Boring Log: SB-01

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 13, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 12

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Silty Gravel (GM) 101YR 3/2 Silty gravel stiff moist
2	1	0.02	85		***Silt with Gravel (ML)*** 10YR 4/3 Silt firm moist
4					
6	2	0.02	60		
8					
10	3	0.01-0.02	100		***Silt (ML)*** 10YR 4/3 Silt soft wet refusak at 12 feet bgs on basalt bedrock
12					Bottom of Boring at 12 feet
14					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

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Boring Log: SB-02

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 12.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Silty Gravel (GM) 10YR 4/3 Silty gravel stiff hard dry
2	1	0.02-0.04	90		***Silt (ML)*** 10YR 3/1 Silt hard moist
4					
6					
8	2	0.03-0.04	95		***Silt (ML)*** 10YR 5/2 to 5/4 Silt firm moist refusal at 12.5 feet bgs on weathered basalt bedrock
10	3	0.03	100		
12					
14					Bottom of Boring at 12.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

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Boring Log: SB-03

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 13.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.02-0.03	50		***Silty Gravel (GM)*** 10YR 7/3 Silty gravel loose dry
4					***Silt (ML)*** 10YR 3/2 Silt stiff moist
6 8	2	0.02	80		***Silt (ML)*** 10YR 4/3 Silt mottled firm moist refusal on weathered basalt at 13.5 feet bgs
10 12	3	0.02	100		
14					Bottom of Boring at 13.5 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

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Boring Log: SB-04

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 13

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Silty Gravel (GM) 10YR 4/2 Silty gravel hard moist
2	1	0.01-0.02	65		***Silt (ML)*** 10YR 4/4 Silt stiff moist
4					
6					***Silt (ML)*** 10YR 6/4 Silt stiff moist refusal at 13 feet bgs on basalt bedrock
8	2	0.02	65		
10					
12	3	0.02	100		
14					Bottom of Boring at 13 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

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Boring Log: SB-05

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 6, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 22.75

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.01-0.02	50		***Poorly-Graded Gravel (GP)*** 10YR 4/2 Gravel ***Silty Gravel (GM)*** 10YR 4/2 Silt and gravel firm moist
5	2	0.02	45		***Silt with Gravel (ML)*** 10YR 4/2 Silt trace of coarse gravel stiff moist
10	3	0.02	95		***Silt with Sand (ML)*** 10YR 5/3 Sandy silt very fine sand soft moist
15	4	0.02	95		***Silt (ML)*** 10YR 5/6 Silt coarse gravel at 15-16 feet bgs stiff moist
20	5	0.02-0.03	100		***Silt with Gravel (ML)*** 10YR 5/6 Silt weathered basalt fragments refusal at 22.75 feet bgs
25					Bottom of Boring at 22.75 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-06

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 6, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 19

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	70		***Silty Gravel (GM)*** 10YR 4/2 Silty gravel moist
					Silt with Sand (ML) 10YR 3/1 Sandy silt soft wet
5	2	0.02	50		***Silt (ML)*** 10YR 3/2 Silt firm moist
10	3	0.02	80		***Silt (ML)*** 10YR 5/3 Silt some clay firm moist
15	4	0.02-0.03	100		***Silt with Gravel (ML)*** 10YR 5/3 Silt with gravel coarse grained gravel firm moist refusal at 19 feet bgs on basalt bedrock
20					Bottom of Boring at 19 feet
25					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-07

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 6, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 19.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	80		***Silty Gravel with Sand (GM)*** 5YR 3/3 and 3/2 Sand, gravel, and silt fill sulfur present at 2 feet bgs loose moist
5	2	0.02	60		***Silt with Gravel (ML)*** 10YR 4/3 Silt trace gravel stiff moist
10	3	0.02	50		***Silt (ML)*** 10YR 5/4 Silt clay present 8-10 feet bgs stiff moist
15	4	0.02	90		
20					10YR 2/1 Weathered basalt fragments wet refusal at 19.5 feet bgs on baslat bedrock Bottom of Boring at 19.5 feet
25					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-08

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 4, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 21

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	30		***Poorly-Graded Sand with Gravel (SP)*** 10YR 6/3 Gravelly sand poorly sorted loose moist
5	2	0.02	60		***Silt (ML)*** 2.5YR 3/2 Silt some gravel and sand soft from 5-6.5 feet bgs stiff from 6.5-8 feet bgs moist
10	3	0.02	50		***Silty Gravel (GM)*** 2.5YR 4/4 Silty gravel dense moist No recovery
15	4	0.02	60		***Silt (ML)*** 10YR 3/2 Silt some sand and gravel encountered at 17.5 feet bgs firm moist
20	5	0.02	100		***Poorly-Graded Sand with Gravel (SP)*** 10YR 2/1 Sand weathered basalt fragments refusal at 21 feet bgs on bedrock
25					Bottom of Boring at 21 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-09

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 5, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 21

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	85		***Silty Gravel (GM)*** 10YR 4/3 and 5YR 3/4 Silty gravel loose dry
5	2	0.02	80		***Silt (ML)*** 10YR 3/2 Silt stiff moist
					Poorly-Graded Sand with Gravel (SP) 10YR 4/2 Silty sand and gravel loose dry
10	3	0.02	60		***Silt with Gravel (ML)*** 10YR 3/2 Silt some very fine sand and gravel stiff moist
15	4	0.01-0.02	60		***Silt (ML)*** 10YR 4/3 Silt stiff moist
20	5	0.02	100		
					10YR 2/1 Weathered basalt fragments
					Bottom of Boring at 21 feet
25					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-10

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 4, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 17.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	40		***Well-Graded Gravel with Sand (GW)*** 10YR 3/2 Sand and gravel loose moist
5	2	0.02	60		***Silt (ML)*** 10YR 4/2 & 4/3 Silt thin layer of fine grained sand present at 5.25-5.5 feet bgs firm moist
10	3	0.02	100		
15	4	0.02	100		***Silt with Sand (ML)*** 10YR 7/3 Silt trace of very fine sand soft wet
20					***Poorly-Graded Sand with Gravel (SP)*** 10YR 2/1 Sand weathered basalt fragments moist refusal on bedrock at 17.5 feet bgs
25					Bottom of Boring at 17.5 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-11

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 4, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 15.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	60		***Poorly-Graded Sand with Gravel (SP)*** 10YR 3/2 Sand and gravel loose dry
2					***Silt (ML)*** 10YR 3/2 Silt firm moist
4					Sulfur yellow
6	2	0.02-0.03	100		***Sandy Silt (ML)*** 10YR 5/3 Sandy silt very fine grained sand stiff moist
8					
10					
12	3	0.02-0.03	40		
14					***Sandy Silt (ML)*** 10YR 5/2 Sandy silt very fine grained sand stiff moist
	4	0.02	100		
16					10YR 2/1 Weathered basalt refusal at 15.5 feet bgs on bedrock
18					Bottom of Boring at 15.5 feet
20					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-12

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 4, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 16.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	60		***Sandy Silt (ML)*** 10YR 5/2 Sandy SIlt stiff loose dry
5	2	0.02-0.03	70		***Silt (ML)*** 10YR 4/3 Silt firm to moderately stiff moist to wet at 15 feet bgs
10	3	0.02	80		
15	4	0.02	100		***Poorly-Graded Sand with Gravel (SP)*** 10YR 2/1 Sand weathered basalt fragments loose refusal on bedrock at 16.5 feet bgs
20					Bottom of Boring at 16.5 feet
25					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-13

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 4, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 15.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.03	70		***Poorly-Graded Sand (SP)*** 10YR 4/2 Sand sulfur horizon present at 1.5 feet bgs odor loose dry to slightly moist
4					***Silt (ML)*** 10YR 5/2 Silt stiff odor
6	2	0.03	80		***Silt (ML)*** 10YR 4/2 Silt soft moist
8					
10	3	0.02	10		
12					
14					
	4	0.02	100		
16					***Silt with Gravel (ML)*** 10YR 4/4 Silt weathered basalt fragments refusal on bedrock at 15.5 feet bgs
18					Bottom of Boring at 15.5 feet
20					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-14

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 4, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 16

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.02-0.03	65		***Poorly-Graded Sand (SP)*** 10YR 4/2 Sand poorly sorted loose dry
4					***Silt with Sand (ML)*** 10YR 5/6 Silt very fine sand stiff moist
6	2	0.02	80		***Silt with Gravel (ML)*** 10YR 5/4 Silt firm moist saturated at 15.5 feet bgs basalt fragments present refusal on basalt bedrock at 16 feet bgs
8					
10	3	0.02	60		
12					
14					
	4	0.02	100		
16					Bottom of Boring at 16 feet
18					
20					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-15

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 4, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 28.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	85		***Poorly-Graded Sand (SP)*** 10YR 4/2 Sand some fine grained gravel present poorly sorted loose dry
	2	0.02	90		***Silt (ML)*** 10YR4/3 Silt stiff moist
10	3	0.02	100		***Silt with Sand (ML)*** 10YR 4/3 Silt trace of fine grained sand stiff moist
	4	0.02	100		
20	5	0.02	100		***Elastic Silt (MH)*** 10YR 4/6 Clayey silt some plasticity stiff moist
	6	0.02	100		
30					10YR 3/1 Weathered basalt friable wet refusal on bedrock at 28.5 feet bgs Bottom of Boring at 28.5 feet
40					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-16

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 2, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 9.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Gravelly Silt (ML) Yellowish brown gravelly silt loose dry to moist
2 4	1	-	80		***Silt with Gravel (ML)*** Dark brown to yellowish brown silt fine grained gravel present stiff moist very dark brown gravel present at bedrock interface refusal at 9.5 feet bgs on bedrock
6 8	2	-	95		
10 12 14					Bottom of Boring at 9.5 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-17

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 2, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 14

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.05	95		***Silty Gravel (GM)*** Dark brown silty gravel loose dry
2					***Poorly-Graded Sand with Gravel (SP)*** Very pale brown sand contains some gravel poorly sorted loose dry
4					
6	2	0.05	95		***Silt (ML)*** Dark brown silt firm stiff moist refusal at 14 feet bgs on basalt bedrock
8					
10	3	0.05	75		
12					
14					Bottom of Boring at 14 feet
16					
18					
20					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-18

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 2, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 9.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.04	90		***Silty Gravel (GM)*** Yellowish brown silty gravel loose dry
2					***Silt with Gravel (ML)*** Dark brown silt trace gravel stiff moist
4					***Silt (ML)*** Yellowish brown silt firm moist refusal on basalt bedrock at 9.5 feet bgs
6	2	0.004	60		
8					
10					Bottom of Boring at 9.5 feet
12					
14					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-19

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 9, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 16

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	90		***Clayey Gravel with Sand (GC)*** 10YR 3/2 Silty gravel with sand fill loose dry
5	2	0.03	50		***Silt with Sand (ML)*** 10YR 4/3 Silt very fine sand increasing with depth stiff moist
10	3	0.02-0.03	70		
15	4	0.02	100		
					10YR 2/1 Weathered basalt fragements in 10YR 5/4 Silt matrix loose moist refusal at 16 feet bgs on basalt bedrock
20					Bottom of Boring at 16 feet
25					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-20

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 14

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.03-0.04	90		***Silty Gravel (GM)*** 10YR 7/1 Light gray silty gravel loose dry
4					***Silt (ML)*** 10YR 3/3 Dark brown silt stiff, dense contains angular gravel sticky resinous material encountered from 0.5-1 feet bgs dry
6	2	0.03-0.04	100		***Silt (ML)*** 10YR 3/4 Dark brown silt soft moist
8					***Well-Graded Sand (SW)*** 10YR 7/1 Light gray fine grained sand well sorted loose dry
10					
12	3	0.03-0.04	100		***Silt (ML)*** 10YR 3/3 Dark brown silt firm uniform moist refusal at 14 feet bgs on basalt
14					Bottom of Boring at 14 feet
16					
18					
20					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-21

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 9, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 16.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
	1	0.03-0.04	90		***Silty Gravel with Sand (GM)*** 10YR 5/1 Silty gravel with sand fill loose dry liner encountered at 1 feet bgs
5					
	2	0.03	95		***Silt with Sand (ML)*** 2.5YR 4/4 Sandy silt stiff friable moist
10					***Silt with Gravel (ML)*** 10YR 3/3 Silt with gravel firm moist
	3	0.03	60		***Silt (ML)*** 10YR 2/1 Silt stiff moist
15					
	4	0.03	100		***Silt with Sand (ML)*** 10YR 5/2 Silt fine sand soft moist to slightly wet
					10YR 2/1 Weathered basalt refusal at 16.5 feet bgs
20					
					Bottom of Boring at 16.5 feet
25					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-22

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 9, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 18

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					ASPHALT Asphalt
	1	0.02-0.03	30		***Gravelly Silt (ML)*** 10YR 6/3 Pale brown gravelly silt dry stiff
5					***Poorly-Graded Sand (SP)*** Light brownish gray sand fine to coarse grained poorly sorted loose moist
	2	0.01-0.03	100		***Silt (ML)*** 10YR 4/1 Dark gray silt stiff dry
10					***Silty Sand with Gravel (SM)*** 10YR 5/2 Grayish brown silty sand basalt fragments
	3	0.01-0.03	100		***Silt (ML)*** 10YR 6/2 and 3/2 Light grayish brown to very dark grayish brown silt moist hard
15					
	4	0.01-0.03	100		***Silt with Sand (ML)*** 10YR 5/1 White to pale brown silt with sand saturated at 16.5 feet bgs
20					***BASALT*** Basalt refusalt at 18 feet bgs
					Bottom of Boring at 18 feet
25					

Geologist(s): David A. Carstens

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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303-850-9200

Boring Log: SB-23

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 9, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 3

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					ASPHALT Asphalt
1	1	0.03-0.04	100		***Silty Gravel with Sand (GM)*** Dark reddish brown silty gravel with sand poorly sorted dry
2					***Silt (ML)*** GLEY1 8/1 White silt stiff moist pale green staining at 3 feet bgs refusal at 3 feet bgs
3					
					Bottom of Boring at 3 feet
4					
5					
6					
7					
8					
9					
10					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-24

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 9, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 7

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					ASPHALT Asphalt
2	1	0.02-0.04	70		***Poorly-Graded Sand with Gravel (SP)*** Light brownish gray sand with gravel fine to coarse grained poorly sorted loose moist
4					***Silt with Sand (ML)*** 10YR 4/1 to 2/2 Dark gray to very dark brown silt trace sand dense dry refusal at 7 feet bgs
6	2	0.02-0.04	100		
8					Bottom of Boring at 7 feet
10					
12					
14					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-26

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 8

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.03	100		***Silty Gravel (GM)*** 10YR 4/4 Dark yellowish brown silty gravel contains fine grained sand loose dry
4					***Silt (ML)*** 2.5YR 3/4 Dark reddish brown silt occassional gravel crumbly dry
6	2	0.03	100		***Well-Graded Sand (SW)*** GLEY1 7/1 Light greenish gray sand fine grained well sorted loose slightly moist
8					***Silt (ML)*** 10YR 4/2 Dark grayish brown silt firm from 4-6 feet bgs soft from 6-8 feet bgs uniform moist refusal at 8 feet bgs
10					Bottom of Boring at 8 feet
12					
14					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-27

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 9, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 9

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.02 - 0.04	100		***Silty Gravel with Sand (GM)*** 10YR 3/1 Dark reddish gray silty gravel with sand poorly sorted fine to medium grained loose moist
4					
6	2	0.02 - 0.04	100		***Silty Gravel with Sand (GM)*** GLEY1 5/1 Gray silty gravel with sand pale green staining (GLEY1 8/2)
8					***Silt (ML)*** 10YR 4/1 Dark gray to 10YR 2/2 very dark brown silt trace sand dense dry refusal at 9 feet bgs
10					Bottom of Boring at 9 feet
12					
14					
16					
18					
20					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-28

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 5, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 4.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
1					***Well-Graded Sand (SW)*** 10YR 2/1 Sand loose moist liner encountered at 0.5 feet bgs
2	1	0.03-0.04	100		***Silty Sand with Gravel (SM)*** 10YR 3/2 to 3/2 Silty sand fine to medium grained trace fine gravel partially lithified moist refusal at 4.5 feet bgs
3					
4					
5					Bottom of Boring at 4.5 feet
6					
7					
8					
9					
10					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-29

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 5, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 9

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.02-0.03	100		***Well-Graded Sand with Gravel (SW)*** 10YR 2/1 Sand and gravel well sorted loose moist liner encountered ar 1 feet bgs
4					***Silt with Sand (ML)*** 10YR 5/2 Silt with sand partially lithified fissile dry
6	2	0.02	100		***Silty Sand (SM)*** 10YR 5/2 Silty sand fine to medium grained partially lithified dry to slightly moist refusal at 9 feet bgs on tufa
8					
10					Bottom of Boring at 9 feet
12					
14					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-30

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 5, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
1 2 3 4 5	1	0.02	100		***Silty Gravel with Sand (GM)*** 10YR 4/4 to 7/2 Silt, sand, and gravel fill layer of black sand at 1 feet bgs dense moist odor initial refusal at 4 feet bgs offset boring advanced refusal at 5 feet bgs
6 7 8 9 10					Bottom of Boring at 5 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-31

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 5, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 11

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2 4	1	0.02	80		***Silty Gravel with Sand (GM)*** 10YR 4/6 Silt, sand, and gravel contains 10YR 7/1 and 2/1 zones fill liner encountered at 1.5 feet bgs black sand above liner dry
6 8 10	2	0.02-0.03	100		***Silt (ML)*** 10YR 5/3 Silt stiff moist refusal at 11 feet bgs
	3	0.03	100		
12 14					Bottom of Boring at 11 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-32

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 5, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 16.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2 4	1	0.02	60		***Silty Gravel with Sand (GM)*** 10YR 4/3 to 5/6 Silt, sand, and gravel fill liner encountered at 1 feet bgs black sand above liner some 5YR 4/6 coloration present moist
6 8	2	0.02-0.03	100		
10 12 14	3	0.02-0.03	100		***Silt (ML)*** 10YR 4/3 Silt stiff moist becoming soft and wet from 15-16 feet bgs stiff and moist from 16-16.5 feet bgs refusal on weathered basalt at 16.5 feet bgs
16	4	0.02-0.03	100		
18 20					Bottom of Boring at 16.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-33

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 4

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03	100		***Silty Gravel (GM)*** 10YR 6/1 Gray silty gravel contains fine grained sand loose dry
1	2	0.03	100		***Poorly-Graded Sand with Silt (SP-SM)*** GLEY1 7/1 Gray silty sand fine grained sand poorly sorted contains occassional pebble loose moist
2	3	0.03	100		
3	4	0.03	100		
4					Bottom of Boring at 4 feet
5					
6					
7					
8					
9					
10					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-34

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 29

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03-0.05	80		***Silty Gravel (GM)*** 10YR 5/3 Brown silty gravel loose dry
5	2	0.03-0.05	90		***Silt with Sand (ML)*** 10YR 4/2 Dark grayish brown silt abundant GLEY1 8/1 light greenish gray sand present from 2-3 feet bgs loose dry to slight moist
10	3	0.03-0.05	75		***Silt (ML)*** 10YR 3/4 Dark yellowish brown silt firm moist
					Silt (ML) 10YR 3/4 Very dark gray silt firm moist
15	4	0.03-0.05	100		***Silt (ML)*** 10YR 5/3 Brown silt firm/dense from 8-10 feet bgs and 14-15 feet bgs soft from 10-14 feet bgs
20	5	0.03-0.05	100		***Silt (ML)*** 10YR 4/2 Brown silt firm/dense moist to saturated at 26 feet bgs poorly sorted sand and gravel present from 26-29 feet bgs refusal at 29 feet bgs on basalt bedrock
25	6	0.03-0.05	100		
30					Bottom of Boring at 29 feet

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-35

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 14.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2, 4	1	0.05-0.06	80		***Sandy Silt with Gravel (ML)*** 10YR 4/2 Dark grayish brown silt contains fine grained sand and gravel loose dry
6, 8	2	0.05-0.06	70		***Silt (ML)*** 10YR 3/2 Very dark grayish brown silt firm uniform slightly moist ***Silt (ML)*** 10YR 3/1 Very dark gray silt firm uniform slightly moist
10, 12, 14	3	0.05-0.06	95		***Silt (ML)*** 10YR 5/2 Grayish brown silt firm uniform moist refusal at 14.5 feet bgs
16, 18, 20					Bottom of Boring at 14.5 feet

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-36

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.02-0.04	80		***Silty Gravel with Sand (GM)*** 10YR 4/2 Dark grayish brown silt, gravel, and sand poorly sorted loose dry
4					***Silt with Sand (ML)*** 2.5YR 4/6 Red silt contains fine grained sand dense, cohesive moist
6					***Silt (ML)*** 10YR 3/1 Very dark gray silt firm moist refusal at 5 feet bgs
8					Bottom of Boring at 5 feet
10					
12					
14					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-37

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.03-0.04	90		***Sandy Silt with Gravel (ML)*** Greenish gray silt, sand, and gravel fill poorly graded loose dry
4					***Sandy Silt with Gravel (ML)*** 5YR 4/2 Dark reddish gray silt, sand, gravel fill poorly graded loose dry
6					***Sandy Silt with Gravel (ML)*** 5YR 3/2 Dark brown gray silt, sand, gravel fill poorly graded loose dry refusal at 5 feet bgs
8					Bottom of Boring at 5 feet
10					
12					
14					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-38

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 5.25

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Poorly-Graded Sand (SP) 10YR 6/1 Gray sand fine grained loose dry
2	1	0.03-0.04	80		***Poorly-Graded Sand with Gravel (SP)*** 5YR 5/4 Reddish brown sand and gravel fine grained sand poorly sorted loose dry
4					
	1	-	0.05		***Poorly-Graded Gravel with Silt and Sand (GP-GM)*** 10YR 5/1 Gravel silt and gravel poorly sorted loose dry
6					
					Silt (ML) 10YR 3/1 Very dark gray silt firm uniform moist refusal at 5.25 feet bgs
8					
					Bottom of Boring at 5.25 feet
10					
12					
14					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-39

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.03-0.04	80		***Well-Graded Sand (SW)*** 2.5YR 7/1 Light gray sand fine grained well sorted loose dry
4					***Silt (ML)*** 10YR 3/1 Very dark brownish gray silt firm uniform slightly moist refusal at 5 feet bgs
6					Bottom of Boring at 5 feet
8					
10					
12					
14					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-40

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 12.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.02	85		***Silty Gravel (GM)*** 10YR 7/1 and 3/2 Silty gravel loose moist
4					***Silt (ML)*** 10YR 4/3 Silt stiff moist
6					***Well-Graded Gravel (GW)*** Gravel
8	2	0.02	85		***Silt (ML)*** 10YR 5/4 Silt stiff moist refusal at 12.5 feet bgs
10					
12	3	0.02-0.03	100		
14					Bottom of Boring at 12.5 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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303-850-9200

Boring Log: SB-41

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 18.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	60		***Silty Gravel (GM)*** 10YR 5/3 Silty gravel loose dry
5	2	0.02-0.03	60		***Poorly-Graded Sand with Silt (SP-SM)*** 2.5YR 7/1 Sand fine to medium grained some silt poorly sorted loose moist ***Poorly-Graded Gravel (GP)*** Coarse gravel
10	3	0.03	90		***Silt (ML)*** 10YR 3/2 Silt stiff moist ***Silt (ML)*** 10YR 4/6 Silt stiff moist refusal at 18.5 feet bgs
15	4	0.02	100		
	5	0.03	100		
20					Bottom of Boring at 18.5 feet
25					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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303-850-9200

Boring Log: SB-42

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 16, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 25

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.04	60		***Poorly-Graded Sand with Gravel (SP)*** 7.5YR 4/3 Brown sand with gravel fine to medium grained poorly sorted loose dry
5	2	0.02-0.04	60		***Silt with Gravel (ML)*** 7.5YR 3/1 Brown silt with gravel stiff dry
10	3	0.02-0.04	60		***Silt (ML)*** 7.5YR 3/1 Very dark gray silt soft dry to moist
15	4	0.02-0.04	100		***Silt (ML)*** 7.5YR 4/3 Brown clayey silt stiff dry soft and wet from 21 to 23 feet bgs refusal at 25 feet bgs on basalt bedrock
20	5	0.02-0.04	100		
25					Bottom of Boring at 25 feet
30					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-43

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 5, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 18.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.02-0.04	60		***Gravelly Silt (ML)*** 10YR 4/3 Gravelly silt stiff moist
4					***Poorly-Graded Gravel with Sand (GP)*** 10YR 6/1 Gravel with sand poorly sorted loose dry
6					
8	2	0.03-0.04	25		***Silt with Gravel (ML)*** 10YR 4/3 Silt trace of fine gravel soft to firm moist
10					
12	3	0.03	80		***Silty Gravel (GM)*** 10YR 7/1 Vuggy basalt fragments with silt fill?
14					***Silt (ML)*** 10YR 4/3 and 4/4 Silt soft from 13-14 feet bgs stiff from 14-18 feet bgs moist
16	4	0.03	100		
18					***BASALT*** Weathered basalt refusal at 18.5 feet bgs on bedrock
20					

Bottom of Boring at 18.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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303-850-9200

Boring Log: SB-44

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 18

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	60		***Silty Gravel with Sand (GM)*** 10YR 4/2 Silty gravel with sand loose dry
5	2	0.02-0.03	50		***Silt with Gravel (ML)*** 10YR 4/2 Silt with gravel fine to coarse grained gravel stiff moist ***Silt with Sand (ML)*** 10YR 4/4 Silt minor amounts of fine sand and gravel stiff moist
10	3	0.02-0.03	100		***Silt (ML)*** 10YR 3/3 Silt stiff moist
15	4	0.02	100		
	5	0.03	100		***Silt (ML)*** 10YR 4/4 Clayey silt fine sand stiff moist
20					***Silt with Gravel (ML)*** 10YR 3/3 Gravelly silt weathered basalt fragments stiff moist refusal at 18 feet bgs on bedrock
25					Bottom of Boring at 18 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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303-850-9200

Boring Log: SB-45

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 16, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 24

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.04	70		***Concrete*** Concrete
					Silt (ML) 7.5YR 4/2 Brown silt stiff dry
5	2	0.02-0.04	70		***Poorly-Graded Sand with Gravel (SP)*** Light bluish-gray sand with gravel fine to medium grained sand poorly sorted loose dry
10					***Gravelly Silt (ML)*** 7.5YR 4/2 Brown gravelly silt stiff moist
	3	0.02-0.04	50		***Silt (ML)*** 7.5YR 2.5/1 Black silt extremely stiff dry
15	4	0.02-0.04	60		***Silty Gravel with Sand (GM)*** Grayish brown silty gravel with sand poorly sorted loose dry
20					***Silt (ML)*** Yellowish brown clayey silt low plasticity stiff dry to moist
	5	0.02-0.04	100		***Lean Clay (CL)*** Silty clay low plasticity refusal at 24 feet bgs on basalt bedrock
25					Bottom of Boring at 24 feet

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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303-850-9200

Boring Log: SB-46

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 16, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 16.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.04	80		***Poorly-Graded Gravel with Sand (GP)*** 2.5YR 7/1 Light gray sandy gravel poorly sorted loose dry
5					***Silt with Gravel (ML)*** 7.5YR 4/1 Dark gray silt with gravel dry to moist stiff
	2	0.02-0.04	70		***Silt (ML)*** 5YR 4/1 Dark gray silt dry stiff
10					***Sandy Silt with Gravel (ML)*** 10YR 6/3 Pale brown sandy silt with gravel very fine to medium grained sand poorly sorted loose dry
	3	0.02-0.04	80		***Silt (ML)*** 10YR 6/3 Pale brown silt stiff moist
15	4	0.02-0.04	100		***Silt with Gravel (ML)*** 10YR 5/3 Brown silt baslt fragments soft
20					***Lean Clay with Gravel (CL)*** Clay and weathered basalt fragments
					Bottom of Boring at 16.5 feet
25					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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303-850-9200

Boring Log: SB-47

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 13

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.04	85		***Silty Gravel with Sand (GM)*** 10YR 5/2 Silty gravel with sand poorly sorted loose moist
4					***Silt (ML)*** 10YR 4/3 to 5/3 Silt firm stiff moist
6	2	0.04-0.05	75		
8					
10	3	-	50		***Poorly-Graded Gravel (GP)*** Gravel and 10YR 2/1 basalt refusal at 13 feet bgs on basalt bedrock
12					
14					Bottom of Boring at 13 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-48

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 15.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.03-0.04	70		***Silty Gravel with Sand (GM)*** 10YR 5/2 Silty gravel with sand loose moist
4					***Silt (ML)*** 10YR 3/2 Silt stiff moist
6					
8	2	0.03	50		
10					***Silt with Gravel (ML)*** 10YR 4/2 Gravelly silt fine to coarse gravel stiff moist
12	3	0.02-0.04	80		***Sandy Silt with Gravel (ML)*** 2.5YR 6/4 Gravelly silt and sand crumbly moist
14					
	4	-	100		***Silt (ML)*** 7.5YR Silt some clay soft moist
16					
18					***Silt with Gravel (ML)*** 10YR 4/6 Silt refusal at 15.5 feet bgs on 10YR 2/1 weathered basalt bedrock
20					Bottom of Boring at 15.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

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Boring Log: SB-49

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 12.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.03	60		***Silty Gravel with Sand (GM)*** 10YR 5/2 Silty gravel with sand loose moist
4					***Silt (ML)*** 10YR 3/2 Silt hard moist
6					
8	2	0.03	75		
10					***Silt with Gravel (ML)*** 10YR 4/2 Gravel silt fine to coarse gravel stiff moist
12	3	0.03	67		
					10YR 2/1 Weathered basalt refusal at 12.5 feet bgs
14					Bottom of Boring at 12.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-50

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 14

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2 4	1	0.004	75		***Silt (ML)*** 10YR 4/2 Dark grayish brown silt dry
6 8	2	0.04	80		***Silt (ML)*** 10YR 5/3 Brown silt firm uniform dry
10					***Well-Graded Sand (SW)*** 10YR 7/3 Very pale brown fine grained sand well sorted loose dry
12	3	0.004	90		***Silt (ML)*** 10YR 5/3 Brown silt soft uniform moist to saturated at overburden-bedrock interface refusal at 14 feet bgs on basalt bedrock
14					Bottom of Boring at 14 feet

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-51

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 3

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03-0.05	100		***Silty Gravel (GM)*** 10YR 5/2 Grayish brown silty gravel loose dry
1	2	0.03-0.05	100		
2	3	0.03-0.05	100		***Silt (ML)*** 10YR 3/1 Very dark gray silt loose soft moist refusal at 3 feet bgs
3					Bottom of Boring at 3 feet
4					
5					
6					
7					
8					
9					
10					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-52

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 24

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03-0.04	85		***Asphalt*** Asphalt
5	2	0.03-0.04	100		***Gravelly Silt with Sand (ML)*** 10YR 3/3 Dark brown silt contains fine grained sand and gravel loose dry ***Silt (ML)*** 10YR 4/3 Brown silt firm uniform moist Refusal at 24 feet bgs on bedrock
10	3	0.03-0.04	75		
15	4	0.03-0.04	90		
20	5	0.03-0.04	90		
25					Bottom of Boring at 24 feet
30					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-53

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 17

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2 4	1	0.05-0.06	75		***Silt (ML)*** 10YR 4/3 Brown silt soft from 0-3 feet bgs, firm from 3-5 feet bgs uniform slightly moist volcanic rock float in matrix at 5 feet bgs
6 8 10	2	0.05-0.06	80		***Silt (ML)*** 10YR 5/3 Brown silt firm uniform dry
12 14	3	0.05-0.06	100		***Sandy Silt (ML)*** 10YR 5/3 Brown sandy silt moderate amounts of clay yellow fine grained sand iron oxidation present at 15 feet bgs refusal at 17 feet bgs on basalt bedrock
16	4	0.05-0.06	90		
18 20					Bottom of Boring at 17 feet

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-54

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 18, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 18

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.04-0.05	80		***Gravelly Silt with Sand (ML)*** 10YR 4/3 Brown silt contains fine grained sand and gravel loose dry
4					***Silt (ML)*** 10YR 4/3 Brown silt firm uniform dry
6	2	0.04-0.05	80		***Silt (ML)*** 10YR 5/3 Brown silt firm dry to slight moist below 15 feet bgs clay content increases near refusal refusal at 18 feet bgs
8					
10					
12	3	0.04-0.05	90		
14					
16	4	0.04-0.05	90		
18					Bottom of Boring at 18 feet
20					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-55

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 9, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 26

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	70		***Silty Gravel (GM)*** 10YR 5/3 Silty gravel fill loose dry
5	2	0.02	50		***Silt (ML)*** 10YR 3/2 Silt stiff moist
10	3	0.02	75		***Silt (ML)*** 10YR 4/3 Silt soft and wet from 5-7.5 feet bgs stiff and moist from 7.5-13 feet bgs
15	4	0.02-0.03	60		***Poorly-Graded Sand (SP)*** 10YR 4/3 Sand fine grained poorly sorted loose moist to wet
20	5	0.02	100		***Silt (ML)*** 10YR 4/4 Clayey silt stiff moist some mottling weathered basalt fragments at bedrock interface refusal at 26 feet bgs on basalt bedrock
25	6	0.02	100		
30					Bottom of Boring at 26 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-56

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 20

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	60		***Silt (ML)*** 10YR 4/3 Silt stiff dry
5	2	0.02-0.03	90		
10	3	0.02	85		***Silt (ML)*** 10YR 3/2 Silt stiff moist ***Silt (ML)*** 10YR 5/3 to 4/4 Silt stiff moist
15	4	0.02	60		***Silt (ML)*** 10YR 4/3 Silt trace of clay firm moist
20					10YR 2/1 Weathered basalt refusal at 20 feet bgs Bottom of Boring at 20 feet
25					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

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Boring Log: SB-57

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 26

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03-0.04	95		***Silty Gravel (GM)*** 10YR 3/2 to 2/1 Silty gravel fill loose moist
	2	0.02-0.03	75		***Silt (ML)*** 10YR 5/3 Silt stiff moist
10	3	0.03-0.04	90		***Silt (ML)*** 10YR 3/ to 6/1 Silt stiff moist to wet at 16-17 feet bgs
	4	0.03	85		
20	5	0.03	100		***Silt with Sand (ML)*** 10YR 4/4 Silt trace clay and fine sand firm moist
	6	0.03	100		
30					***Silt with Gravel (ML)*** 10YR 4/4 Silt weathered basalt fragments stiff moist
					10YR 2/1 Weathered basalt wet refusal at 26 feet bgs on bedrock
					Bottom of Boring at 26 feet
40					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

WSP Environment & Energy
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303-850-9200

Boring Log: SB-58

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 19

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03	90		***Silty Gravel with Sand (GM)*** 10YR 5/2, 3/2, and 2.5YR 4/3 Silty gravel with sand loose dry
5	2	0.03	85		***Silt (ML)*** 10YR 6/3 Silt stiff moist
10	3	0.02-0.03	100		***Silt with Gravel (ML)*** 10YR 6/1 Silt trace gravel present from 17-18 feet bgs stiff moist wet at 16 feet bgs
15	4	0.02-0.03	100		
	5	0.02	100		***Poorly-Graded Sand with Silt and Gravel (SP-SM)*** 10YR 3/2 Sand fine to medium grained fine gravel and silt porrly sorted dense wet
20					
25					10YR 2/1 Weathered basalt moist refusal at 19 feet bgs on basalt bedrock
					Bottom of Boring at 19 feet
30					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-59

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 4.75

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.03-0.04	85		***Poorly-Graded Gravel with Silt and Sand (GP-GM)*** Gravel with fine grained sand and silt loose dry
4					***Silt (ML)*** 2.5YR 4/6 Red silt contains fine grained sand loose moist to saturated Refusal at 4.5 feet bgs
6					Bottom of Boring at 4.75 feet
8					
10					
12					
14					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-60

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 7

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.02-0.04	90		***Sandy Silt with Gravel (ML)*** 10YR 4/2 Dark brown silt contains fine grained sand and gravel poorly sorted firm moist
4					***Silt (ML)*** 10YR 6/3 Pale brown silt loose dry
6	1	0.02-0.04	100		***Silt (ML)*** 2.5YR 4/6 Red silt contains some fine grained sand moist
8					***Silt (ML)*** 10YR 3/1 Very dark brown silt firm, dense, uniform moist Refusal at 7 feet bgs, becoming nearly lithified.
					Bottom of Boring at 7 feet
10					
12					
14					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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303-850-9200

Boring Log: SB-61

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 6.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Asphalt Asphalt
2	1	0.04-0.05	50		***Silt with Gravel (ML)*** 10YR 4/2 Dark grayish brown silt some fine grained sand and gravel poorly sorted loose dry
4					***Silt with Sand (ML)*** 2.5 YR 4/6 Red silt contains fine grained sand loose moist
6	2	0.04-0.05			***Silt (ML)*** 10YR 3/1 Very dark gray silt firm uniform near saturation Refusal at 6.5 feet bgs
8					Bottom of Boring at 6.5 feet
10					
12					
14					

Geologist(s): Laura Tobin

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-62

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 17, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 20

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.04	50		***Silt with Gravel (ML)*** 10YR 5/1 Light brown silt and gravel fill loose dry
5	2	0.02-0.03	100		***Silt (ML)*** 10YR 4/2 Light brown silt darker color with depth grading to 10YR 5/3 light brown silt at 10 feet bgs firm moist
10	3	0.02-0.04	100		
15	4	0.02-0.04	100		
20					***Basalt*** Dark brown basalt Refusal at 20 feet bgs on bedrock saturated at overburden-bedrock interface Bottom of Boring at 20 feet
25					

Geologist(s): Laura Tobin
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-63

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 22

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03	70		***Poorly-Graded Gravel with Sand (GP)*** 2.5 YR 3/4 Sandy gravel loose moist to wet
5					***Silt (ML)*** 10YR 4/3 Silt stiff moist
	2	0.02-0.03	100		***Silt with Sand (ML)*** 10YR 4/3 Silt with sand fine grained sand firm moist
10	3	0.02-0.03	65		***Silt (ML)*** 10YR 5/3 Silt firm moist
15	4	0.03	100		***Silt (ML)*** 10YR 4/4 Clayey silt refusal at 22 feet bgs on basalt bedrock
20	5	0.03	10		
25					Bottom of Boring at 22 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-64

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 10, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 17.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03-0.04	80		***Silty Gravel with Sand (GM)*** 10YR 4/2 and 6/1 SIlty gravel with sand fill loose dry
5					***Silt (ML)*** 10YR 4/3 Silt stiff moist
	2	0.03-0.04	75		***Silt (ML)*** 10YR 4/2 Silt 10YR 6/1 horizon at 9.5-10 feet bgs stiff moist
10					
	3	0.03-0.04	95		
15					
	4	0.03	100		***Silt with Gravel (ML)*** 10YR 4/3 Silt fine to coarse gravel wet
20					10YR 2/1 Weathered basalt refusal on basalt bedrock at 17.5 feet bgs Bottom of Boring at 17.5 feet
25					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-65

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 13, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 20.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02	95		***Silty Gravel with Sand (GM)*** 10YR 5/1, 5/6, and 4/4 Silty gravel with sand fill material loose dry
5	2	0.02	80		***Silt (ML)*** 10YR 3/3 Silt hard moist ***Silt with Sand (ML)*** 10YR 5/4 Silt trace of fine sand firm moist
10	3	0.02	95		***Silt (ML)*** 10YR 3/2 Silt hard moist ***Silt with Gravel (ML)*** 10YR 5/3 & 5/4 Silt some fine to coarse gravel stiff moist
15	4	0.01-0.02	100		
20	5	0.02	100		***Silt with Sand (ML)*** 10YR 5/5 Silt contains fine grained sand stiff moist
25					10YR 2/1 Basalt refusal at 23 feet bgs on bedrock

Bottom of Boring at 20.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

WSP Environment & Energy
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Denver, Colorado 80237
303-850-9200

Boring Log: SB-66

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 13, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 21

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	90		***Silty Gravel with Sand (GM)*** 10YR 5/6 and 5/1 Silty gravel with sand fill material loose dry
5	2	0.02-0.03	60		***Silt (ML)*** 10YR 4/3 Silt stiff yet friable moist sulrfur odor present ***Silt with Gravel (ML)*** 10YR 6/3, 3/2, and 7/1 Silt with gravel stiff moist
10	3	0.02	90		***Silt (ML)*** 10YR 5/3 Silt firm moist refusal at 23 feet bgs on basalt bedrock
15	4	0.02	100		
20	5	0.02	100		
					Bottom of Boring at 21 feet
25					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

WSP Environment & Energy
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303-850-9200

Boring Log: SB-67

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 13, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 23

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Depth	Sample/Interval	Gamma Radiation (mR/hr)	% Recovery	Lithology	Description
					Ground Surface
	1	0.02-0.03	95		***Silty Gravel (GM)*** 10YR 5/6 and 5/1 Silty gravel with sand fill material loose dry
5	2	0.02-0.03	80		***Silt (ML)*** 10YR 3/3 Silt hard moist ***Silt with Gravel (ML)*** 10YR 4/2 and 6/2 Silt trace of fine to coarse gravel stiff moist
10	3	0.02	95		***Silt (ML)*** 10YR 5/4 Silt stiff moist
15	4	0.02	100		
20	5	0.02-0.03	100		***Silt with Sand (ML)*** 10YR 5/6 Silt trace of fine grained sand stiff moist
25					***BASALT*** 10YR 2/1 Basalt refusal at 23 feet bgs

Bottom of Boring at 23 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

WSP Environment & Energy
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Denver, Colorado 80237
303-850-9200

Boring Log: SB-68

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 16, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 23

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.04	60		***Silty Gravel with Sand (GM)*** 7.5YR 7/1 Light gray silty gravel with sand loose dry
5					***Silt (ML)*** 7.5YR 3/3 Dark brown silt stiff dry
	2	0.02-0.04	70		***Silt (ML)*** 7.5YR 3/3 Black silt stiff dry
10					***Silt (ML)*** 5YR 4/1 Dark gray silt trace of very fine sand stiff dry to moist
	3	0.02-0.04	70		***Sandy Silt with Gravel (ML)*** 10YR 6/3 Pale brown sandy silt with gravel very fine grained sand poorly sorted basalt fragments dry
15					
	4	0.02-0.04	55		***Silt with Sand (ML)*** Dark yellowish brown silt very fine sand stiff dry
20					
	5	0.02-0.04	100		

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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303-850-9200

Boring Log: SB-68

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 16, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 23

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					BASLT Basalt refusal at 23 feet bgs on bedrock
25					Bottom of Boring at 23 feet
30					
35					
40					
45					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-69

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 16, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 21

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.04	70		
5					
	2	0.02-0.04	70		
10					
	3	0.02-0.04	80		
15					
	4	0.02-0.04	70		
20					
	5	0.02-0.04	100		***BASALT*** Basalt
					Bottom of Boring at 21 feet
25					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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303-850-9200

Boring Log: SB-70

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 13, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 7.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.02-0.03	85		***Silt (ML)*** 10YR 5/4 Silt stiff moist
4					
6	2	0.02-0.03	100		
8					***Silty Sand (SM)*** 10YR 4/3 Silty sand fine grained partially lithified friable moist refusal at 7.5 feet bgs
10					Bottom of Boring at 7.5 feet
12					
14					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

WSP Environment & Energy
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Denver, Colorado 80237
303-850-9200

Boring Log: SB-71

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 16, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 7.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Gravelly Silt (ML) Light bluish gray gravelly silt loose dry
2	1	0.02-0.04	60		***Silt (ML)*** 7.5YR 5/3 Brown silt light gray mottling stiff dry wet below 6.5 feet bgs refusalt at 7.5 feet bgs on basalt bedrock
4					
6	2	0.02-0.04	100		
8					Bottom of Boring at 7.5 feet
10					
12					
14					

Geologist(s): David A. Carstens
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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Denver, Colorado 80237
303-850-9200

Boring Log: SB-72

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 32

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2, 4	1	0.01-0.02	60		***Silt (ML)*** Brown silt travel gravel encountered from 0-5 feet bgs, 23 feet bgs firm moist refusal at 32 feet bgs on basalt bedrock
6, 8, 10	2	0.01-0.02	75		
12, 14	3	0.01-0.02	80		
16, 18, 20	4	0.01-0.02	90		

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
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303-850-9200

Boring Log: SB-72

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 32

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
22 24	5	0.01-0.02	50		***Silt (ML)*** Brown silt travel gravel encountered from 0-5 feet bgs, 23 feet bgs firm moist refusal at 32 feet bgs on basalt bedrock *(continued)*
26 28 30	6	0.01-0.02	100		
32	7	0.01-0.02	100		
34 36 38 40					Bottom of Boring at 32 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
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303-850-9200

Boring Log: SB-73

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 32.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2, 4	1	0.01-0.02	50		***Silt (ML)*** Brown silt stiff moist red cinders and gravel present 0.25 feet bgs
6, 8	2	0.01-0.02	75		
10, 12, 14	3	0.01-0.02	90		
16, 18, 20	4	0.01-0.02	85		

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-73

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 32.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
22 24	5	0.02-0.03	70		***Silt (ML)*** Brown silt stiff moist red cinders and gravel present 0.25 feet bgs *(continued)*
26 28 30	6	0.02-0.03	75		***Silty Sand (SM)*** 10YR 5/4 Silty sand very fine grained trace basalt gravel loose moist
32	7	0.02-0.03	80		***Poorly-Graded Sand (SP)*** 10YR 2/1 Sand and weathered basalt fragments porrly sorted loose moist to wet refusal at 32.5 on basalt bedrock
34 36 38 40					Bottom of Boring at 32.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-74

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 31

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2, 4	1	0.02-0.03	50		***Silty Gravel (GM)*** 10YR 4/4 and 5/1 silty gravel loose dry
6, 8	2	0.03	60		***Silt (ML)*** 10YR 3/2 Silt firm friable moist ***Silt (ML)*** 10YR 4/4 Silt firm friable moist
10, 12, 14	3	0.03	80		***Silt (ML)*** 10YR 5/4 Silt firm to stiff moist
16, 18, 20	4	0.02-0.03	80		

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-74

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 31

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
22, 24	5	0.02-0.03	80		***Silt (ML)*** 10YR 5/4 Silt firm to stiff moist *(continued)*
26, 28	6	0.02-0.03	60		
30	7	0.02-0.03	100		***Poorly-Graded Sand with Silt (SP-SM)*** 10YR 2/1 Silty dand and gravel poorly sorted loose moist refusal at 31 feet bgs on basalt bedrock
32, 34, 36, 38, 40					Bottom of Boring at 31 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-75

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 20

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	50		***Organic Soil (OL/OH)*** Topsoil ***Silt (ML)*** 2.5YR 4/3 Silt stiff moist
5	2	0.02	85		***Silt (ML)*** 10YR 5/3 Silt soft to firm moist with wet zone between 7-9 feet bgs
10	3	0.02	85		***Silt (ML)*** 10YR 5/3 Silt soft and wet from 10-12 feet bgs stiff and moist from 12-19.5 feet bgs
15	4	0.02-0.03	100		
20					***Poorly-Graded Sand with Gravel (SP)*** 10YR 2/1 Sand weathered basalt fragments refusal at 20 feet bgs Bottom of Boring at 20 feet
25					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
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Boring Log: SB-76

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 22.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Organic Soil (OL/OH) Topsoil
	1	0.02-0.03	70		***Silt (ML)*** 2.5YR 4/3 Brown silt trace of fine grained sand from 10-12 feet bgs firm from 1-10 feet bgs and 12-21.5 feet bgs soft from 10-12 feet bgs moist
5					
	2	0.03	60		
10					
	3	0.03	60		
15					
	4	0.03	100		
20					
	5	0.02-0.03	100		
					Poorly-Graded Sand with Gravel (SP) 2.5YR 2.5/1 Sand and gravel weathered basalt fragments refusal on basalt bedrock at 22.5 feet bgs
25					Bottom of Boring at 22.5 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

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Boring Log: SB-77

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 26

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2	1	0.02-0.03	60		***Silty Gravel with Sand (GM)*** 10YR 5/4 Silty gravel and sand loose dry
4					***Silty Gravel (GM)*** 2.5YR 5/1 Limestone gravel
6	2	0.03	55		***Silt (ML)*** 2.5YR 4/2 Silt stiff moist
8					
10					
12	3	0.03	50		***Silt (ML)*** 2.5YR 5/4 Silt trace of fine sand at 24 feet bgs firm to stiff moist
14					
16	4	0.02	50		
18					
20					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Mark Taggart

Method: Direct Push

WSP Environment & Energy
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Denver, Colorado 80237
303-850-9200

Boring Log: SB-77

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 3, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 26

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
22	5	0.03	100		***Silt (ML)*** 2.5YR 5/4 Silt trace of fine sand at 24 feet bgs firm to stiff moist *(continued)*
24					
	6	0.03	100		
26					***Poorly-Graded Sand with Gravel (SP)*** 2.5YR 2.5/1 Sand and gravel poorly sorted weathered basalt fragments refusal at 26 feet bgs on basalt bedrock
28					Bottom of Boring at 26 feet
30					
32					
34					
36					
38					
40					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Mark Taggart
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-78

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 20

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03	50		***Silt with Sand (ML)*** 10YR 5/2 Silt fine sand stiff friable dry
5	2	0.02	70		***Poorly-Graded Sand (SP)*** 2.5 YR 7/4 Sand fine grained sand poorly sorted loose dry
10	3	0.02	60		***Silt (ML)*** 2.5 YR 4/3 Silt soft to firm moist ***Silt (ML)*** 2.5 YR 5/4 Silt soft moist
15	4	0.02	85		***Poorly-Graded Sand (SP)*** 2.5YR 7/2 Sand fine grained loose moist
20					***Silt with Gravel (ML)*** 2.5YR 5/1 Silt basalt fragments firm moist to wet refusal at 20 feet bgs on weathered basalt bedrock Bottom of Boring at 20 feet
25					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

WSP Environment & Energy
4600 South Ulster Street, Suite 930
Denver, Colorado 80237
303-850-9200

Boring Log: SB-79

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 17

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2, 4	1	0.03	65		***Silt with Gravel (ML)*** 2.5YR 6/4 Silt some coarse grained gravel stiff friable dry
					Silt (ML) 2.5YR 3/2 Silt stiff moist
6, 8, 10	2	0.02-0.03	65		***Silt (ML)*** 2.5YR 6/3 Silt some 2.5 YR 5/6 mottling firm
12, 14	3	0.02-0.03	75		***Silt (ML)*** 10YR YR 4/3 SIlt some clay firm moist
16	4	0.02	100		***Elastic Silt (MH)*** 10YR 4/3 Silt moderate amount of clay firm moist
18, 20					10YR 2/1 Weathered basalt moist Bottom of Boring at 17 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

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Boring Log: SB-80

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 14.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2 4	1	0.02	80		***Silt with Gravel (ML)*** 2.5YR 6/3 Silt with gravel stiff dry ***Silt (ML)*** 2.5YR 3/2 Silt hard moist
6 8 10	2	0.02	70		***Poorly-Graded Sand with Gravel (SP)*** 2.5YR 7/2 Sand fine to medium grained some coarse gravel ppoorly sorted loose moist
12 14	3	0.02	75		***Poorly-Graded Sand (SP)*** 2.5YR 7/2 and 10YR 6/6 Sand fine to coarse grained sand poorly sorted semi lithified moist refusal at 14.5 feet bgs
16 18 20					Bottom of Boring at 14.5 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

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Boring Log: SB-81

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 23

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.01-0.02	50		***Organic Soil (OL/OH)*** Topsoil organic matter
5	2	0.02-0.03	60		***Silt (ML)*** 2.5 YR 6/2 Silt stiff friable dry
10	3	0.02-0.03	70		***Silt (ML)*** 2.5YR 5/3 Silt stiff moist
15	4	0.02-0.03	100		***Silt (ML)*** 10YR 4/4 Silt firm moist
20	5	0.01-0.02	100		***Silt (ML)*** 10YR 5/4 Silt stiff moist
25					***Silt with Gravel (ML)*** 10YR 5/4 Silt with 10YR 2/1 basalt gravel firm moist to wet
30					***Silt (ML)*** 10YR 5/4 Silt firm moist refusal at 23 feet bgs on basalt bedrock
					Bottom of Boring at 23 feet

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

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Boring Log: SB-82

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 21

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.02-0.03	60		***Silt (ML)*** 2.5YR 6/1 Silt fine to corase grained gravel stiff friable dry
5	2	0.03	30		***Silt (ML)*** 2.5 YR 4/1 Silt stiff moist ***Poorly-Graded Sand (SP)*** 5YR 8/2 Sand with silt fine grained poorly sorted loose moist to wet
10	3	0.03-0.04	60		***Silt (ML)*** 2.5YR 4/2 Silt firm moist
15	4	0.03-0.04	75		***Poorly-Graded Sand (SP)*** 5YR 8/2 Sand fine grained poorly sorted dense moist ***Silt (ML)*** 10YR 3/4 Silt trace of fine to coarse gravel at 16 feet bgs soft to firm
20	5	0.03	100		moist ***Silt with Gravel (ML)*** 10YR 3/4 Gravelly silt weathered basalt fragments moist to wet refusal on basalt bedrock at 21 feet bgs
25					Bottom of Boring at 21 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

WSP Environment & Energy
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Boring Log: SB-83

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 11

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Silty Gravel (GM) 2.5YR 3/2 Silty gravel loose moist
2	1	0.03	100		***Silt (ML)*** 2.5YR 4/2 Silt stiff moist
4					
6					***Poorly-Graded Sand (SP)*** 2.5YR 7/2 Sand fine grained poorly sorted saturated
8	2	0.03	90		
10	3	0.02	100		***Poorly-Graded Gravel (GP)*** 2.5YR 8/1 Gravel poorly sorted crystalline and vuggy dry
12					Bottom of Boring at 11 feet
14					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

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Boring Log: SB-84

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 10.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
					Silty Gravel (GM) Silty gravel loose dry
2	1	0.03	80		***Silt (ML)*** 2.5 YR 3/2 Silt stiff moist
4					
6					***Silt (ML)*** 10YR 4/4 Silt firm moist
8	2	0.03	75		
10	3	0.02	100		
					10YR 2/1 Weathered basalt dry refusal at 10.5 feet bgs
12					Bottom of Boring at 10.5 feet
14					

Geologist(s): Dave Carstens/Tim Huff

Subcontractor: EarthProbe

Driller/Operator: Pat Casey

Method: Direct Push

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Boring Log: SB-85

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 11, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 9.5

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2 4	1	0.02-0.03	70		***Silt (ML)*** 10YR 4/2 Silt hard and dry from 0-4 feet bgs stiff and moist from 4-6 feet bgs
6 8	2	0.02	60		***Poorly-Graded Sand (SP)*** 10YR 8/1 Sand fine to coarse grained gravel fragments poorly sorted dense dry refusal at 9.5 feet bgs
10 12 14					Bottom of Boring at 9.5 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

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Boring Log: SB-86

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 19

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
	1	0.03	80		***Silt with Sand (ML)*** 10YR 4/3 Silt with sand firm friable dry
5	2	0.02-0.03	85		***Silt (ML)*** 10YR 4/4 Silt firm friable dry above 7 feet bgs stiff and moist below 7 feet bgs refusal at 19 feet bgs on basalt bedrock
10	3	0.02-0.03	100		
15	4	0.03	100		
20					Bottom of Boring at 19 feet
25					

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

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Boring Log: SB-87

Project: Nu-West - Agrium CPO

Project No.: 100238

Location: Soda Springs, Idaho

Completion Date: August 12, 2010

Surface Elevation (feet AMSL*): Not Determ

Total Depth (feet): 11

Borehole Diameter (inches): 3

**AMSL = Above mean sea level*

Sample Data				Subsurface Profile	
Depth	**Sample/Interval**	**Gamma Radiation (mR/hr)**	**% Recovery**	**Lithology**	**Description**
					Ground Surface
2 4	1	0.01-0.02	65		***Silt (ML)*** 10YR 5/3 Silt stiff dry from 0-3 feet bgs moist from 3-5 feet bgs
6 8	2	0.02	100		***Silt with Gravel (ML)*** 10YR 6/3 Silt with clay and minor basalt gravel stiff moist
10	3	0.01-0.02	100		
12 14					10YR 2/1 Weathered basalt refusal at 11 feet bgs Bottom of Boring at 11 feet

Geologist(s): Dave Carstens/Tim Huff
Subcontractor: EarthProbe
Driller/Operator: Pat Casey
Method: Direct Push

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