Colorado Department of Transportation

Sieve Analysis for Aggregates CP31

Atterberg Limits T89 and T90

Contract ID	Region	
Project Number:		
Project Location:		
Material Description:	Pit:	
Prime Contractor:	Item:	**Do not use this form for Item 203 - Soils or Item 206 - Structure Backfill Class 2, use Form 564 Split over the #4 - CP 21**
Sample ID SMM: / Lab Ref Number SMM:	Class: / Test No: / Test Date:	

Gradation Specimen Dry Weight (SDW): _____ **Washed Dry Weight (WDW):** _____

Sieve	Weight	Percent Retained	Percent Passing	Specs
6"				
4"				
3"				
2½"				
2"				
1½"				
1"				
¾"				
½"				
⅜"				
5/16"				
¼"				
#4				
#8				
#16				
#30				
#50				
#100				
#200				
- #200		(WDW - TSW) ÷ WDW x 100 = % Diff (Spec: ≤ 0.3%)		
Total Sieved WT (TSW):		(_____ - _____) ÷ _____ x100 = _____%		

Wet Weight ÷ (100 + MC %) x 100 = Specimen Dry Weight

Wet WT._____÷ (100 + _____) x 100 = _____ SDW

Sample Information

Sampled From: _____

Supplier Ticket No: _____

Time Sampled: _____

Station: _____

Lane: _____

Quantity Sample Represents: _____

Sampling witnessed by: _____

Sample Tested By:

Sample % Moisture and Dry Weight

Pan ID: _____

Pan Weight (g): _____ A

Pan & Sample - Wet Weight (g): _____ B

Pan & Sample - Dry Weight (g): _____ C

Sample - Wet Weight (g): _____ D=(B-A)

Sample - Dry Weight (g): _____ E=(C-A)

Moisture Loss (g): _____ F=(D-E)

Moisture Content (MC) %: _____ G=(F/E) x 100

Specimen Dry Weight: _____ **E**

If gradation sample and moisture sample are the same sample, use the dry weight (SDW) in the sieve analysis calculations.

Gradation Remarks:

If a split moisture sample is used to determine dry mass of gradation sample, use calculation to determine dry weight.

Atterberg Limits:	Liquid Limit T89	Plastic Limit T90
Tin ID:		
Mass of Tin:		
Mass of Tin + Wet Soil:		
Mass of Tin + Dry Soil:		
Moisture Content %:		
Number of Blows:		

Plasticity Index		Specifications
Liquid Limit %:		
Plastic Limit %:		
Plasticity Index:		

LL % = Moisture Content @ number of blows X multiplier

Number of Blows	Multiplier
22	0.9850
23	0.9900
24	0.9950
25	1.0000
26	1.0050
27	1.0090
28	1.0140

Place IA Stamp Here:

IA Sample ID:

Electronic Signature of IA Personnel

Sample Remarks: