SW-846 7471A									
Mercury	0.0131	0.00138	0.00985	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	4.27	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.06	9.85	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.73	4.93	"	"	"	"	"	
Beryllium	ND	0.187	1.97	"	"	"	"	"	
Cadmium	ND	0.201	2.46	"	"	"	"	"	
Chromium	13.8	1.75	4.93	"	"	"	"	"	
Copper	27.3	1.42	9.85	"	"	"	"	"	
Lead	25.1	4.54	4.93	"	"	"	"	"	
Nickel	9.54	0.439	4.93	"	"	"	"	"	
Selenium	ND	2.66	14.8	"	"	"	"	"	
Silver	48.7	0.951	9.85	"	"	"	"	"	
Thallium	ND	3.06	9.85	"	"	"	"	"	
Zinc	82	0.745	14.8	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.31			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-2. 0-10'
12/6/2011 12:30:00AM

XENCO
X112049-06 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.0143	0.00133	0.00949	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	2.45	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.1	10.1	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.8	5.03	"	"	"	"	"	
Beryllium	ND	0.19	2.01	"	"	"	"	"	
Cadmium	0.47	0.205	2.51	"	"	"	"	"	V, I
Chromium	9.77	1.78	5.03	"	"	"	"	"	
Copper	18.4	1.45	10.1	"	"	"	"	"	
Lead	13.4	4.63	5.03	"	"	"	"	"	
Nickel	10	0.447	5.03	"	"	"	"	"	
Selenium	ND	2.71	15.1	"	"	"	"	"	
Silver	33.6	0.97	10.1	"	"	"	"	"	
Thallium	ND	3.12	10.1	"	"	"	"	"	
Zinc	73.1	0.759	15.1	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.29			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-3. 0-5'
12/6/2011 9:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-07 (Soil)									
Mercury by SW-846 7471A									
Mercury	0.00391	0.00137	0.00978	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	1.65	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.04	9.78	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	5.36	3.7	4.89	"	"	"	"	"	
Beryllium	ND	0.185	1.96	"	"	"	"	"	
Cadmium	0.237	0.199	2.44	"	"	"	"	"	V, I
Chromium	15.4	1.73	4.89	"	"	"	"	"	
Copper	28.5	1.41	9.78	"	"	"	"	"	
Lead	16.2	4.5	4.89	"	"	"	"	"	
Nickel	10.1	0.435	4.89	"	"	"	"	"	
Selenium	ND	2.64	14.7	"	"	"	"	"	
Silver	62.9	0.944	9.78	"	"	"	"	"	
Thallium	ND	3.04	9.78	"	"	"	"	"	
Zinc	93.4	0.739	14.7	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.88			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-3. 5-20'
12/6/2011 9:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-08 (Soil)									
Mercury by SW-846 7471A									
Mercury	0.282	0.00146	0.0104	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	5.92	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.09	10	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	4.11	3.79	5.01	"	"	"	"	"	I
Beryllium	ND	0.19	2.01	"	"	"	"	"	
Cadmium	1.42	0.205	2.51	"	"	"	"	"	V, I
Chromium	7.92	1.78	5.01	"	"	"	"	"	
Copper	46.3	1.45	10	"	"	"	"	"	
Lead	76.8	4.62	5.01	"	"	"	"	"	
Nickel	6.48	0.446	5.01	"	"	"	"	"	
Selenium	ND	2.71	15	"	"	"	"	"	
Silver	50.6	0.968	10	"	"	"	"	"	
Thallium	ND	3.11	10	"	"	"	"	"	
Zinc	123	0.758	15	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	7.6			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-3, 5-20' Duplicate
12/6/2011 9:30:00PM

XENCO
X112049-09 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.245	0.00142	0.0102	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	5.32	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.08	9.96	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.77	4.98	"	"	"	"	"	
Beryllium	ND	0.189	1.99	"	"	"	"	"	
Cadmium	0.343	0.203	2.49	"	"	"	"	"	V, I
Chromium	8.48	1.77	4.98	"	"	"	"	"	
Copper	77.7	1.44	9.96	"	"	"	"	"	
Lead	78.4	4.59	4.98	"	"	"	"	"	
Nickel	5.57	0.443	4.98	"	"	"	"	"	
Selenium	ND	2.69	14.9	"	"	"	"	"	
Silver	43.7	0.962	9.96	"	"	"	"	"	
Thallium	ND	3.09	9.96	"	"	"	"	"	
Zinc	123	0.753	14.9	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	7.31			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-4. 0-20'
12/7/2011 12:30:00AM

XENCO
X112049-10 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.00816	0.00136	0.00972	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	2.9	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.15	10.3	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.89	5.15	"	"	"	"	"	
Beryllium	ND	0.195	2.06	"	"	"	"	"	
Cadmium	6.62	0.21	2.57	"	"	"	"	"	
Chromium	18.7	1.83	5.15	"	"	"	"	"	
Copper	119	1.48	10.3	"	"	"	"	"	
Lead	29.4	4.74	5.15	"	"	"	"	"	
Nickel	17.4	0.458	5.15	"	"	"	"	"	
Selenium	ND	2.78	15.4	"	"	"	"	"	
Silver	85.4	0.994	10.3	"	"	"	"	"	
Thallium	ND	3.2	10.3	"	"	"	"	"	
Zinc	1600	0.778	15.4	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	4.8			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-8. 0-15'
12/7/2011 3:15:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-11 (Soil)									
Mercury by SW-846 7471A									
Mercury	ND	0.00141	0.0101	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	2.85	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.07	9.9	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	7.2	3.74	4.95	"	"	"	"	"	
Beryllium	ND	0.188	1.98	"	"	"	"	"	
Cadmium	ND	0.202	2.47	"	"	"	"	"	
Chromium	62.8	1.75	4.95	"	"	"	"	"	
Copper	20.9	1.43	9.9	"	"	"	"	"	
Lead	5.72	4.56	4.95	"	"	"	"	"	
Nickel	39.6	0.44	4.95	"	"	"	"	"	
Selenium	ND	2.67	14.8	"	"	"	"	"	
Silver	209	0.956	9.9	"	"	"	"	"	
Thallium	ND	3.07	9.9	"	"	"	"	"	
Zinc	91	0.748	14.8	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.28			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-10. 0-10'
12/7/2011 9:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-12 (Soil)									
Mercury by SW-846 7471A									
Mercury	0.0264	0.00147	0.0105	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	4.46	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.06	9.87	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	3.91	3.73	4.94	"	"	"	"	"	I
Beryllium	ND	0.187	1.97	"	"	"	"	"	
Cadmium	ND	0.201	2.47	"	"	"	"	"	
Chromium	21.2	1.75	4.94	"	"	"	"	"	
Copper	77	1.42	9.87	"	"	"	"	"	
Lead	23.6	4.55	4.94	"	"	"	"	"	
Nickel	14.6	0.439	4.94	"	"	"	"	"	
Selenium	ND	2.67	14.8	"	"	"	"	"	
Silver	120	0.953	9.87	"	"	"	"	"	
Thallium	ND	3.07	9.87	"	"	"	"	"	
Zinc	105	0.746	14.8	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.74			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-10, 0-10' Duplicate
12/7/2011 9:00:00PM

XENCO
X112049-13 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.0321	0.00145	0.0103	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	3.17	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.16	10.3	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.91	5.16	"	"	"	"	"	
Beryllium	ND	0.196	2.07	"	"	"	"	"	
Cadmium	0.35	0.211	2.58	"	"	"	"	"	V, I
Chromium	18	1.83	5.16	"	"	"	"	"	
Copper	41.9	1.49	10.3	"	"	"	"	"	
Lead	26.9	4.75	5.16	"	"	"	"	"	
Nickel	14.3	0.46	5.16	"	"	"	"	"	
Selenium	ND	2.79	15.5	"	"	"	"	"	
Silver	114	0.997	10.3	"	"	"	"	"	
Thallium	ND	3.21	10.3	"	"	"	"	"	
Zinc	108	0.78	15.5	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.68			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-5. 0-15'
12/7/2011 11:55:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-14 (Soil)									
Mercury by SW-846 7471A									
Mercury	0.00971	0.00145	0.0103	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	3.22	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.03	9.75	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	6.13	3.69	4.87	"	"	"	"	"	
Beryllium	ND	0.185	1.95	"	"	"	"	"	
Cadmium	ND	0.199	2.44	"	"	"	"	"	
Chromium	68.6	1.73	4.87	"	"	"	"	"	
Copper	21.6	1.41	9.75	"	"	"	"	"	
Lead	16.7	4.49	4.87	"	"	"	"	"	
Nickel	43.7	0.434	4.87	"	"	"	"	"	
Selenium	ND	2.63	14.6	"	"	"	"	"	
Silver	199	0.941	9.75	"	"	"	"	"	
Thallium	ND	3.03	9.75	"	"	"	"	"	
Zinc	102	0.736	14.6	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	9.06			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-9. 0-10'
12/9/2011 9:00:00PM

XENCO
X112049-15 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.00199	0.0014	0.00997	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	1.64	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.08	9.97	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.77	4.98	"	"	"	"	"	
Beryllium	ND	0.189	1.99	"	"	"	"	"	
Cadmium	ND	0.203	2.49	"	"	"	"	"	
Chromium	8.05	1.77	4.98	"	"	"	"	"	
Copper	27	1.44	9.97	"	"	"	"	"	
Lead	5.61	4.59	4.98	"	"	"	"	"	
Nickel	5.35	0.444	4.98	"	"	"	"	"	
Selenium	ND	2.69	15	"	"	"	"	"	
Silver	65.8	0.962	9.97	"	"	"	"	"	
Thallium	ND	3.1	9.97	"	"	"	"	"	
Zinc	69.6	0.753	15	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.57			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-9. 0-10' Duplicate
12/9/2011 9:00:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-16 (Soil)									
Mercury by SW-846 7471A									
Mercury	ND	0.00139	0.00994	mg/kg	1	877015	12/14/2011	12/14/2011	
Percent Moisture									
Percent Moisture	1.41	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.04	9.75	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.69	4.88	"	"	"	"	"	
Beryllium	ND	0.185	1.95	"	"	"	"	"	
Cadmium	ND	0.199	2.44	"	"	"	"	"	
Chromium	8.85	1.73	4.88	"	"	"	"	"	
Copper	32	1.41	9.75	"	"	"	"	"	
Lead	4.7	4.49	4.88	"	"	"	"	"	I
Nickel	6.75	0.434	4.88	"	"	"	"	"	
Selenium	ND	2.63	14.6	"	"	"	"	"	
Silver	53.3	0.942	9.75	"	"	"	"	"	
Thallium	ND	3.03	9.75	"	"	"	"	"	
Zinc	66.4	0.737	14.6	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.55			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-7. 0-15'
12/9/2011 12:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
XENCO									
X112049-17 (Soil)									
Mercury by SW-846 7471A									
Mercury	0.00727	0.00145	0.0104	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	5.61	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.21	10.6	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	4.01	5.3	"	"	"	"	"	
Beryllium	ND	0.201	2.12	"	"	"	"	"	
Cadmium	0.911	0.216	2.65	"	"	"	"	"	V, I
Chromium	11.2	1.88	5.3	"	"	"	"	"	
Copper	20.2	1.53	10.6	"	"	"	"	"	
Lead	14.7	4.88	5.3	"	"	"	"	"	
Nickel	9.45	0.471	5.3	"	"	"	"	"	
Selenium	ND	2.86	15.9	"	"	"	"	"	
Silver	45.8	1.02	10.6	"	"	"	"	"	
Thallium	ND	3.29	10.6	"	"	"	"	"	
Zinc	72.8	0.8	15.9	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.61			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

YA-7, 0-15' Duplicate
12/9/2011 12:30:00PM

XENCO
X112049-18 (Soil)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Mercury by SW-846 7471A									
Mercury	0.00737	0.00141	0.0101	mg/kg	1	877015	12/14/2011	12/14/2011	I
Percent Moisture									
Percent Moisture	4.82	1	1	%	1	877016	"	12/14/2011	
PP Metals per ICP by EPA 6010B									
Antimony	ND	2.15	10.3	mg/kg	5	877374	12/16/2011	12/19/2011	
Arsenic	ND	3.9	5.15	"	"	"	"	"	
Beryllium	ND	0.195	2.06	"	"	"	"	"	
Cadmium	ND	0.21	2.58	"	"	"	"	"	
Chromium	9.92	1.83	5.15	"	"	"	"	"	
Copper	21.6	1.48	10.3	"	"	"	"	"	
Lead	15.5	4.74	5.15	"	"	"	"	"	
Nickel	7.17	0.458	5.15	"	"	"	"	"	
Selenium	ND	2.78	15.5	"	"	"	"	"	
Silver	43.4	0.995	10.3	"	"	"	"	"	
Thallium	ND	3.2	10.3	"	"	"	"	"	
Zinc	66.4	0.778	15.5	"	"	"	"	"	
Soil pH by SW-846 9045C									
pH	8.49			SU	1	877089	12/15/2011	12/15/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Mercury by SW-846 7471A - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 877015 - SW7471P										
MS (433185-001 S)		Source: 433185-001 S			Prepared: 12/14/2011 Analyzed: 12/14/2011					
Mercury	0.111	0.0102	mg/kg	0.102	0.00863	100	80-120		20	
MSD (433185-001 SD)		Source: 433185-001 SD			Prepared: 12/14/2011 Analyzed: 12/14/2011					
Mercury	0.111	0.0102	mg/kg	0.102	0.00863	100	80-120	0	20	
LCS (615398-1-BKS)		Source: 615398-1-BKS			Prepared: 12/14/2011 Analyzed: 12/14/2011					
Mercury	0.399	0.01	mg/kg	0.4	<0.00140	100	80-120		20	
BLANK (615398-1-BLK)		Source: 615398-1-BLK			Prepared: 12/14/2011 Analyzed: 12/14/2011					
Mercury	ND	0.01	mg/kg	0.4			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Percent Moisture - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 877016 - NONE										
BLANK (877016-1-BLK)		Source: 877016-1-BLK			Prepared: 12/14/2011 Analyzed: 12/14/2011					
Percent Moisture	ND	1	%	0			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

PP Metals per ICP by EPA 6010B - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 877374 - SW3050B										
MS (433185-001 S)		Source: 433185-001 S				Prepared: 12/16/2011 Analyzed: 12/19/2011				
Thallium	77.1	10	mg/kg	100	<3.10	77	75-125		20	
Zinc	183	15	"	100	104	79	75-125		20	
Silver	116	10	"	50	62.8	106	75-125		20	
Selenium	81.8	15	"	100	<2.70	82	75-125		20	
Nickel	98.3	5	"	100	11.5	87	75-125		20	
Lead	98.7	5	"	100	20.2	79	75-125		20	
Chromium	99.1	5	"	100	14	85	75-125		20	
Cadmium	82.4	2.5	"	100	<0.204	82	75-125		20	
Beryllium	84.3	2	"	100	<0.189	84	75-125		20	
Arsenic	82	5	"	100	<3.78	82	75-125		20	
Antimony	52.4	10	"	100	<2.09	52	75-125		20	
Copper	110	10	"	100	72.6	37	75-125		20	
MSD (433185-001 SD)		Source: 433185-001 SD				Prepared: 12/16/2011 Analyzed: 12/19/2011				
Arsenic	96.2	5.1	mg/kg	102	<3.85	94	75-125	16	20	
Selenium	100	15.3	"	102	<2.75	98	75-125	20	20	
Nickel	116	5.1	"	102	11.5	102	75-125	17	20	
Lead	120	5.1	"	102	20.2	98	75-125	19	20	
Copper	131	10.2	"	102	72.6	57	75-125	17	20	
Chromium	116	5.1	"	102	14	100	75-125	16	20	
Antimony	65.3	10.2	"	102	<2.13	64	75-125	22	20	
Beryllium	101	2.04	"	102	<0.193	99	75-125	18	20	
Zinc	216	15.3	"	102	104	110	75-125	17	20	
Thallium	93.7	10.2	"	102	<3.17	92	75-125	19	20	
Cadmium	100	2.55	"	102	<0.208	98	75-125	19	20	
Silver	135	10.2	"	51	62.8	142	75-125	15	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

PP Metals per ICP by EPA 6010B - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 877374 - SW3050B										
LCS (615537-1-BKS)		Source: 615537-1-BKS			Prepared: 12/16/2011 Analyzed: 12/19/2011					
Selenium	96	2.94	mg/kg	98	<0.529	98	75-125		20	
Zinc	104	2.94	"	98	0.251	106	75-125		20	
Thallium	96.1	1.96	"	98	<0.609	98	75-125		20	
Silver	48.1	1.96	"	49	<0.189	98	75-125		20	
Nickel	97.3	0.98	"	98	<0.0873	99	75-125		20	
Lead	96.1	0.98	"	98	<0.903	98	75-125		20	
Copper	93.9	1.96	"	98	<0.283	96	75-125		20	
Cadmium	93.5	0.49	"	98	0.0459	95	75-125		20	
Beryllium	98.6	0.392	"	98	<0.0372	101	75-125		20	
Arsenic	92.5	0.98	"	98	<0.741	94	75-125		20	
Antimony	96.1	1.96	"	98	<0.409	98	75-125		20	
Chromium	96.3	0.98	"	98	<0.348	98	75-125		20	
BLANK (615537-1-BLK)		Source: 615537-1-BLK			Prepared: 12/16/2011 Analyzed: 12/19/2011					
Selenium	ND	3	mg/kg	100			-		20	
Nickel	ND	1	"	100			-		20	
Lead	ND	1	"	100			-		20	
Copper	ND	2	"	100			-		20	
Chromium	ND	1	"	100			-		20	
Cadmium	0.0459	0.5	"	100			-		20	I
Beryllium	ND	0.4	"	100			-		20	
Zinc	0.251	3	"	100			-		20	I
Antimony	ND	2	"	100			-		20	
Silver	ND	2	"	50			-		20	
Thallium	ND	2	"	100			-		20	
Arsenic	ND	1	"	100			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Notes and Definitions

V	detected in the sample and method blank
J	Spike recovery in the MS and/or MSD is outside method control limits, LCS recovery passed.
I	Sample result was found between MDL and RL
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

February 20, 2012

Pinyon

Brian Partington

9100 West Jewell Avenue, Suite 200

Lakewood CO 80232

Project Name - Twin Tunnels Project Number - 1/11-750-02.8000

Attached are you analytical results for Twin Tunnels received by Origins Laboratory, Inc. February 02, 2012. This project is associated with Origins project number X202015-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods specified in SW-846. The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
West Portal Out	X202015-01	Soil	January 31, 2012 13:30	02/02/2012 17:18

Origins Laboratory, Inc.

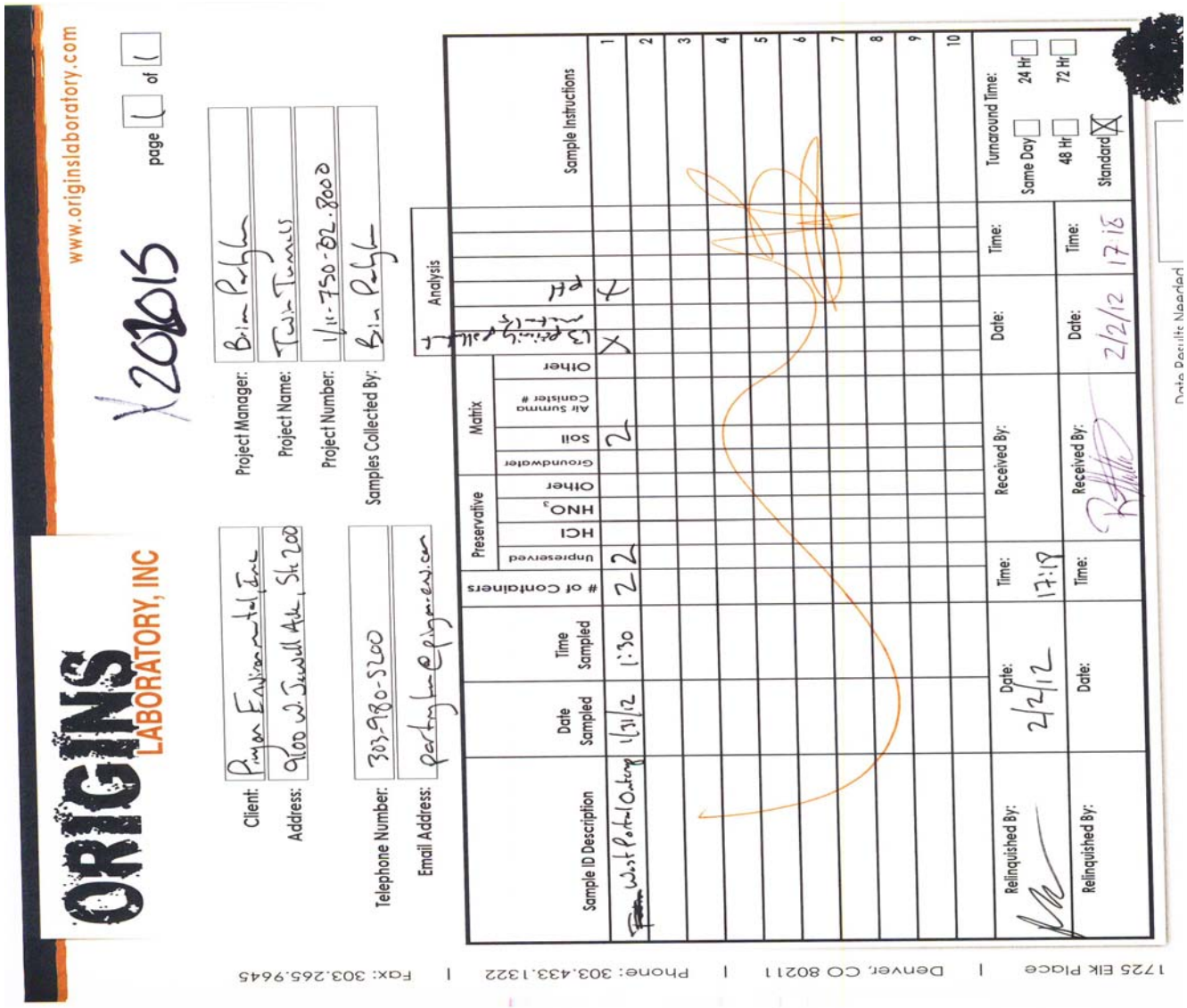
Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels



Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X202015
Client: PINYON
Client Project ID: TWIN TUNNELS
Checklist Completed by:
Shipped Via: A/D (UPS, FedEx, Hand Delivered, Pick-up, etc.)
Date/time completed: 2/2/12 17:24
Airbill #: N/A
Matrix(s) Received: (Check all that apply): X Soil/Solid ____ Water ____ Other: ____
Cooler Number/Temperature: 1 / 1.7 °C ____/____ °C ____/____ °C ____/____ °C (Describe)
Thermometer ID: T001

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[1]?		X		
Is there ice present (document if blue ice is used)		X		
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		X		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		X		
Were all samples received intact[1]?	X			
Was adequate sample volume provided[1]?	X			
Are short holding time analytes or samples with HTs due within 48 hours present[1]?	X	X RA 2/2/12		pH
Is a chain-of-custody (COC) present and filled out completely[1]?	X			
Does the COC agree with the number and type of sample bottles received[1]?	X			
Do the sample IDs on the bottle labels match the COC[1]?	X			
Is the COC properly relinquished by the client with date and time recorded[1]?	X			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**			X	Soil
Are samples preserved that require preservation and was it checked [1]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*			X	Soil
Additional Comments (if any):				

[1]If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager) 2.3.12 Date/Time Reviewed

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

West Portal Out
1/31/2012 1:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

Microbac Laboratories, Inc.

X202015-01 (Soil)

Antimony, Total by 6010B ICP

Antimony	ND	1940	1940	ug/kg	1	1206154	02/08/2012	02/08/2012

Arsenic, Total by 6010B ICP

Arsenic	4670	970	970	"	"	"	"	"

Beryllium, Total by 6010B ICP

Beryllium	ND	970	970	"	"	"	"	"

Cadmium, Total by 6010B ICP

Cadmium	2440	970	970	"	"	"	"	"

Chromium, Total by 6010B ICP

Chromium	15400	970	970	"	"	"	"	"

Copper, Total by 6010B ICP

Copper	334000	970	970	"	"	"	"	"

Lead, Total by 6010B ICP

Lead	8870	970	970	"	"	"	"	"

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

West Portal Out
1/31/2012 1:30:00PM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X202015-01 (Soil)									
Mercury, Total by 7471 Cold Vapor AA									
Mercury	ND	38.5	38.5	"	"	1207200	02/14/2012	02/14/2012	OST
Nickel, Total by 6010B ICP									
Nickel	10300	970	970	"	"	1206154	02/08/2012	02/08/2012	
pH (SW846 9045)									
pH	2.7			pH Units	1	1206248	02/09/2012	02/09/2012	
Selenium, Total by 6010B ICP									
Selenium	52500	1940	1940	ug/kg	1	1206154	02/08/2012	02/08/2012	
Silver, Total by 6010B ICP									
Silver	ND	970	970	"	"	"	"	"	
Thallium, Total by 6010B ICP									
Thallium	ND	1940	1940	"	"	"	"	"	
Zinc, Total by 6010B ICP									
Zinc	1180000	1940	1940	"	"	"	"	"	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

General Chemistry - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1206248 - WetChem_pH_Prep										
Duplicate (1206248-DUP1)		Source: X202015-01			Prepared: 02/09/2012 Analyzed: 02/09/2012					
pH	2.8		pH Units		2.7			1.09	20	
Reference (1206248-SRM1)					Prepared: 02/09/2012 Analyzed: 02/09/2012					
pH	7.2		pH Units	7.13		101	97.2-103			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Metals, Total by EPA 6000/7000 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1206154 - Metals_Prep										
Blank (1206154-BLK1)						Prepared: 02/08/2012 Analyzed: 02/08/2012				
Cadmium	ND	1000	ug/kg							
Chromium	ND	1000	"							
Copper	ND	1000	"							
Lead	ND	1000	"							
Nickel	ND	1000	"							
Selenium	ND	2000	"							
Silver	ND	1000	"							
Zinc	ND	2000	"							
LCS (1206154-BS1)						Prepared: 02/08/2012 Analyzed: 02/08/2012				
Cadmium	177000	1000	ug/kg	200000		88.6	85-115			
Chromium	204000	1000	"	200000		102	85-115			
Copper	189000	1000	"	200000		94.4	85-115			
Lead	189000	1000	"	200000		94.6	85-115			
Nickel	192000	1000	"	200000		96.0	85-115			
Silver	45900	1000	"	50000		91.8	85-115			
Zinc	188000	2000	"	200000		93.9	85-115			
LCS Dup (1206154-BSD1)						Prepared: 02/08/2012 Analyzed: 02/08/2012				
Cadmium	177000	1000	ug/kg	200000		88.6	85-115	0.00	20	
Chromium	203000	1000	"	200000		101	85-115	0.443	20	
Copper	189000	1000	"	200000		94.6	85-115	0.317	20	
Lead	190000	1000	"	200000		94.9	85-115	0.264	20	
Nickel	192000	1000	"	200000		96.2	85-115	0.208	20	
Silver	46600	1000	"	50000		93.2	85-115	1.53	20	
Zinc	187000	2000	"	200000		93.6	85-115	0.267	20	
Duplicate (1206154-DUP1)			Source: 1201629-01			Prepared: 02/08/2012 Analyzed: 02/08/2012				

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Metals, Total by EPA 6000/7000 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1206154 - Metals_Prep										
Antimony	145000	1820	ug/kg		139000			4.19	200	
Arsenic	148000	910	"		147000			1.25	200	
Beryllium	223000	910	"		223000			0.0825	200	
Cadmium	175000	910	"		174000			0.427	200	
Chromium	240000	910	"		235000			2.00	200	
Copper	66700	910	"		66400			0.365	200	
Lead	154000	910	"		155000			0.230	200	
Nickel	187000	910	"		186000			0.415	200	
Selenium	71600	1820	"		70600			1.49	200	
Silver	17300	910	"		17200			0.930	200	
Thallium	144000	1820	"		147000			1.67	200	
Zinc	237000	1820	"		237000			0.111	200	
Matrix Spike (1206154-MS1)		Source: 1202165-01			Prepared: 02/08/2012 Analyzed: 02/08/2012					
Antimony	159000	1780	ug/kg	178000	ND	89.3	80-120			
Arsenic	166000	890	"	178000	ND	93.4	80-120			
Beryllium	163000	890	"	178000	ND	91.3	80-120			
Cadmium	154000	890	"	178000	ND	86.6	80-120			
Chromium	175000	890	"	178000	1710	97.2	80-120			
Copper	183000	890	"	178000	21400	90.5	80-120			
Lead	162000	890	"	178000	1220	90.1	80-120			
Nickel	167000	890	"	178000	1560	92.8	80-120			
Selenium	156000	1780	"	178000	ND	87.4	80-120			
Silver	39100	890	"	44500	ND	87.8	80-120			
Thallium	152000	1780	"	178000	ND	85.4	80-120			
Zinc	205000	1780	"	178000	52600	85.5	80-120			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Notes and Definitions

OST Analysis subcontracted to Microbac Central Pennsylvania.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

December 27, 2011

Pinyon

Brian Partington

9100 West Jewell Avenue, Suite 200

Lakewood CO 80232

Project Name - Twin Tunnels Project Number - 1/11-750-02.8000

Attached are you analytical results for Twin Tunnels received by Origins Laboratory, Inc. December 07, 2011. This project is associated with Origins project number X112018-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods specified in SW-846. The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TT-01	X112018-01	Water	December 7, 2011 13:35	12/07/2011 14:45

Origins Laboratory, Inc.

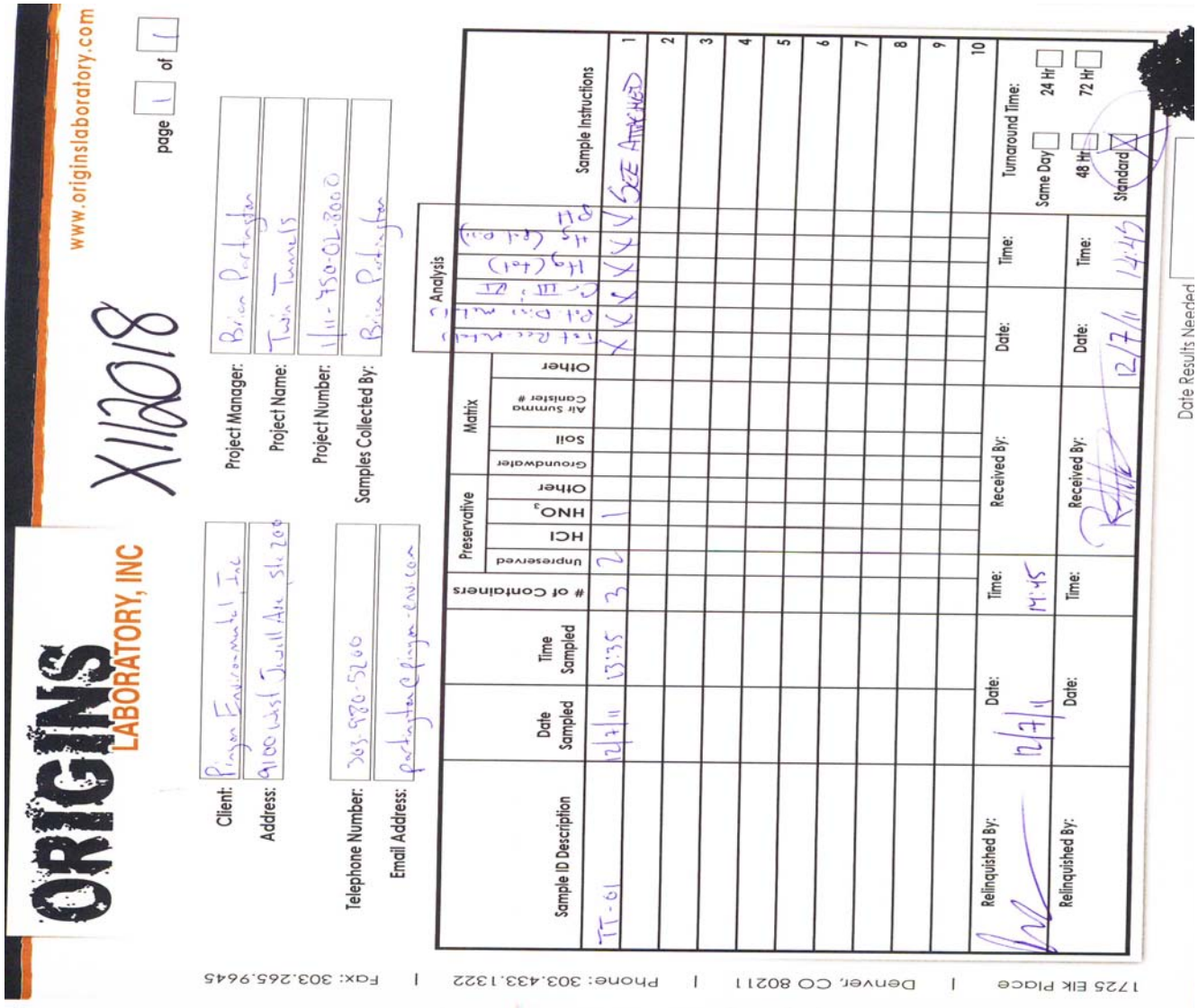
Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels



Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Origins Laboratory

F-012207-01
Effective Date: 01/22/07

Sample Receipt Checklist

Origins Work Order: X112018

Client: Pinyon Client Project ID: Twin Tunnels

Shipped Via: Hand (UPS, FedEx, Hand Delivered, Pick-up, etc.) Airbill #: N/A

Matrix (Check all that apply): ____Soil/Solid __X__Water ____Other: ____ (Describe)

Cooler ID	N/A				
Temp (°C)	5.3				

Thermometer ID: 1001

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature just above 0°C to ≤ 6°C[1]? NOTE: If samples are delivered within 5 hours of sampling, this requirement is waived provided that there is evidence that cooling has begun.			X	
Were all samples received intact[1]?	X			
Was adequate sample volume provided[1]?	X			
If custody seals are present, are they intact[1]?			X	
Are short holding time analytes or samples with HTs due within 48 hours present[1]?		X		
Is a chain-of-custody (COC) present and filled out completely[1]?	X			
Does the COC agree with the number and type of sample bottles received[1]?	X			
Do the sample IDs on the bottle labels match the COC[1]?	X			
Is the COC properly relinquished by the client with date and time recorded[1]?	X			
For volatiles in water – is there headspace present? **If yes, contact client and note in narrative.**			X	
Are samples preserved that require preservation (excluding cooling)[1]? Note the type of preservation in the Comments column (e.g., HCl).	X			HNO_3
Additional Comments (if any):				

[1]If NO, then contact the client before proceeding with analysis and note in the case narrative.

Custodian Printed Name — Signature or Initials of Custodian — 12/7/11 Date/Time

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

TT-01
12/7/2011 1:35:00PM

XENCO
X112018-01 (Water)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Chromium, Hexavalent (Colorimetric)									
Chromium, Hexavalent	ND	0.005	0.01	mg/L	1	876586	12/08/2011	12/08/2011	
Chromium, Trivalent									
Chromium, Trivalent	ND			mg/L	1	877137	12/15/2011	12/15/2011	
Dissolved Mercury by EPA 245.1									
Mercury-Potentially-Dissolved	0.404	0.014	0.1	ug/L	1	876579	12/08/2011	12/08/2011	
Dissolved Metals by ICP/MS									
Antimony-Potentially-Dissolved	ND	1.15	2	ug/L	1	876976	12/12/2011	12/13/2011	
Arsenic-Potentially-Dissolved	ND	0.589	2	"	"	"	"	"	
Beryllium-Potentially-Dissolved	0.19	0.0689	0.5	"	"	"	"	"	V, I
Cadmium-Potentially-Dissolved	ND	0.0614	0.6	"	"	"	"	"	
Chromium-Potentially-Dissolved	ND	0.332	3	"	"	"	"	"	
Copper-Potentially-Dissolved	2.42	0.268	2	"	"	"	"	"	
Lead-Potentially-Dissolved	0.24	0.0434	2	"	"	"	"	"	I
Manganese-Potentially-Dissolved	25.6	0.137	3	"	"	"	"	"	
Molybdenum-Potentially-Dissolved	5.49	0.269	2	"	"	"	"	"	
Nickel-Potentially-Dissolved	3.32	0.344	5	"	"	"	"	"	I
Selenium-Potentially-Dissolved	0.77	0.174	2	"	"	"	"	"	I
Silver-Potentially-Dissolved	ND	0.123	1	"	"	"	"	"	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

TT-01
12/7/2011 1:35:00PM

XENCO
X112018-01 (Water)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Dissolved Metals by ICP/MS									
Thallium-Potentially-Dissolved	ND	0.0475	0.5	ug/L	1	876976	12/12/2011	12/13/2011	
Uranium-Potentially-Dissolved	81	0.02	0.5	"	"	"	"	"	
Dissolved Metals per ICP by EPA 200.7									
Aluminum-Potentially-Dissolved	ND	84.7	200	ug/L	1	876965	"	12/13/2011	
Barium-Potentially-Dissolved	45	0.483	10	"	"	"	"	"	
Iron-Potentially-Dissolved	ND	18.8	200	"	"	"	"	"	
Zinc-Potentially-Dissolved	28.2	1.51	30	"	"	"	"	"	I
Mercury (Cold Vapor, Manual)									
Mercury	0.41	0.014	0.1	ug/L	1	876578	12/08/2011	12/08/2011	
Metals per ICP by EPA 200.7									
Aluminum	ND	84.7	200	ug/L	1	876964	12/12/2011	12/13/2011	
Barium	47	0.483	10	"	"	"	"	"	
Iron	ND	18.8	200	"	"	"	"	"	
Zinc	30.6	1.51	30	"	"	"	"	"	
Metals per ICP/MS by EPA 200.8									
Antimony	ND	1.15	2	ug/L	1	876975	"	12/13/2011	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

TT-01
12/7/2011 1:35:00PM

XENCO
X112018-01 (Water)

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Metals per ICP/MS by EPA 200.8									
Arsenic	0.98	0.589	2	ug/L	1	876975	12/12/2011	12/13/2011	I
Beryllium	0.26	0.0689	0.5	"	"	"	"	"	V, I
Cadmium	ND	0.0614	0.6	"	"	"	"	"	
Chromium	ND	0.332	3	"	"	"	"	"	
Copper	2.87	0.268	2	"	"	"	"	"	
Lead	0.35	0.0434	2	"	"	"	"	"	I
Manganese	33.9	0.137	3	"	"	"	"	"	
Molybdenum	5.81	0.269	2	"	"	"	"	"	
Nickel	3.39	0.344	5	"	"	"	"	"	I
Selenium	1.1	0.174	2	"	"	"	"	"	I
Silver	ND	0.123	1	"	"	"	"	"	
Thallium	ND	0.0475	0.5	"	"	"	"	"	
Uranium	97.7	0.02	0.5	"	"	"	"	"	
pH, Electrometric by EPA 150.2									
pH	7.85	1	2	SU	1	876589	12/08/2011	12/08/2011	Q

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Chromium, Hexavalent (Colorimetric) - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876586 - NONE										
MS (432877-001 S)		Source: 432877-001 S			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Chromium, Hexavalent	0.203	0.01	mg/L	0.2	<0.00500	102	80-120		20	
LCS (876586-1-BKS)		Source: 876586-1-BKS			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Chromium, Hexavalent	0.199	0.01	mg/L	0.2	<0.00500	100	80-120		20	
BLANK (876586-1-BLK)		Source: 876586-1-BLK			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Chromium, Hexavalent	ND	0.01	mg/L	0.4			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Dissolved Mercury by EPA 245.1 - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876579 - E245.1P										
MS (432554-001 S)		Source: 432554-001 S			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury-Potentially-Dissolved	1.39	0.1	ug/L	0.001	0.153	124	70-130		20	
MSD (432554-001 SD)		Source: 432554-001 SD			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury-Potentially-Dissolved	1.4	0.1	ug/L	0.001	0.153	125	70-130	1	20	
LCS (615131-1-BKS)		Source: 615131-1-BKS			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury-Potentially-Dissolved	4.06	0.1	ug/L	0.004	<0.0140	102	70-130		20	
BLANK (615131-1-BLK)		Source: 615131-1-BLK			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury-Potentially-Dissolved	ND	0.1	ug/L	0.004			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Dissolved Metals by ICP/MS - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876976 - SW3010A										
MS (432772-001 S)		Source: 432772-001 S			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Silver-Potentially-Dissolved	93.9	1	ug/L	0.1	<0.123	94	70-130		20	
Thallium-Potentially-Dissolved	196	0.5	"	0.2	0.24	98	70-130		20	
Selenium-Potentially-Dissolved	180	2	"	0.2	1.28	89	70-130		20	
Nickel-Potentially-Dissolved	187	5	"	0.2	1.66	93	70-130		20	
Molybdenum-Potentially-Dissolved	203	2	"	0.2	4.06	99	70-130		20	
Lead-Potentially-Dissolved	198	2	"	0.2	0.1	99	70-130		20	
Copper-Potentially-Dissolved	191	2	"	0.2	2.84	94	70-130		20	
Chromium-Potentially-Dissolved	191	3	"	0.2	1.84	95	70-130		20	
Antimony-Potentially-Dissolved	209	2	"	0.2	<1.15	105	70-130		20	
Cadmium-Potentially-Dissolved	188	0.6	"	0.2	<0.0614	94	70-130		20	
Beryllium-Potentially-Dissolved	192	0.5	"	0.2	0.21	96	70-130		20	
Arsenic-Potentially-Dissolved	196	2	"	0.2	1.97	97	70-130		20	
Manganese-Potentially-Dissolved	193	3	"	0.2	3.97	95	70-130		20	
Uranium-Potentially-Dissolved	51.9	0.5	"	0.05	0.64	103	70-130		20	
MSD (432772-001 SD)		Source: 432772-001 SD			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Cadmium-Potentially-Dissolved	176	0.6	ug/L	0.2	<0.0614	88	70-130	7	20	
Thallium-Potentially-Dissolved	186	0.5	"	0.2	0.24	93	70-130	5	20	
Silver-Potentially-Dissolved	88.8	1	"	0.1	<0.123	89	70-130	6	20	
Selenium-Potentially-Dissolved	186	2	"	0.2	1.28	92	70-130	3	20	
Nickel-Potentially-Dissolved	180	5	"	0.2	1.66	89	70-130	4	20	
Molybdenum-Potentially-Dissolved	190	2	"	0.2	4.06	93	70-130	7	20	
Manganese-Potentially-Dissolved	186	3	"	0.2	3.97	91	70-130	4	20	
Lead-Potentially-Dissolved	187	2	"	0.2	0.1	93	70-130	6	20	
Chromium-Potentially-Dissolved	184	3	"	0.2	1.84	91	70-130	4	20	
Beryllium-Potentially-Dissolved	182	0.5	"	0.2	0.21	91	70-130	5	20	
Arsenic-Potentially-Dissolved	189	2	"	0.2	1.97	94	70-130	4	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Dissolved Metals by ICP/MS - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876976 - SW3010A										
MSD (432772-001 SD)		Source: 432772-001 SD			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Antimony-Potentially-Dissolved	197	2	ug/L	0.2	<1.15	99	70-130	6	20	
Uranium-Potentially-Dissolved	48.7	0.5	"	0.05	0.64	96	70-130	6	20	
Copper-Potentially-Dissolved	184	2	"	0.2	2.84	91	70-130	4	20	
LCS (615279-1-BKS)		Source: 615279-1-BKS			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Manganese-Potentially-Dissolved	181	3	ug/L	0.2	0.34	91	70-130		20	
Uranium-Potentially-Dissolved	45.8	0.5	"	0.05	<0.0200	92	70-130		20	
Thallium-Potentially-Dissolved	182	0.5	"	0.2	<0.0475	91	70-130		20	
Silver-Potentially-Dissolved	92.4	1	"	0.1	<0.123	92	70-130		20	
Lead-Potentially-Dissolved	183	2	"	0.2	<0.0434	92	70-130		20	
Selenium-Potentially-Dissolved	173	2	"	0.2	<0.174	87	70-130		20	
Molybdenum-Potentially-Dissolved	185	2	"	0.2	<0.269	93	70-130		20	
Nickel-Potentially-Dissolved	181	5	"	0.2	<0.344	91	70-130		20	
Antimony-Potentially-Dissolved	187	2	"	0.2	<1.15	94	70-130		20	
Arsenic-Potentially-Dissolved	182	2	"	0.2	<0.589	91	70-130		20	
Beryllium-Potentially-Dissolved	183	0.5	"	0.2	0.18	92	70-130		20	
Cadmium-Potentially-Dissolved	184	0.6	"	0.2	<0.0614	92	70-130		20	
Chromium-Potentially-Dissolved	181	3	"	0.2	<0.332	91	70-130		20	
Copper-Potentially-Dissolved	180	2	"	0.2	<0.268	90	70-130		20	
BLANK (615279-1-BLK)		Source: 615279-1-BLK			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Uranium-Potentially-Dissolved	ND	0.5	ug/L	0.05			-		20	
Antimony-Potentially-Dissolved	ND	2	"	0.2			-		20	
Cadmium-Potentially-Dissolved	ND	0.6	"	0.2			-		20	
Manganese-Potentially-Dissolved	0.34	3	"	0.2			-		20	I
Chromium-Potentially-Dissolved	ND	3	"	0.2			-		20	
Beryllium-Potentially-Dissolved	0.18	0.5	"	0.2			-		20	I

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Dissolved Metals by ICP/MS - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876976 - SW3010A										
BLANK (615279-1-BLK)		Source: 615279-1-BLK			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Copper-Potentially-Dissolved	ND	2	ug/L	0.2			-		20	
Lead-Potentially-Dissolved	ND	2	"	0.2			-		20	
Thallium-Potentially-Dissolved	ND	0.5	"	0.2			-		20	
Silver-Potentially-Dissolved	ND	1	"	0.1			-		20	
Selenium-Potentially-Dissolved	ND	2	"	0.2			-		20	
Nickel-Potentially-Dissolved	ND	5	"	0.2			-		20	
Molybdenum-Potentially-Dissolved	ND	2	"	0.2			-		20	
Arsenic-Potentially-Dissolved	ND	2	"	0.2			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Dissolved Metals per ICP by EPA 200.7 - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876965 - E200.7P										
MS (432877-001 S)		Source: 432877-001 S			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Zinc-Potentially-Dissolved	229	30	ug/L	200	30.6	99	70-130		20	
Iron-Potentially-Dissolved	743	200	"	1000	<18.8	74	70-130		20	
Barium-Potentially-Dissolved	236	10	"	200	47	95	70-130		20	
Aluminum-Potentially-Dissolved	995	200	"	1000	<84.7	100	70-130		20	
MSD (432877-001 SD)		Source: 432877-001 SD			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Barium-Potentially-Dissolved	243	10	ug/L	200	47	98	70-130	3	20	
Iron-Potentially-Dissolved	707	200	"	1000	<18.8	71	70-130	5	20	
Zinc-Potentially-Dissolved	234	30	"	200	30.6	102	70-130	2	20	
Aluminum-Potentially-Dissolved	1020	200	"	1000	<84.7	102	70-130	2	20	
LCS (615280-1-BKS)		Source: 615280-1-BKS			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Zinc-Potentially-Dissolved	195	30	ug/L	0.2	<1.51	98	70-130		20	
Iron-Potentially-Dissolved	936	200	"	1	<18.8	94	70-130		20	
Aluminum-Potentially-Dissolved	933	200	"	1	<84.7	93	70-130		20	
Barium-Potentially-Dissolved	192	10	"	0.2	<0.483	96	70-130		20	
BLANK (615280-1-BLK)		Source: 615280-1-BLK			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Barium-Potentially-Dissolved	ND	10	ug/L	1			-		20	
Iron-Potentially-Dissolved	ND	200	"	5			-		20	
Zinc-Potentially-Dissolved	ND	30	"	1			-		20	
Aluminum-Potentially-Dissolved	ND	200	"	5			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Mercury (Cold Vapor, Manual) - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876578 - E245.1P										
MS (432554-001 S)		Source: 432554-001 S			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury	1.39	0.1	ug/L	0.001	0.153	124	70-130		20	
MSD (432554-001 SD)		Source: 432554-001 SD			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury	1.4	0.1	ug/L	0.001	0.153	125	70-130	1	20	
LCS (615131-1-BKS)		Source: 615131-1-BKS			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury	4.06	0.1	ug/L	0.004	<0.0140	102	70-130		20	
BLANK (615131-1-BLK)		Source: 615131-1-BLK			Prepared: 12/08/2011 Analyzed: 12/08/2011					
Mercury	ND	0.1	ug/L	0.004			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Metals per ICP by EPA 200.7 - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876964 - E200.7P										
MS (432877-001 S)		Source: 432877-001 S			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Barium	236	10	ug/L	200	47	95	70-130		20	
Iron	743	200	"	1000	<18.8	74	70-130		20	
Aluminum	995	200	"	1000	<84.7	100	70-130		20	
Zinc	229	30	"	200	30.6	99	70-130		20	
MSD (432877-001 SD)		Source: 432877-001 SD			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Barium	243	10	ug/L	200	47	98	70-130	3	20	
Iron	707	200	"	1000	<18.8	71	70-130	5	20	
Zinc	234	30	"	200	30.6	102	70-130	2	20	
Aluminum	1020	200	"	1000	<84.7	102	70-130	2	20	
LCS (615280-1-BKS)		Source: 615280-1-BKS			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Aluminum	933	200	ug/L	1	<84.7	93	70-130		20	
Zinc	195	30	"	0.2	<1.51	98	70-130		20	
Barium	192	10	"	0.2	<0.483	96	70-130		20	
Iron	936	200	"	1	<18.8	94	70-130		20	
BLANK (615280-1-BLK)		Source: 615280-1-BLK			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Zinc	ND	30	ug/L	1			-		20	
Iron	ND	200	"	5			-		20	
Barium	ND	10	"	1			-		20	
Aluminum	ND	200	"	5			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Metals per ICP/MS by EPA 200.8 - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876975 - SW3010A										
MS (432772-001 S)		Source: 432772-001 S			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Arsenic	196	2	ug/L	0.2	1.97	97	70-130		20	
Selenium	180	2	"	0.2	1.28	89	70-130		20	
Antimony	209	2	"	0.2	<1.15	105	70-130		20	
Nickel	187	5	"	0.2	1.66	93	70-130		20	
Molybdenum	203	2	"	0.2	4.06	99	70-130		20	
Uranium	51.9	0.5	"	0.05	0.64	103	70-130		20	
Thallium	196	0.5	"	0.2	0.24	98	70-130		20	
Beryllium	192	0.5	"	0.2	0.21	96	70-130		20	
Silver	93.9	1	"	0.1	<0.123	94	70-130		20	
Manganese	193	3	"	0.2	3.97	95	70-130		20	
Lead	198	2	"	0.2	0.1	99	70-130		20	
Chromium	191	3	"	0.2	1.84	95	70-130		20	
Cadmium	188	0.6	"	0.2	<0.0614	94	70-130		20	
Copper	191	2	"	0.2	2.84	94	70-130		20	
MSD (432772-001 SD)		Source: 432772-001 SD			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Beryllium	182	0.5	ug/L	0.2	0.21	91	70-130	5	20	
Cadmium	176	0.6	"	0.2	<0.0614	88	70-130	7	20	
Chromium	184	3	"	0.2	1.84	91	70-130	4	20	
Copper	184	2	"	0.2	2.84	91	70-130	4	20	
Molybdenum	190	2	"	0.2	4.06	93	70-130	7	20	
Manganese	186	3	"	0.2	3.97	91	70-130	4	20	
Uranium	48.7	0.5	"	0.05	0.64	96	70-130	6	20	
Thallium	186	0.5	"	0.2	0.24	93	70-130	5	20	
Silver	88.8	1	"	0.1	<0.123	89	70-130	6	20	
Arsenic	189	2	"	0.2	1.97	94	70-130	4	20	
Selenium	186	2	"	0.2	1.28	92	70-130	3	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Metals per ICP/MS by EPA 200.8 - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876975 - SW3010A										
MSD (432772-001 SD)		Source: 432772-001 SD			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Nickel	180	5	ug/L	0.2	1.66	89	70-130	4	20	
Lead	187	2	"	0.2	0.1	93	70-130	6	20	
Antimony	197	2	"	0.2	<1.15	99	70-130	6	20	
LCS (615279-1-BKS)		Source: 615279-1-BKS			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Selenium	173	2	ug/L	0.2	<0.174	87	70-130		20	
Nickel	181	5	"	0.2	<0.344	91	70-130		20	
Antimony	187	2	"	0.2	<1.15	94	70-130		20	
Silver	92.4	1	"	0.1	<0.123	92	70-130		20	
Thallium	182	0.5	"	0.2	<0.0475	91	70-130		20	
Uranium	45.8	0.5	"	0.05	<0.0200	92	70-130		20	
Molybdenum	185	2	"	0.2	<0.269	93	70-130		20	
Lead	183	2	"	0.2	<0.0434	92	70-130		20	
Copper	180	2	"	0.2	<0.268	90	70-130		20	
Chromium	181	3	"	0.2	<0.332	91	70-130		20	
Cadmium	184	0.6	"	0.2	<0.0614	92	70-130		20	
Beryllium	183	0.5	"	0.2	0.18	92	70-130		20	
Arsenic	182	2	"	0.2	<0.589	91	70-130		20	
Manganese	181	3	"	0.2	0.34	91	70-130		20	
BLANK (615279-1-BLK)		Source: 615279-1-BLK			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Silver	ND	1	ug/L	0.1			-		20	
Arsenic	ND	2	"	0.2			-		20	
Beryllium	0.18	0.5	"	0.2			-		20	I
Cadmium	ND	0.6	"	0.2			-		20	
Chromium	ND	3	"	0.2			-		20	
Copper	ND	2	"	0.2			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Metals per ICP/MS by EPA 200.8 - Quality Control
XENCO

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 876975 - SW3010A										
BLANK (615279-1-BLK)		Source: 615279-1-BLK			Prepared: 12/12/2011 Analyzed: 12/13/2011					
Lead	ND	2	ug/L	0.2			-		20	
Manganese	0.34	3	"	0.2			-		20	I
Molybdenum	ND	2	"	0.2			-		20	
Uranium	ND	0.5	"	0.05			-		20	
Selenium	ND	2	"	0.2			-		20	
Thallium	ND	0.5	"	0.2			-		20	
Antimony	ND	2	"	0.2			-		20	
Nickel	ND	5	"	0.2			-		20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/11-750-02.8000
Project: Twin Tunnels

Notes and Definitions

V	detected in the sample and method blank
Q	Sample held beyond the accepted holding time
I	Sample result was found between MDL and RL
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

February 20, 2012

Pinyon

Brian Partington

9100 West Jewell Avenue, Suite 200

Lakewood CO 80232

Project Name - Twin Tunnels Project Number - 1/10-750-03.8000

Attached are you analytical results for Twin Tunnels received by Origins Laboratory, Inc. January 30, 2012. This project is associated with Origins project number X201120-01.

The analytical results in the following report were analyzed under the guidelines of EPA Methods specified in SW-846. The analytical results apply specifically to the samples and analyses specified per the attached Chain of Custody.

Thank you for selecting Origins for your analytical needs. Please contact us with any questions concerning this report, or if we can help with anything at all.

Origins Laboratory, Inc.
303.433.1322
o-squad@oelabinc.com

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

CROSS REFERENCE REPORT

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
South Discharge	X201120-01	Water	January 30, 2012 8:35	01/30/2012 16:29
North Discharge	X201120-02	Water	January 30, 2012 8:45	01/30/2012 16:29

Origins Laboratory, Inc.

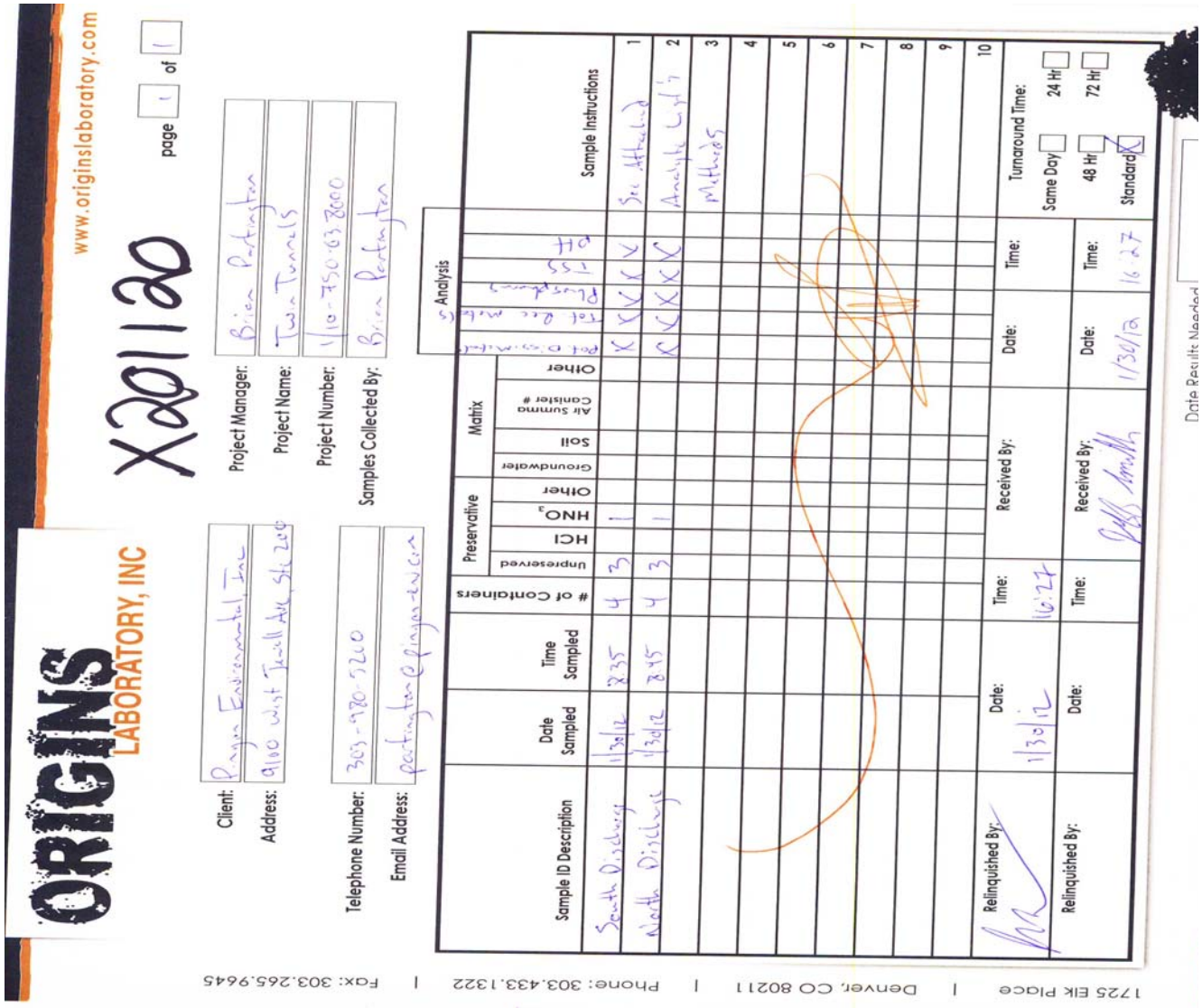
Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

ORIGINS LABORATORY, INC

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels



Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Origins Laboratory

F-012207-01-R1
Effective Date: 01/09/12

Sample Receipt Checklist

Origins Work Order: X201120
Client: Pinyon
Client Project ID: Twin Tunnels

Checklist Completed by: Jeff Smith
Shipped Via: Pick-Up (UPS, FedEx, Hand Delivered, Pick-up, etc.)
Date/time completed: 1/30/12 16:50
Airbill #: NA

Matrix(s) Received: (Check all that apply): ____Soil/Solid ✓ Water ____Other: ____

Cooler Number/Temperature: 1 / 1.6 °C ____/____°C ____/____°C ____/____°C (Describe)

Thermometer ID: 7001

Requirement Description	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature between 0°C to ≤ 6°C[1]?	✓			
Is there ice present (document if blue ice is used)	✓			
Are custody seals present on cooler? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Are custody seals present on each sample container? (if so, document in comments if they are signed and dated, broken or intact)		✓		
Were all samples received intact[1]?	✓			
Was adequate sample volume provided[1]?	✓			
Are short holding time analytes or samples with HTs due within 48 hours present[1]?	✓			24 hr Hold time
Is a chain-of-custody (COC) present and filled out completely[1]?	✓			
Does the COC agree with the number and type of sample bottles received[1]?		✓		Extra bottle added for Total Phosphorus
Do the sample IDs on the bottle labels match the COC[1]?	✓			
Is the COC properly relinquished by the client with date and time recorded[1]?	✓			
For volatiles in water – is there headspace (> ¼ inch bubble) present? **If yes, contact client and note in narrative.**			✓	
Are samples preserved that require preservation and was it checked[1]? *(note ID of confirmation instrument used in comments) / (preservation is not confirmed for subcontracted analyses in order to insure sample integrity)/(pH <2 for samples preserved with HNO3, HCL, H2SO4) / (pH >10 for samples preserved with NaAsO2+NaOH, ZnAc+NaOH)*	✓			H_2SO_4 HNO3

Additional Comments (if any):
RECEIVED SAMPLE FOR TOTAL PHOSPHORUS UNPRESERVED. PER CLIENT REQUEST TRANSFERED AND PRESERVED TO pH <2 WITH H_2SO_4. 1/30/12

[1]If NO, then contact the client before proceeding with analysis and note date/time and person contacted as well as the corrective action to in the additional comments (above) and the case narrative.

Reviewed by (Project Manager)

2.1.12
Date/Time Reviewed

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

South Discharge
1/30/2012 8:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-01 (Water)									
Aluminum, Potentially Dissolved by 200.7 ICP									
Aluminum	73.7	12.8	50.0	ug/L	1	1205144	02/01/2012	02/02/2012	
Aluminum, Total by 200.7 ICP									
Aluminum	ND	12.8	50.0	ug/L	1	1205140	02/01/2012	02/02/2012	
Antimony, Potentially Dissolved by 200.8 ICP									
Antimony	ND	0.500	2.50	ug/L	1	1205151	02/01/2012	02/03/2012	S1
Antimony, Total by 200.8 ICP									
Antimony	ND	0.500	2.50	ug/L	1	1205151	"	02/03/2012	S1
Arsenic, Potentially Dissolved by 200.8 ICP									
Arsenic	1.56	1.00	2.50	ug/L	1	1205151	"	02/01/2012	J
Arsenic, Total by 200.8 ICP									
Arsenic	1.38	1.00	2.50	ug/L	1	1205151	"	02/01/2012	J
Barium, Potentially Dissolved by 200.8 ICP									
Barium	62.3	2.30	20.0	ug/L	1	1205151	"	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

South Discharge
1/30/2012 8:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-01 (Water)									
Barium, Total by 200.8 ICP									
Barium	61.1	2.30	20.0	ug/L	1	1205151	"	02/01/2012	
Beryllium, Potentially Dissolved by 200.8 ICP									
Beryllium	ND	0.0780	0.500	ug/L	1	1205151	"	02/01/2012	
Beryllium, Total by 200.8 ICP									
Beryllium	ND	0.0780	0.500	ug/L	1	1205151	"	02/01/2012	
Cadmium, Potentially Dissolved by 200.8 ICP									
Cadmium	ND	0.240	0.500	ug/L	1	1205151	"	02/01/2012	
Cadmium, Total by 200.8 ICP									
Cadmium	ND	0.240	0.500	ug/L	1	1205151	"	02/01/2012	
Chromium, Hexavalent (SM 3500-Cr D.)									
Hexavalent Chromium	ND	5.30	25.0	ug/L	1	1205216	01/31/2012	01/31/2012	H
Chromium, Potentially Dissolved by 200.8 ICP									
Chromium	0.562	0.220	0.500	ug/L	1	1205151	02/01/2012	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

South Discharge
1/30/2012 8:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-01 (Water)									
Chromium, Total by 200.8 ICP									
Chromium	1.23	0.220	0.500	ug/L	1	1205151	"	02/01/2012	
Chromium, Trivalent									
Chromium, Trivalent	ND	25.0	25.0	ug/L	1	1206014	02/01/2012	02/01/2012	
Copper, Potentially Dissolved by 200.8 ICP									
Copper	5.36	0.300	1.25	ug/L	1	1205151	02/01/2012	02/01/2012	
Copper, Total by 200.8 ICP									
Copper	3.07	1.90	10.0	ug/L	1	1205151	"	02/01/2012	J
Iron, Potentially Dissolved by 200.7 ICP									
Iron	ND	40.3	60.0	ug/L	1	1205144	02/01/2012	02/02/2012	
Iron, Total by 200.7 ICP									
Iron	43.9	40.3	60.0	ug/L	1	1205140	02/01/2012	02/02/2012	J, B
Lead, Potentially Dissolved by 200.8 ICP									
Lead	24.1	0.400	2.00	ug/L	1	1205151	02/01/2012	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

South Discharge
1/30/2012 8:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-01 (Water)									
Lead, Total by 200.8 ICP									
Lead	18.0	0.400	2.00	ug/L	1	1205151	"	02/01/2012	
Manganese, Potentially Dissolved by 200.8 ICP									
Manganese	68.9	0.260	0.750	ug/L	1	1205151	"	02/01/2012	
Manganese, Total by 200.8 ICP									
Manganese	69.8	0.260	0.750	ug/L	1	1205151	"	02/01/2012	
Mercury, Potentially Dissolved by 245.1 CV AA									
Mercury	ND	0.500	0.500	ug/L	1	1207134	02/09/2012	02/09/2012	
Mercury, Total by 245.1 Cold Vapor AA									
Mercury	ND	0.500	0.500	ug/L	1	1207134	"	02/09/2012	
Molybdenum, Potentially Dissolved by 200.8									
Molybdenum	4.79	0.460	0.750	ug/L	1	1205151	02/01/2012	02/01/2012	
Molybdenum, Total by 200.8 ICP-MS									
Molybdenum	4.97	0.460	0.750	ug/L	1	1205151	"	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

South Discharge
1/30/2012 8:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-01 (Water)									
Nickel, Potentially Dissolved by 200.8 ICP									
Nickel	7.08	0.260	2.00	ug/L	1	1205151	"	02/01/2012	
Nickel, Total by 200.8 ICP									
Nickel	6.36	0.260	2.00	ug/L	1	1205151	"	02/01/2012	
pH (SM 4500-H,B)									
pH	7.8		0.0	pH Units	1	1205147	02/01/2012	02/01/2012	Z
Phos, Total									
Phosphorus, Total (as P)	ND	0.00620	0.0500	mg/L	"	1206007	02/06/2012	02/06/2012	
Selenium, Potentially Dissolved by 200.8 ICP									
Selenium	7.26	3.80	5.00	ug/L	1	1205151	02/01/2012	02/01/2012	
Selenium, Total by 200.8 ICP									
Selenium	7.70	3.80	5.00	ug/L	1	1205151	"	02/01/2012	
Silver, Potentially Dissolved by 200.8									
Silver	ND	0.270	0.500	ug/L	1	1205151	"	02/01/2012	S1

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

South Discharge
1/30/2012 8:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-01 (Water)									
Silver, Total by 200.8									
Silver	ND	0.270	0.500	ug/L	1	1205151	"	02/01/2012	S1
Solids, Total Suspended (SM 2540D)									
Total Suspended Solids	ND		4.0	mg/L	1	1206004	02/06/2012	02/06/2012	
Thallium, Potentially Dissolved by 200.8 ICP									
Thallium	16.8	0.290	2.00	ug/L	1	1205151	02/01/2012	02/01/2012	
Thallium, Total by 200.8 ICP									
Thallium	ND	0.290	2.00	ug/L	1	1205151	"	02/01/2012	
Uranium, Potentially Dissolved by 200.8 ICP									
Uranium	ND	1.00	1.00	ug/L	1	1207134	02/13/2012	02/13/2012	
Uranium, Total by 200.8 ICP									
Uranium	ND	1.00	1.00	ug/L	1	1207134	02/13/2012	02/13/2012	
Zinc, Potentially Dissolved by 200.8 ICP									
Zinc	34.7	1.20	2.00	ug/L	1	1205151	02/01/2012	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

South Discharge
1/30/2012 8:35:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

Microbac Laboratories, Inc.

X201120-01 (Water)

Zinc, Total by 200.8 ICP

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Zinc	26.5	1.20	2.00	ug/L	1	1205151	"	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

North Discharge
1/30/2012 8:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-02 (Water)									
Aluminum, Potentially Dissolved by 200.7 ICP									
Aluminum	42.4	12.8	50.0	ug/L	1	1205144	02/01/2012	02/02/2012	J
Aluminum, Total by 200.7 ICP									
Aluminum	18.2	12.8	50.0	ug/L	1	1205140	02/01/2012	02/02/2012	J, B
Antimony, Potentially Dissolved by 200.8 ICP									
Antimony	ND	0.500	2.50	ug/L	1	1205151	02/01/2012	02/03/2012	S1
Antimony, Total by 200.8 ICP									
Antimony	ND	0.500	2.50	ug/L	1	1205151	"	02/03/2012	S1
Arsenic, Potentially Dissolved by 200.8 ICP									
Arsenic	3.08	1.00	2.50	ug/L	1	1205151	"	02/01/2012	
Arsenic, Total by 200.8 ICP									
Arsenic	2.44	1.00	2.50	ug/L	1	1205151	"	02/01/2012	J
Barium, Potentially Dissolved by 200.8 ICP									
Barium	123	2.30	20.0	ug/L	1	1205151	"	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

North Discharge
1/30/2012 8:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-02 (Water)									
Barium, Total by 200.8 ICP									
Barium	136	2.30	20.0	ug/L	1	1205151	"	02/01/2012	
Beryllium, Potentially Dissolved by 200.8 ICP									
Beryllium	ND	0.0780	0.500	ug/L	1	1205151	"	02/01/2012	
Beryllium, Total by 200.8 ICP									
Beryllium	ND	0.0780	0.500	ug/L	1	1205151	"	02/01/2012	
Cadmium, Potentially Dissolved by 200.8 ICP									
Cadmium	ND	0.240	0.500	ug/L	1	1205151	"	02/01/2012	
Cadmium, Total by 200.8 ICP									
Cadmium	ND	0.240	0.500	ug/L	1	1205151	"	02/01/2012	
Chromium, Hexavalent (SM 3500-Cr D.)									
Hexavalent Chromium	ND	5.30	25.0	ug/L	1	1205216	01/31/2012	01/31/2012	H
Chromium, Potentially Dissolved by 200.8 ICP									
Chromium	1.22	0.220	0.500	ug/L	1	1205151	02/01/2012	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

North Discharge
1/30/2012 8:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-02 (Water)									
Chromium, Total by 200.8 ICP									
Chromium	1.51	0.220	0.500	ug/L	1	1205151	"	02/01/2012	
Chromium, Trivalent									
Chromium, Trivalent	ND	25.0	25.0	ug/L	1	1206014	02/01/2012	02/01/2012	
Copper, Potentially Dissolved by 200.8 ICP									
Copper	3.62	0.300	1.25	ug/L	1	1205151	02/01/2012	02/01/2012	
Copper, Total by 200.8 ICP									
Copper	ND	1.90	10.0	ug/L	1	1205151	"	02/01/2012	
Iron, Potentially Dissolved by 200.7 ICP									
Iron	428	40.3	60.0	ug/L	1	1205144	02/01/2012	02/02/2012	
Iron, Total by 200.7 ICP									
Iron	486	40.3	60.0	ug/L	1	1205140	02/01/2012	02/02/2012	B
Lead, Potentially Dissolved by 200.8 ICP									
Lead	7.48	0.400	2.00	ug/L	1	1205151	02/01/2012	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

North Discharge
1/30/2012 8:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

Microbac Laboratories, Inc.

X201120-02 (Water)

Lead, Total by 200.8 ICP

Lead	ND	0.400	2.00	ug/L	1	1205151	"	02/01/2012

Manganese, Potentially Dissolved by 200.8 ICP

Manganese	769	0.260	0.750	ug/L	1	1205151	"	02/01/2012

Manganese, Total by 200.8 ICP

Manganese	818	0.260	0.750	ug/L	1	1205151	"	02/01/2012

Mercury, Potentially Dissolved by 245.1 CV AA

Mercury	ND	0.500	0.500	ug/L	1	1207134	02/09/2012	02/09/2012

Mercury, Total by 245.1 Cold Vapor AA

Mercury	ND	0.500	0.500	ug/L	1	1207134	"	02/09/2012

Molybdenum, Potentially Dissolved by 200.8

Molybdenum	12.7	0.460	0.750	ug/L	1	1205151	02/01/2012	02/01/2012

Molybdenum, Total by 200.8 ICP-MS

Molybdenum	13.8	0.460	0.750	ug/L	1	1205151	"	02/01/2012

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

North Discharge
1/30/2012 8:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-02 (Water)									
Nickel, Potentially Dissolved by 200.8 ICP									
Nickel	3.93	0.260	2.00	ug/L	1	1205151	"	02/01/2012	
Nickel, Total by 200.8 ICP									
Nickel	4.17	0.260	2.00	ug/L	1	1205151	"	02/01/2012	
pH (SM 4500-H,B)									
pH	7.6		0.0	pH Units	1	1205147	02/01/2012	02/01/2012	Z
Phos, Total									
Phosphorus, Total (as P)	ND	0.00620	0.0500	mg/L	"	1206007	02/06/2012	02/06/2012	
Selenium, Potentially Dissolved by 200.8 ICP									
Selenium	12.9	3.80	5.00	ug/L	1	1205151	02/01/2012	02/01/2012	
Selenium, Total by 200.8 ICP									
Selenium	14.9	3.80	5.00	ug/L	1	1205151	"	02/01/2012	
Silver, Potentially Dissolved by 200.8									
Silver	ND	0.270	0.500	ug/L	1	1205151	"	02/01/2012	S1

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

North Discharge
1/30/2012 8:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Microbac Laboratories, Inc.									
X201120-02 (Water)									
Silver, Total by 200.8									
Silver	ND	0.270	0.500	ug/L	1	1205151	"	02/01/2012	S1
Solids, Total Suspended (SM 2540D)									
Total Suspended Solids	ND		4.0	mg/L	1	1206004	02/06/2012	02/06/2012	
Thallium, Potentially Dissolved by 200.8 ICP									
Thallium	5.54	0.290	2.00	ug/L	1	1205151	02/01/2012	02/01/2012	
Thallium, Total by 200.8 ICP									
Thallium	0.604	0.290	2.00	ug/L	1	1205151	"	02/01/2012	J
Uranium, Potentially Dissolved by 200.8 ICP									
Uranium	ND	1.00	1.00	ug/L	1	1207134	02/13/2012	02/13/2012	
Uranium, Total by 200.8 ICP									
Uranium	ND	1.00	1.00	ug/L	1	1207134	02/13/2012	02/13/2012	
Zinc, Potentially Dissolved by 200.8 ICP									
Zinc	4.85	1.20	2.00	ug/L	1	1205151	02/01/2012	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

North Discharge
1/30/2012 8:45:00AM

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes

Microbac Laboratories, Inc.

X201120-02 (Water)

Zinc, Total by 200.8 ICP

Analyte	Result	Min Detection Limit	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Notes
Zinc	ND	1.20	2.00	ug/L	1	1205151	"	02/01/2012	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Wet Chemistry - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205147 - WetChem_pH_Prep										
Duplicate (1205147-DUP1)		Source: X201120-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
pH	7.9	0.0	pH Units		7.8			0.762	20	
Duplicate (1205147-DUP2)		Source: X201120-02			Prepared: 02/01/2012 Analyzed: 02/01/2012					
pH	7.6	0.0	pH Units		7.6			0.393	20	
Duplicate (1205147-DUP3)		Source: 1201701-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
pH	6.9	0.0	pH Units		7.0			0.288	20	
Duplicate (1205147-DUP4)		Source: 1201701-02			Prepared: 02/01/2012 Analyzed: 02/01/2012					
pH	8.4	0.0	pH Units		8.3			0.957	20	
Reference (1205147-SRM1)					Prepared: 02/01/2012 Analyzed: 02/01/2012					
pH	7.3	0.0	pH Units	7.13		102	97.2-103			
Batch 1205216 - CR+6_Prep										
Blank (1205216-BLK1)					Prepared: 01/31/2012 Analyzed: 01/31/2012					
Hexavalent Chromium	ND	25.0	ug/L							
Blank (1205216-BLK2)					Prepared: 01/31/2012 Analyzed: 01/31/2012					
Hexavalent Chromium	ND	25.0	ug/L							
LCS (1205216-BS1)					Prepared: 01/31/2012 Analyzed: 01/31/2012					
Hexavalent Chromium	50.5	25.0	ug/L	50.0		101	90-110			
LCS (1205216-BS2)					Prepared: 01/31/2012 Analyzed: 01/31/2012					
Hexavalent Chromium	48.1	25.0	ug/L	50.0		96.2	90-110			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Wet Chemistry - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205216 - CR+6_Prep										
Matrix Spike (1205216-MS1)		Source: X201120-02			Prepared: 01/31/2012 Analyzed: 01/31/2012					
Hexavalent Chromium	54.8	27.8	ug/L	55.6	ND	98.6	80-120			
Batch 1206004 - WetChem_S										
Blank (1206004-BLK1)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Total Suspended Solids	ND	4.0	mg/L							
LCS (1206004-BS1)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Total Suspended Solids	100	4.0	mg/L	100		100	90-110			
LCS (1206004-BS2)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Total Suspended Solids	104	4.0	mg/L	100		104	90-110			
Duplicate (1206004-DUP1)		Source: 1201688-01			Prepared: 02/06/2012 Analyzed: 02/06/2012					
Total Suspended Solids	1.60	4.0	mg/L		1.60			0.00	5	
Duplicate (1206004-DUP2)		Source: 1201735-01			Prepared: 02/06/2012 Analyzed: 02/06/2012					
Total Suspended Solids	110	4.0	mg/L		104			5.61	5	
Duplicate (1206004-DUP3)		Source: 1201826-01			Prepared: 02/06/2012 Analyzed: 02/06/2012					
Total Suspended Solids	10.0	4.0	mg/L		9.00			10.5	5	
Batch 1206007 - WetChem_TP_Prep										
Blank (1206007-BLK1)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	ND	0.0500	mg/L							

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Wet Chemistry - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1206007 - WetChem_TP_Prep										
Blank (1206007-BLK2)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	ND	0.0500	mg/L							
Blank (1206007-BLK3)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	ND	0.0500	mg/L							
LCS (1206007-BS1)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	0.970	0.0500	mg/L	1.00		97.0	90-110			
LCS (1206007-BS2)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	0.974	0.0500	mg/L	1.00		97.4	90-110			
LCS (1206007-BS3)					Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	0.970	0.0500	mg/L	1.00		97.0	90-110			
Matrix Spike (1206007-MS1)		Source: 1201561-01			Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	4.06	0.417	mg/L	3.33	0.870	95.7	80-120			
Matrix Spike (1206007-MS2)		Source: 1201959-01			Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	0.420	0.0500	mg/L	0.400	ND	105	80-120			
Matrix Spike Dup (1206007-MSD1)		Source: 1201561-01			Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	4.16	0.417	mg/L	3.33	0.870	98.7	80-120	2.43	20	
Matrix Spike Dup (1206007-MSD2)		Source: 1201959-01			Prepared: 02/06/2012 Analyzed: 02/06/2012					
Phosphorus, Total (as P)	0.418	0.0500	mg/L	0.400	ND	105	80-120	0.429	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals, Potentially Dissolved by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205144 - Metals_Prep										
Blank (1205144-BLK1)					Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	ND	50.0	ug/L							
Iron	ND	60.0	"							
LCS (1205144-BS1)					Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	198	50.0	ug/L	200		99.0	85-115			
Iron	196	60.0	"	200		97.8	85-115			
LCS Dup (1205144-BSD1)					Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	204	50.0	ug/L	200		102	85-115	3.18	20	
Iron	198	60.0	"	200		99.0	85-115	1.17	20	
Batch 1205151 - Metals_Prep										
Blank (1205151-BLK1)					Prepared: 02/01/2012 Analyzed: 02/06/2012					
Silver	ND	0.500	ug/L							
Antimony	ND	2.50	"							
Arsenic	ND	2.50	"							
Barium	ND	20.0	"							
Beryllium	ND	0.500	"							
Cadmium	ND	0.500	"							
Chromium	ND	0.500	"							
Copper	ND	1.25	"							
Lead	ND	2.00	"							
Manganese	ND	0.750	"							
Molybdenum	ND	0.750	"							
Nickel	ND	2.00	"							
Selenium	ND	5.00	"							

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals, Potentially Dissolved by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
Blank (1205151-BLK1)					Prepared: 02/01/2012 Analyzed: 02/06/2012					
Thallium	ND	2.00	ug/L							
Zinc	ND	2.00	"							
LCS (1205151-BS1)					Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	97.4	2.55	ug/L	51.0		191	85-115			S1
Arsenic	57.9	2.55	"	51.0		113	85-115			
Barium	50.5	20.4	"	51.0		98.9	85-115			
Beryllium	53.9	0.510	"	51.0		106	85-115			
Cadmium	59.5	0.510	"	51.0		117	85-115			
Chromium	63.6	0.510	"	51.0		125	85-115			
Copper	50.9	1.28	"	51.0		99.7	85-115			
Lead	54.4	2.04	"	51.0		107	85-115			
Manganese	64.0	0.765	"	51.0		125	85-115			
Molybdenum	67.3	0.765	"	51.0		132	85-115			
Nickel	66.1	2.04	"	51.0		130	85-115			
Selenium	55.4	5.10	"	51.0		109	85-115			
Thallium	53.8	2.04	"	51.0		105	85-115			
Zinc	54.7	2.04	"	51.0		107	85-115			
LCS Dup (1205151-BSD1)					Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	98.3	2.55	ug/L	51.0		193	85-115	0.910	20	S1
Arsenic	57.5	2.55	"	51.0		113	85-115	0.694	20	
Barium	51.0	20.4	"	51.0		100	85-115	1.12	20	
Beryllium	54.8	0.510	"	51.0		107	85-115	1.61	20	
Cadmium	60.1	0.510	"	51.0		118	85-115	1.04	20	
Chromium	64.1	0.510	"	51.0		126	85-115	0.721	20	
Copper	50.9	1.28	"	51.0		99.8	85-115	0.0964	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals, Potentially Dissolved by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
LCS Dup (1205151-BSD1)					Prepared: 02/01/2012 Analyzed: 02/01/2012					
Lead	57.3	2.04	ug/L	51.0		112	85-115	5.18	20	
Manganese	64.9	0.765	"	51.0		127	85-115	1.38	20	
Molybdenum	70.7	0.765	"	51.0		139	85-115	4.91	20	
Nickel	66.4	2.04	"	51.0		130	85-115	0.418	20	
Selenium	55.8	5.10	"	51.0		109	85-115	0.671	20	
Thallium	55.0	2.04	"	51.0		108	85-115	2.34	20	
Zinc	55.7	2.04	"	51.0		109	85-115	1.74	20	
Matrix Spike (1205151-MS1)		Source: 1201623-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	95.1	2.55	ug/L	51.0	ND	186	80-120			
Arsenic	57.9	2.55	"	51.0	2.54	108	80-120			
Barium	51.1	20.4	"	51.0	ND	100	80-120			
Beryllium	48.5	0.510	"	51.0	ND	95.1	80-120			
Cadmium	55.9	0.510	"	51.0	ND	110	80-120			
Chromium	61.0	0.510	"	51.0	ND	120	80-120			
Copper	110	1.28	"	51.0	62.4	92.9	80-120			
Lead	53.7	2.04	"	51.0	0.673	104	80-120			
Manganese	66.1	0.765	"	51.0	4.69	120	80-120			
Molybdenum	69.7	0.765	"	51.0	ND	137	80-120			
Nickel	62.8	2.04	"	51.0	ND	123	80-120			
Selenium	50.4	5.10	"	51.0	ND	98.8	80-120			
Thallium	53.1	2.04	"	51.0	ND	104	80-120			
Zinc	60.3	2.04	"	51.0	5.21	108	80-120			
Matrix Spike (1205151-MS2)		Source: 1201603-05			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	96.3	2.55	ug/L	51.0	ND	189	80-120			
Arsenic	60.1	2.55	"	51.0	3.41	111	80-120			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals, Potentially Dissolved by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
Matrix Spike (1205151-MS2)		Source: 1201603-05			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Barium	74.2	20.4	ug/L	51.0	24.0	98.5	80-120			
Beryllium	49.3	0.510	"	51.0	ND	96.6	80-120			
Cadmium	56.3	0.510	"	51.0	1.80	107	80-120			
Chromium	63.0	0.510	"	51.0	1.04	121	80-120			
Copper	115	1.28	"	51.0	69.2	88.9	80-120			
Lead	56.9	2.04	"	51.0	5.26	101	80-120			
Manganese	112	0.765	"	51.0	53.7	114	80-120			
Molybdenum	75.0	0.765	"	51.0	2.94	141	80-120			
Nickel	71.8	2.04	"	51.0	7.89	125	80-120			
Selenium	69.6	5.10	"	51.0	14.8	107	80-120			
Thallium	56.2	2.04	"	51.0	1.37	107	80-120			
Zinc	271	2.04	"	51.0	209	121	80-120			
Matrix Spike Dup (1205151-MSD1)		Source: 1201623-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	93.3	2.55	ug/L	51.0	ND	183	80-120	1.98	20	
Arsenic	57.9	2.55	"	51.0	2.54	109	80-120	0.0468	20	
Barium	51.5	20.4	"	51.0	ND	101	80-120	0.793	20	
Beryllium	48.2	0.510	"	51.0	ND	94.5	80-120	0.670	20	
Cadmium	55.9	0.510	"	51.0	ND	110	80-120	0.0687	20	
Chromium	61.1	0.510	"	51.0	ND	120	80-120	0.108	20	
Copper	111	1.28	"	51.0	62.4	95.2	80-120	1.04	20	
Lead	61.7	2.04	"	51.0	0.673	120	80-120	13.8	20	
Manganese	65.2	0.765	"	51.0	4.69	119	80-120	1.46	20	
Molybdenum	70.6	0.765	"	51.0	ND	138	80-120	1.22	20	
Nickel	62.2	2.04	"	51.0	ND	122	80-120	0.927	20	
Selenium	51.6	5.10	"	51.0	ND	101	80-120	2.26	20	
Thallium	53.6	2.04	"	51.0	ND	105	80-120	0.980	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals, Potentially Dissolved by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
Matrix Spike Dup (1205151-MSD1)		Source: 1201623-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Zinc	56.7	2.04	ug/L	51.0	5.21	101	80-120	6.19	20	
Matrix Spike Dup (1205151-MSD2)		Source: 1201603-05			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	97.1	2.55	ug/L	51.0	ND	190	80-120	0.855	20	
Arsenic	60.6	2.55	"	51.0	3.41	112	80-120	0.890	20	
Barium	75.7	20.4	"	51.0	24.0	101	80-120	1.97	20	
Beryllium	50.9	0.510	"	51.0	ND	99.8	80-120	3.29	20	
Cadmium	56.9	0.510	"	51.0	1.80	108	80-120	1.13	20	
Chromium	62.5	0.510	"	51.0	1.04	120	80-120	0.814	20	
Copper	117	1.28	"	51.0	69.2	94.3	80-120	2.37	20	
Lead	55.5	2.04	"	51.0	5.26	98.4	80-120	2.57	20	
Manganese	113	0.765	"	51.0	53.7	116	80-120	1.02	20	
Molybdenum	75.5	0.765	"	51.0	2.94	142	80-120	0.659	20	
Nickel	71.8	2.04	"	51.0	7.89	125	80-120	0.0172	20	
Selenium	69.8	5.10	"	51.0	14.8	108	80-120	0.243	20	
Thallium	56.3	2.04	"	51.0	1.37	108	80-120	0.266	20	
Zinc	245	2.04	"	51.0	209	69.2	80-120	10.3	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205140 - Metals_Prep										
Blank (1205140-BLK1)					Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	22.4	50.0	ug/L							J
Iron	44.1	60.0	"							J
LCS (1205140-BS1)					Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	217	50.0	ug/L	200		109	85-115			B
Iron	227	60.0	"	200		114	85-115			B
LCS Dup (1205140-BSD1)					Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	231	50.0	ug/L	200		115	85-115	6.07	20	B
Iron	230	60.0	"	200		115	85-115	1.10	20	B
Matrix Spike (1205140-MS1)		Source: 1201390-01			Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	240	50.0	ug/L	200	28.4	106	80-120			B
Iron	3440	60.0	"	200	2970	236	80-120			N, B
Matrix Spike (1205140-MS2)		Source: 1201539-03			Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	529	50.0	ug/L	200	224	152	80-120			N, B
Iron	384	60.0	"	200	128	128	80-120			N, B
Matrix Spike Dup (1205140-MSD1)		Source: 1201390-01			Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	232	50.0	ug/L	200	28.4	102	80-120	3.56	20	B
Iron	3730	60.0	"	200	2970	380	80-120	8.02	20	N, B
Matrix Spike Dup (1205140-MSD2)		Source: 1201539-03			Prepared: 02/01/2012 Analyzed: 02/02/2012					
Aluminum	496	50.0	ug/L	200	224	136	80-120	6.42	20	N, B
Iron	362	60.0	"	200	128	117	80-120	5.98	20	N, B

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
Blank (1205151-BLK1)					Prepared: 02/01/2012 Analyzed: 02/06/2012					
Silver	ND	0.500	ug/L							
Antimony	ND	2.50	"							
Arsenic	ND	2.50	"							
Barium	ND	20.0	"							
Beryllium	ND	0.500	"							
Cadmium	ND	0.500	"							
Chromium	ND	0.500	"							
Copper	ND	10.0	"							
Lead	ND	2.00	"							
Manganese	ND	0.750	"							
Molybdenum	ND	0.750	"							
Nickel	ND	2.00	"							
Selenium	ND	5.00	"							
Thallium	ND	2.00	"							
Zinc	ND	2.00	"							
LCS (1205151-BS1)					Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	97.4	2.55	ug/L	51.0		191	85-115			S1
Arsenic	57.9	2.55	"	51.0		113	85-115			
Barium	50.5	20.4	"	51.0		98.9	85-115			
Beryllium	53.9	0.510	"	51.0		106	85-115			
Cadmium	59.5	0.510	"	51.0		117	85-115			
Chromium	63.6	0.510	"	51.0		125	85-115			
Copper	50.9	10.2	"	51.0		99.7	85-115			
Lead	54.4	2.04	"	51.0		107	85-115			
Manganese	64.0	0.765	"	51.0		125	85-115			
Molybdenum	67.3	0.765	"	51.0		132	85-115			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
LCS (1205151-BS1)					Prepared: 02/01/2012 Analyzed: 02/01/2012					
Nickel	66.1	2.04	ug/L	51.0		130	85-115			
Selenium	55.4	5.00	"	51.0		109	85-115			
Thallium	53.8	2.04	"	51.0		105	85-115			
Zinc	54.7	2.04	"	51.0		107	85-115			
LCS Dup (1205151-BSD1)					Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	98.3	2.55	ug/L	51.0		193	85-115	0.910	20	S1
Arsenic	57.5	2.55	"	51.0		113	85-115	0.694	20	
Barium	51.0	20.4	"	51.0		100	85-115	1.12	20	
Beryllium	54.8	0.510	"	51.0		107	85-115	1.61	20	
Cadmium	60.1	0.510	"	51.0		118	85-115	1.04	20	
Chromium	64.1	0.510	"	51.0		126	85-115	0.721	20	
Copper	50.9	10.2	"	51.0		99.8	85-115	0.0964	20	
Lead	57.3	2.04	"	51.0		112	85-115	5.18	20	
Manganese	64.9	0.765	"	51.0		127	85-115	1.38	20	
Molybdenum	70.7	0.765	"	51.0		139	85-115	4.91	20	
Nickel	66.4	2.04	"	51.0		130	85-115	0.418	20	
Selenium	55.8	5.00	"	51.0		109	85-115	0.671	20	
Thallium	55.0	2.04	"	51.0		108	85-115	2.34	20	
Zinc	55.7	2.04	"	51.0		109	85-115	1.74	20	
Matrix Spike (1205151-MS1)		Source: 1201623-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	95.1	2.55	ug/L	51.0	ND	186	80-120			
Arsenic	57.9	2.55	"	51.0	2.54	108	80-120			
Barium	51.1	20.4	"	51.0	ND	100	80-120			
Beryllium	48.5	0.510	"	51.0	ND	95.1	80-120			
Cadmium	55.9	0.510	"	51.0	ND	110	80-120			

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
Matrix Spike (1205151-MS1)		Source: 1201623-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Chromium	61.0	0.510	ug/L	51.0	ND	120	80-120			
Copper	110	10.2	"	51.0	62.4	92.9	80-120			
Lead	53.7	2.04	"	51.0	0.673	104	80-120			
Manganese	66.1	0.765	"	51.0	4.69	120	80-120			
Molybdenum	69.7	0.765	"	51.0	ND	137	80-120			
Nickel	62.8	2.04	"	51.0	ND	123	80-120			
Selenium	50.4	5.00	"	51.0	ND	98.8	80-120			
Thallium	53.1	2.04	"	51.0	ND	104	80-120			
Zinc	60.3	2.04	"	51.0	5.21	108	80-120			
Matrix Spike (1205151-MS2)		Source: 1201603-05			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	96.3	2.55	ug/L	51.0	ND	189	80-120			
Arsenic	60.1	2.55	"	51.0	3.41	111	80-120			
Barium	74.2	20.4	"	51.0	24.0	98.5	80-120			
Beryllium	49.3	0.510	"	51.0	ND	96.6	80-120			
Cadmium	56.3	0.510	"	51.0	1.80	107	80-120			
Chromium	63.0	0.510	"	51.0	1.04	121	80-120			
Copper	115	10.2	"	51.0	69.2	88.9	80-120			
Lead	56.9	2.04	"	51.0	5.26	101	80-120			
Manganese	112	0.765	"	51.0	53.7	114	80-120			
Molybdenum	75.0	0.765	"	51.0	2.94	141	80-120			
Nickel	71.8	2.04	"	51.0	7.89	125	80-120			
Selenium	69.6	5.00	"	51.0	14.8	107	80-120			
Thallium	56.2	2.04	"	51.0	1.37	107	80-120			
Zinc	271	2.04	"	51.0	209	121	80-120			
Matrix Spike Dup (1205151-MSD1)		Source: 1201623-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
Matrix Spike Dup (1205151-MSD1)		Source: 1201623-01			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	93.3	2.55	ug/L	51.0	ND	183	80-120	1.98	20	
Arsenic	57.9	2.55	"	51.0	2.54	109	80-120	0.0468	20	
Barium	51.5	20.4	"	51.0	ND	101	80-120	0.793	20	
Beryllium	48.2	0.510	"	51.0	ND	94.5	80-120	0.670	20	
Cadmium	55.9	0.510	"	51.0	ND	110	80-120	0.0687	20	
Chromium	61.1	0.510	"	51.0	ND	120	80-120	0.108	20	
Copper	111	10.2	"	51.0	62.4	95.2	80-120	1.04	20	
Lead	61.7	2.04	"	51.0	0.673	120	80-120	13.8	20	
Manganese	65.2	0.765	"	51.0	4.69	119	80-120	1.46	20	
Molybdenum	70.6	0.765	"	51.0	ND	138	80-120	1.22	20	
Nickel	62.2	2.04	"	51.0	ND	122	80-120	0.927	20	
Selenium	51.6	5.00	"	51.0	ND	101	80-120	2.26	20	
Thallium	53.6	2.04	"	51.0	ND	105	80-120	0.980	20	
Zinc	56.7	2.04	"	51.0	5.21	101	80-120	6.19	20	
Matrix Spike Dup (1205151-MSD2)		Source: 1201603-05			Prepared: 02/01/2012 Analyzed: 02/01/2012					
Antimony	97.1	2.55	ug/L	51.0	ND	190	80-120	0.855	20	
Arsenic	60.6	2.55	"	51.0	3.41	112	80-120	0.890	20	
Barium	75.7	20.4	"	51.0	24.0	101	80-120	1.97	20	
Beryllium	50.9	0.510	"	51.0	ND	99.8	80-120	3.29	20	
Cadmium	56.9	0.510	"	51.0	1.80	108	80-120	1.13	20	
Chromium	62.5	0.510	"	51.0	1.04	120	80-120	0.814	20	
Copper	117	10.2	"	51.0	69.2	94.3	80-120	2.37	20	
Lead	55.5	2.04	"	51.0	5.26	98.4	80-120	2.57	20	
Manganese	113	0.765	"	51.0	53.7	116	80-120	1.02	20	
Molybdenum	75.5	0.765	"	51.0	2.94	142	80-120	0.659	20	
Nickel	71.8	2.04	"	51.0	7.89	125	80-120	0.0172	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Metals by EPA 200 Series Methods - Quality Control
Microbac Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1205151 - Metals_Prep										
Matrix Spike Dup (1205151-MSD2)	Source: 1201603-05				Prepared: 02/01/2012 Analyzed: 02/01/2012					
Selenium	69.8	5.00	ug/L	51.0	14.8	108	80-120	0.243	20	
Thallium	56.3	2.04	"	51.0	1.37	108	80-120	0.266	20	
Zinc	245	2.04	"	51.0	209	69.2	80-120	10.3	20	

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Pinyon
9100 West Jewell Avenue, Suite 200
Lakewood CO 80232

Brian Partington
Project Number: 1/10-750-03.8000
Project: Twin Tunnels

Notes and Definitions

Z	The parameter is considered a field analysis with an immediate to 15 minute holding time. Laboratory analysis is confirmatory in nature and is performed outside the preferred holding time window.
S1	Spike recovery outside of recovery limits.
N	Analyte acceptable but matrix spike/matrix spike duplicate outside accepted recovery criteria.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample
H	Analyte was prepared and/or analyzed outside of the analytical method holding time
B	Detected in the associated Method Blank
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference

Origins Laboratory, Inc.

Noelle E Doyle, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reservoirs Environmental, Inc.

January 4, 2012

Laboratory Code:	**RES**
Subcontract Number:	**NA**
Laboratory Report:	**RES 227084-1**
Project # / PO #:	**1/11-750-02.8000**
Project Description:	**Twin Tunnel**

Pinyon Environmental Engineering
9100 West Jewell Ave. Suite 200
Lakewood CO 80232-6357

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association, Lab ID 101533 - Accreditation Certificate #480. The laboratory is currently proficient in both PAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy - Inductively Coupled Plasma (AES-ICP) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

RES 227084-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those authorized by the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you should have any questions about this report, please feel free to call me at 303-964-1986.

Sincerely,

Jeanne Spencer Orr
President

RESERVOIRS ENVIRONMENTAL, INC.

5801 Logan St., Suite 100
Denver CO 80216

TABLE ANALYSIS: LEAD IN PAINT

RES Job Number:	**RES 227084-1**
Client:	**Pinyon Environmental Engineering**
Client Project Number / P.O.:	**1/11-750-02.8000**
Client Project Description:	**Twin Tunnel**
Date Samples Received:	**January 4, 2012**
Analysis Type:	**USEPA SW846 3050B / AA (7420)**
Turnaround:	**3-5 Day**
Date Samples Analyzed:	**January 4, 2012**

Client ID Number	Lab ID Number	Reporting Limit (%)	LEAD CONCENTRATION (%)
#1 - Dog House Bridge	EM 844525	0.002	0.007
#2 - Hidden Valley Bridge	EM 844526	0.005	0.133

*** Unless otherwise noted all quality control samples performed within specifications established by the laboratory.**

Digitally signed by Gina Vettraino
Date: 2012.01.04 13:02:46 -07'00'

BRL = Below Reporting Limit

Data Qa

RES 227084

Due Date: 1/9 - 1/11
Due Time: AM

REI LAB Reservoirs Environmental, Inc.

5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free :866 RESI-ENV

After Hours Cell Phone: 720-339-9228

Job #_____
Page 1 of 1

INVOICE TO: (IF DIFFERENT)

Company: Pinyon Environmental, Inc.	Company:
Address: 9100 Wright Jewell Ave, Ste	Address:
Lakewood CO 80120	
Project Number and/or P.O. #: 1/11-750-02.8000	
Project Description/Location: Twin Tunnels	

CONTACT INFORMATION:

Contact: Brian Partington	Contact:
Phone: 303-980-5200	Phone:
Fax: 303-980-0089	Fax:
Cell/pager:	Cell/pager:
Final Data Deliverable Email Address: partington@pinyon-env.com	

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm

PLM / PCM / TEM ___ RUSH (Same Day) ___ PRIORITY (Next Day) ___STANDARD
(Rush PCM = 2hr, TEM = 6hr.)

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Metal(s) / Dust ___ RUSH ___ 24 hr. X 3-5 Day
RCRA 8 / Metals & Welding
Fume Scan / TCLP ___ RUSH ___ 5 day ___10 day
Organics ___ 24 hr. ___ 3 day ___5 Day

Prior notification is required for RUSH turnarounds.

MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm

E.coli O157:H7, Coliforms, S.aureus ___ 24 hr. ___2 Day ___3-5 Day
Salmonella, Listeria, E.coli, APC, Y & M ___ 48 Hr. ___3-5 Day
Mold ___ RUSH ___24 Hr ___48 Hr ___3 Day ___5 Day

Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.

Special Instructions:

REQUESTED ANALYSIS

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO, +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) Lead	RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - METH	MICROBIOLOGY: Salmonella: +/-	E.coli O157:H7: +/-	Listeria: +/-	Aerobic Plate Count: +/- or Quantification	E.coli: +/- or Quantification	Coliforms: +/- or Quantification	S.aureus: +/- or Quantification	Y & M: +/- or Quantification	Mold: +/-, Identification, Quantification	SAMPLER'S INITIALS OR OTHER NOTES	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
1 Dog Haus Bridge					X												MP					844525
2 Hidden Valley Bridge						X											MP					26
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

ASTM E1792 approved wipe media only

LAB NOTES:

Number of samples received: 2 (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: Shannon Stein Date/Time: 1-4-12 0930

Laboratory Use Only
Received By: Date/Time: 1/4/12 9:30 AM Carrier: Hand

Sample Condition: On Ice Yes / No Sealed Yes / No Intact Yes / No
Temp. (F°) _____

Results:	Contact	Phone Email Fax	Date	Time	Initials	Contact	Phone Email Fax	Date	Time	Initials
	Contact	Phone Email Fax	Date	Time	Initials	Contact	Phone Email Fax	Date	Time	Initials

Reservoirs Environmental, Inc.

February 15, 2012

Laboratory Code:	**RES**
Subcontract Number:	**NA**
Laboratory Report:	**RES 229720-1**
Project # / PO #:	**1/11-750-02.8000**
Project Description:	**Twin Tunnels**

Pinyon Environmental Engineering
9100 West Jewell Ave. Suite 200
Lakewood CO 80232-6357

Dear Customer,

Reservoirs Environmental, Inc. is an analytical laboratory accredited for the analysis of Industrial Hygiene and Environmental matrices by the American Industrial Hygiene Association, Lab ID 101533 - Accreditation Certificate #480. The laboratory is currently proficient in both PAT & ELPAT programs respectively.

Reservoirs has analyzed the following sample(s) using Atomic Absorption Spectroscopy (AAS) / Atomic Emission Spectroscopy - Inductively Coupled Plasma (AES-ICP) per your request. Reported sample results were not blank corrected. The analysis has been completed in general accordance with the appropriate methodology as stated in the analysis table. Results have been sent to your office.

RES 229720-1 is the job number assigned to this study. This report is considered highly confidential and the sole property of the customer. Reservoirs Environmental, Inc. will not discuss any part of this study with personnel other than those authorized by the client. The results described in this report only apply to the samples analyzed. This report shall not be reproduced except in full, without written approval from Reservoirs Environmental, Inc. Samples will be disposed of after sixty days unless longer storage is requested. If you should have any questions about this report, please feel free to call me at 303-964-1986.

Sincerely,

Jeanne Spencer Orr
President

RESERVOIRS ENVIRONMENTAL, INC.

5801 Logan St., Suite 100
Denver CO 80216

TABLE ANALYSIS: LEAD IN PAINT

RES Job Number:	**RES 229720-1**
Client:	**Pinyon Environmental Engineering**
Client Project Number / P.O.:	**1/11-750-02.8000**
Client Project Description:	**Twin Tunnels**
Date Samples Received:	**February 14, 2012**
Analysis Type:	**USEPA SW846 3050B / AA (7420)**
Turnaround:	**3-5 Day**
Date Samples Analyzed:	**February 14, 2012**

Client ID Number	Lab ID Number	Reporting Limit (%)	LEAD CONCENTRATION (%)
#1 Dog House Bridge - Black Paint	EM 864044	0.002	54.44

*** Unless otherwise noted all quality control samples performed within specifications established by the laboratory.**

Digitally signed by Gina Vettraino
Date: 2012.02.15 11:39:08 -07'00'

Data Qa _____

RES 229720

Due Date: 2-17-221
Due Time: 1:50

Reservoirs Environmental, Inc.

REI LAB

5801 Logan St. Denver, CO 80216 • Ph: 303 964-1986 • Fax 303-477-4275 • Toll Free :866 RESI-ENV

After Hours Cell Phone: 720-339-9228

Job #_____

Page 1 of 1

INVOICE TO: (IF DIFFERENT)

Company: Pinyon Environmental, Inc
Address: 9100 W Jewell Ave, Ste 200

Company:
Address:

Project Number and/or P.O. #: 111-750-02.8000
Project Description/Location: Twin Tunnels

CONTACT INFORMATION:

Contact: Brian Partington
Phone: 303-980-5200
Fax: 303-980-0089
Cell/pager:

Contact:
Phone:
Fax:
Cell/pager:

Final Data Deliverable Email Address: partingtone@pinyonenv.com

ASBESTOS LABORATORY HOURS: Weekdays: 7am - 7pm

PLM / PCM / TEM ___ RUSH (Same Day) ___ PRIORITY (Next Day) ___STANDARD
(Rush PCM = 2hr, TEM = 6hr.)

CHEMISTRY LABORATORY HOURS: Weekdays: 8am - 5pm

Metal(s) / Dust ___ RUSH ___ 24 hr. X 3-5 Day
RCRA 8 / Metals & Welding Fume Scan / TCLP ___ RUSH ___ 5 day ___10 day
Organics ___ 24 hr. ___ 3 day ___5 Day

Prior notification is required for RUSH turnarounds.

MICROBIOLOGY LABORATORY HOURS: Weekdays: 9am - 6pm

E.coli O157:H7, Coliforms, S.aureus ___ 24 hr. ___2 Day ___3-5 Day
Salmonella, Listeria, E.coli, APC, Y & M ___ 48 Hr. ___3-5 Day
Mold ___ RUSH ___24 Hr ___48 Hr ___3 Day ___5 Day

Turnaround times establish a laboratory priority, subject to laboratory volume and are not guaranteed. Additional fees apply for afterhours, weekends and holidays.

Special Instructions:

REQUESTED ANALYSIS

Client sample ID number (Sample ID's must be unique)	PLM - Short report, Long report, Point Count	TEM - AHERA, Level II, 7402, ISO +/-, Quant, Semi-quant, Micro-vac, ISO-Indirect Preps	PCM - 7400A, 7400B, OSHA	DUST - Total, Respirable	METALS - Analyte(s) Lead	RCRA 8, TCLP, Welding Fume, Metals Scan	ORGANICS - METH, TSS	MICROBIOLOGY: Salmonella: +/-	E.coli O157:H7: +/-	Listeria: +/-	Aerobic Plate Count: +/- or Quantification	E.coli: +/- or Quantification	Coliforms: +/- or Quantification	S.aureus: +/- or Quantification	Y & M: +/- or Quantification	Mold: +/-, Identification, Quantification	SAMPLER'S INITIALS OR OTHER NOTES	Sample Volume (L) / Area	Matrix Code	# Containers	Date Collected mm/dd/yy	Time Collected hh/mm a/p	EM Number (Laboratory Use Only)
1 Dog House Bridge - Black Paint					X												AP		P	1	2/14/12	12:55	86404
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							

VALID MATRIX CODES

Air = A	Bulk = B
Dust = D	Paint = P
Soil = S	Wipe = W
Swab = SW	F = Food
Drinking Water = DW	Waste Water = WW
O = Other	

ASTM E1792 approved wipe media only

LAB NOTES:

Number of samples received: 1 (Additional samples shall be listed on attached long form.)

NOTE: REI will analyze incoming samples based upon information received and will not be responsible for errors or omissions in calculations resulting from the inaccuracy of original data. By signing client/company representative agrees that submission of the following samples for requested analysis as indicated on this Chain of Custody shall constitute an analytical services agreement with payment terms of NET 30 days, failure to comply with payment terms may result in a 1.5% monthly interest surcharge.

Relinquished By: _____ Date/Time: 2/14/12 13:46

Laboratory Use Only
Received By: _____ Date/Time: 2-14-12 1:50 Carrier: HAND

Sample Condition: On Ice Yes / No | Sealed Yes / No | Intact Yes / No
Temp. (F°) _____

Results:	Contact	Phone	Email	Fax	Date	Time	Initials	Contact	Phone	Email	Fax	Date	Time	Initials
	Contact	Phone	Email	Fax	Date	Time	Initials	Contact	Phone	Email	Fax	2/15/12	Time	Initials
								Contact	Phone	Email	Fax	Date	Time	Initials