

## **Appendix B**

### **Soil Boring Logs**



1220 Avenida Acaso  
Camarillo, California 93012  
(805) 388-3775

Client:	Tronox LLC		<b>Boring No. M-116</b>
Project Number:	04020-023-151		
Site Location:	Henderson, NV		
Coordinates:	26716286.080 N, 828584.248E; NAD 83	Elevation: 1844.44 ft, msl	Sheet: 1 of 1
Drilling Method:	Sonic - Continuous Core		Monitoring Well Installed: No
Sample Type(s):	Split Spoon/Core	Boring Diameter: 7-inch	Screened Interval:

Weather: Sunny, cold, 40s	Logged By: Ed Krish	Date/Time Started: 3/12/06 1230	Depth of Boring: 50 ft
Drilling Contractor: Prosonic	Ground Elevation:	Date/Time Finished: 3/12/06	Water Level:

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
0	M-116-0.5	0.5		10	0.0	SM (GM)	<b>ALLUVIUM; SILTY/GRAVELLY SAND</b> , with silty gravel lenses present, brown (5YR 5/4), 10% silt with trace clay; 65% sand (very fine- to very coarse-grained, angular to subangular), 25% gravel to 2-inches, (commonly 1/8" to 1", angular to subangular), dry, no unusual odor or staining.  From 4 to 5 ft: caliche zone.	
5	M-116-5	5						
10	M-116-10	10		10	6.2			
15								
20	M-116-20	20		10	0.0			25 ft
25						SM	<b>ALLUVIUM; SILTY SAND</b> , yellow brown (5Y 8/1), 20% silt with trace clay, 80% sand (very fine- to fine-grained, with medium- to coarse-grained sand, angular to subangular), common caliche nodules to 3", dry, no unusual odors or staining.	29 ft
30	M-116-30	30		10	2.2	ML/SM	<b>MUDDY CREEK FORMATION - FIRST FINE-GRAINED FACIES: SILT and SANDY SILT</b> , moderate yellow brown (10YR 5/4), sandy zones (with up to 30% very fine-grain, angular to subangular), dry.  From 31 to 35 ft: pale orange (10YR 7/2), abundant soft caliche cement and nodules to 1".	
35								
40	M-116-40	40		10	6.5			41 ft
45						SM	<b>MUDDY CREEK FORMATION - FIRST COARSE-GRAINED FACIES: SILTY SAND</b> with trace gravel, yellow brown (10YR 6/4), 30% silt with trace clay, 65% sand (very fine- to medium-grained with coarse-grained sand, angular to subrounded), 5% gravel to 1/4" (angular to subrounded), dry.  Damp at 45'	
50	M-116-50	50			1.8			50 ft

Notes: Total Depth = 50 feet  
Boring Terminated  
Target depth achieved

The Boring was backfilled with bentonite chips and hydrated. The surface was restored.  
No groundwater was encountered in the boring.



1220 Avenida Acaso  
Camarillo, California 93012  
(805) 388-3775

<b>Client:</b>	Tronox LLC	<b>Boring No. M-117</b>	
<b>Project Number:</b>	04020-023-151		
<b>Site Location:</b>	Henderson, NV		
<b>Coordinates:</b>	26715198.289 N , 828917.057 E NAD83	<b>Elevation:</b> 1877.98 ft, msl	<b>Sheet:</b> 1 of 2
<b>Drilling Method:</b>	Sonic - Continuous Core		<b>Monitoring Well Installed:</b> Yes
<b>Sample Type(s):</b>	Split Spoon/Core	<b>Boring Diameter:</b> 7-inch	<b>Screened Interval:</b> 130-150 feet

<b>Weather:</b> Cold, cloudy, 30s to 40s	<b>Logged By:</b> Ed Krish	<b>Date/Time Started:</b> 3/11/06 7:30 am	<b>Depth of Boring:</b> 157 feet
<b>Drilling Contractor:</b> Prosonic	<b>Ground Elevation:</b>	<b>Date/Time Finished:</b> 3/11/06	<b>Water Level:</b> 79.4 feet

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)	
0	M-117-0.5	0.5		10		SM (GM)	<b>ALLUVIUM; SILTY/GRAVELY SAND</b> , with silty gravel lenses present, pale yellow brown (10YR 6/4), 10-20% silt with trace clay, 60 to 80% sand (very fine- to very coarse-grained, angular to subrounded), 10 to 30% gravel to 2" maximum, (commonly 1/8" to 3/4", subangular to angular, volcanic to basaltic, well graded), dry, no unusual odor or staining.  From 27 to 40 ft: brown (5YR 5/4).		
1	M-117-5	5		10	0.0				
10	M-117-10	10		10	0.0				
20	M-117-20	20		10	0.0				
20	M-117-20D	20		10	0.0				
30	M-117-30	30		10	0.0				
40	M-117-40	40		10	0.0			40 ft	
47						GM		<b>ALLUVIUM; SANDY SILTY GRAVEL</b> , brown (5YR 5/4), 25% silt with trace clay, 35% sand (very fine- to very coarse-grained, angular to subrounded), 40% gravel to 2 1/2" maximum (commonly 1/8" to 1", angular to subangular), dry, no unusual odor or staining. From 46 to 47 ft: caliche zone at contact with Muddy Creek Fm - First coarse-grained facies at 47'.	47 ft
50	M-117-50	50		10	0.0	SM (GM)		<b>MUDDY CREEK FORMATION - FIRST COARSE-GRAINED FACIES; SILTY SAND and GRAVELLY SAND</b> , with silty gravel lenses present, brown (5YR 5/4 & 5/6), 20 to 45% silt with trace clay, 50 to 70% sand (very fine- to very coarse-grained, angular to subrounded), 0 to 20% gravel to 1" maximum (commonly 1/8" to 3/4", angular to subangular), dry, no unusual odors or staining.  Damp at 70' From 72 to 74 ft: caliche zone, nodular.  From 79 to 85 ft: common caliche nodules to 1/2". Wet at 80'  From 85 to 100 ft: Sp. (?) caliche nodules to 1/2".	
60	M-117-60	60		20	0.0				
70	M-117-70	70			0.0				
80	M-117-80	80		17	0.0				
80	M-117-80D	80							
100				20					

Notes:



1220 Avenida Acaso  
 Camarillo, California 93012  
 (805) 388-3775

<i>Client:</i>	Tronox LLC	<b>Boring No. M-117</b>
<i>Project Number:</i>	04020-023-151	
<i>Site Location:</i>	Henderson, NV	
<i>Coordinates:</i>	26715198.289 N, 828917.057 E NAD83	<i>Elevation:</i> 1877.98 ft, msl
<i>Drilling Method:</i>	Sonic - Continuous Core	
<i>Sample Type(s):</i>	Split Spoon/Core	<i>Boring Diameter:</i> 7-inch
<i>Weather:</i> Cold, cloudy, 30s to 40s		<i>Logged By:</i> Ed Krish
<i>Drilling Contractor:</i> Prosonic		<i>Date/Time Started:</i> 3/11/06 7:30 am
<i>Ground Elevation:</i>		<i>Date/Time Finished:</i> 3/11/06
		<i>Depth of Boring:</i> 157 feet
		<i>Water Level:</i> 79.4 feet
<i>Screened Interval:</i>	130-150 feet	

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
110				20		SM (GM)	MUDDY CREEK FORMATION - FIRST COARSE-GRAINED FACIES: SILTY SAND and GRAVELLY SAND, with silty gravel lenses present, cont'd	119 ft
120						ML	MUDDY CREEK FM - SECOND FINE-GRAINED FACIES: SILT and SANDY SILT, brown (5YR 5/4), interbedded sandy zones with 20 to 50% sand (very fine-grained, angular to subangular), no unusual odors or staining.	
130				20				157 ft
140								
150								
160							Total Depth = 157 feet Boring Terminated Target depth achieved	
170								
180								
190								
200								

**Notes:**

The Boring was backfilled with bentonite chips and hydrated. The surface was restored.  
 Groundwater was encountered in the boring at 79.4 ft bgs.

Checked by \_\_\_\_\_ SWB      Date: 8/10/06



1220 Avenida Acaso  
Camarillo, California 93012  
(805) 388-3775

Client:	Tronox LLC		<b>Boring No. M-118</b>
Project Number:	04020-023-151		
Site Location:	Henderson, NV		
Coordinates:	26715068.012 N , 828036.397 E ; NAD 83	Elevation: 1874.53 feet	Sheet: 1 of 2
Drilling Method:	Sonic - Continuous Core		Monitoring Well Installed: Yes
Sample Type(s):	Split Spoon/Core	Boring Diameter: 7-inch	Screened Interval: 138-158 feet

Weather: Sunny, windy, 50s F	Logged By: Ed Krish	Date/Time Started: 3/8/06 11:45 am	Depth of Boring: 163 feet
Drilling Contractor: Prosonic	Ground Elevation:	Date/Time Finished: 3/8/06 5:05 pm	Water Level:

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
0-10	M-118-0.5 M-118-5 M-118-10			10	2.4 12.8	SM (GM)	<p><b>ALLUVIUM; SILTY SAND and GRAVELY SAND</b>, with silty gravel lenses present, brown (5YR 5/5), 15 to 20% silt, 65 to 70% sand (very fine- to very-coarse-grained, angular to subangular), 10 to 20% volcanic gravel to 4" maximum (commonly granule to pea gravel, 18" to 1/4", angular to subangular), dry, no unusual odor or staining.</p>	
10-20	M-118-20 M-118-20D		10	5.1				
20-30	M-118-30		10	2.9				
30-40	M-118-40		10	4.7				
40-50	M-118-50		10			SM (GM)	<p>From 40 to 51 ft: very pale orange (10YR 8/2) with common caliche nodules and soft cement in sand matrix, nodules to 2 1/2".</p> <p>From 51 to 52 ft: Silty Sand, very fine- to fine-grained, common caliche nodules, possibly reworked Muddy Creek Fm.</p>	52 ft
50-60	M-118-60		7	0.4		<p><b>MUDDY CREEK FM - FIRST COARSE-GRAINED FACIES; SILTY SAND and SILTY/GRAVELY SAND</b>, with silty gravel lenses present, brown (5YR 5/5), 10 to 35% silt, 60 to 80% sand (very fine- to very coarse-grained, angular to subrounded), 0 to 15% granules and pea gravel (1/8" to 3/8", angular to subangular), interbedded, dry, no unusual odors or staining.</p> <p>From 52 to 62 ft: Local zones with caliche nodules (1/8" to 1" diameter).</p>		
60-70			13			Damp at 75'		
70-80	M-118-80		7			<p>From 77 to 80 ft: Local zones with caliche nodules (1/8" to 1" diameter). Wet from 80'</p> <p>From 83 to 87 ft: Local zones with caliche nodules (1/8" to 1" diameter).</p>		
80-90			13			From 92 to 102 ft: Local zones with caliche nodules (1/8" to 1" diameter).		
90-100			13					
100					3.4			

Notes:



1220 Avenida Acaso  
Camarillo, California 93012  
(805) 388-3775

<i>Client:</i>	Tronox LLC	<b>Boring No. M-118</b>
<i>Project Number:</i>	04020-023-151	
<i>Site Location:</i>	Henderson, NV	
<i>Coordinates:</i>	26715068.012 N , 828036.397 E ; NAD 83	<i>Elevation:</i> 1874.53 feet
<i>Drilling Method:</i>	Sonic - Continuous Core	
<i>Sample Type(s):</i>	Split Spoon/Core	<i>Boring Diameter:</i> 7-inch
<i>Weather:</i> Sunny, windy, 50s F		<i>Logged By:</i> Ed Krish
<i>Drilling Contractor:</i> Prosonic		<i>Date/Time Started:</i> 03/08/06 11:45 am
		<i>Depth of Boring:</i> 163 feet
		<i>Date/Time Finished:</i> 03/08/06 5:05 pm
		<i>Water Level:</i>

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
110				17		SM (GM)	<b>MUDDY CREEK FM - FIRST COARSE-GRAINED FACIES:</b> SILTY SAND and SILTY/GRAVELY SAND, with silty gravel lenses present, cont'd From 104 to 108 ft: Local zones with caliche nodules (1/8" to 1" diameter).  From 117 to 119 ft: Silt lens, sandy and gravely, local zones with caliche  From 123 to 126 ft: Local zones with caliche nodules (1/8" to 1" diameter).	126 ft
130				20	2.0			
140				20		ML	<b>MUDDY CREEK FM - SECOND FINE-GRAINED FACIES:</b> SILT and SANDY SILT, brown (5YR 5/5), 0 to 30% sand, very fine-grained locally, interbedded, wet.	
160				20	5.05			163 ft
170							Total Depth = 163 feet Boring Terminated Target depth achieved	

**Notes:**

The Boring was backfilled with bentonite chips and hydrated. The surface was restored.  
No groundwater was encountered in the boring.

Checked by \_\_\_\_\_ SWB      Date: 8/10/06



1220 Avenida Acaso  
Camarillo, California 93012  
(805) 388-3775

<i>Client:</i>	Tronox LLC	<b>Boring No. M-119</b>	
<i>Project Number:</i>	04020-023-151		
<i>Site Location:</i>	Henderson, NV		
<i>Coordinates:</i>	26716076.792 N, 826740.838 E; NAD 83	<i>Elevation:</i> 1838.75 ft., msl	<i>Sheet:</i> 1 of 1
<i>Drilling Method:</i>	Sonic - Continuous Core		<i>Monitoring Well Installed:</i> No
<i>Sample Type(s):</i>	Split Spoon/Core	<i>Boring Diameter:</i> 7-inch	<i>Screened Interval:</i>

<i>Weather:</i> Sunny, 50s to 60s F	<i>Logged By:</i> Ed Krish	<i>Date/Time Started:</i> 3/14/06 7:20 am	<i>Depth of Boring:</i> 50 feet
<i>Drilling Contractor:</i> Prosonic	<i>Ground Elevation:</i>	<i>Date/Time Finished:</i> 3/14/06 9:30 am	<i>Water Level:</i>

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
10	M-119-0.5 M-119-0.5D M-119-5 M-119-10			10		SM (GM)	<b>ALLUVIUM; SILTY/GRAVELLY SAND</b> , with silty gravel lenses present, yellow brown (10YR 6/4), 10% silt with trace clay, 70% sand (very fine- to very-coarse-grained, angular to subangular), 20% gravel to 1 1/2" (commonly 1/8" to 1", angular to subangular), dry, no unusual odor or staining.	27 ft
20	M-119-20			10	3.3			
30	M-119-32			10	0.0	SM	<b>ALLUVIUM; SILTY SAND</b> , very pale orange (10YR 8/2), 10% silt with trace clay, 90% sand (very fine- to medium-grained with coarse-grained sand, angular to subangular), common soft caliche cement matirx, dry, no unusual odors or staining.	32 ft
40	M-119-40			10	0.0	ML/SM	<b>MUDDY CREEK FM - FIRST FINE-GRAINED FACIES: SILT and SANDY SILT</b> , yellow brown (10YR 6/4), sandy zones with up to 30% sand (very fine-grained, angular to subangular). From 33 to 34 ft: minor caliche nodules to 1".  Damp at 44'	46 ft
50	M-119-50			10	1.2	SM (GM)	<b>MUDDY CREEK FM - FIRST COARSE-GRAINED FACIES: SILTY/GRAVELLY SAND</b> , with silty gravel lenses present, brown (5YR 6/4), 10% silt with trace clay, 80% sand (very fine- to medium-grained with coarse- to very coarse-grained sand, angular to subangular), 10% gravel to 1/8".	50 ft
							Total Depth = 50 feet Boring Terminated Target depth achieved	

**Notes:**

The Boring was backfilled with bentonite chips and hydrated. The surface was restored.  
No groundwater was encountered in the boring.



1220 Avenida Acaso  
Camarillo, California 93012  
(805) 388-3775

<i>Client:</i>	Tronox LLC	<b>Boring No. M-120</b>	
<i>Project Number:</i>	04020-023-151		
<i>Site Location:</i>	Henderson, NV		
<i>Coordinates:</i>	26715162.900 N, 828387.792 E, NAD 83	<i>Elevation:</i> 1875.81 ft, msl	<i>Sheet:</i> 1 of 2
<i>Drilling Method:</i>	Sonic - Continuous Core		<i>Monitoring Well Installed:</i> Yes
<i>Sample Type(s):</i>	Split Spoon/Core	<i>Boring Diameter:</i> 7-inch	<i>Screened Interval:</i> 80-100 feet

<i>Weather:</i> Windy, 40s to 58s F	<i>Logged By:</i> Ed Krish	<i>Date/Time Started:</i> 3/8/06 9:00 am	<i>Depth of Boring:</i> 107 feet
<i>Drilling Contractor:</i> Prosonic	<i>Ground Elevation:</i>	<i>Date/Time Finished:</i> 3/8/06	<i>Water Level:</i> 79.47

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
7	M-120-0.5			7		SW/SP	<b>ALLUVIUM; SAND</b> , brown (5YR 5/4), 20% silt and clay, 60% sand (very fine- to fine-grained with common medium- to very coarse-grained sand, angular to subangular), 20% granules and gravel (fine-grained to 1/2", angular to subangular), gravelly, dry, no unusual odors or staining.	21 ft
3	M-120-5			3	0.0			
12	M-120-10			12	1.0			
10	M-120-20			10	1.8			
26				3		GM	<b>ALLUVIUM; SANDY GRAVEL</b> , brown (5YR 5/4), 20% silt and clay, 30% sand (very fine- to very coarse-grained, angular to subangular), 50% gravel to 3 1/2" (mostly 1/8" to 1 1/2", angular to subangular, basaltic), dry.	26 ft
31	M-120-30			3	0.8	SM	<b>ALLUVIUM; SILTY SAND</b> , brown (5YR 5/4), 25 to 35% silt, 75% sand (very fine- to fine-grained with minor medium to coarse-grained sand, angular to subangular), 0 to 5% granules and gravel (fine gravel to 1/4"), dry, no unusual odors or staining. From 31 to 41 ft: moderate calcite cement.	49 ft
41	M-120-40 M-120-40D			12	2.2		From 48 to 49 ft: caliche zone with nodules to 3 1/2". Contact with Muddy Creek Fm at 49 ft	
49	M-120-50			12	1.6	SC/SM (GM)	<b>MUDDY CREEK FM - FIRST COARSE-GRAINED FACIES: SAND</b> , with silty gravel lenses present, silty gravel lenses present and varying amounts of silt, clay and/or gravel, brown (5YR 5/4), 0 to 20% clay, 10 to 50% silt, 50 to 70% sand (very fine- to fine-grained, with medium- to very coarse-grained sand, angular to subangular), 0 to 15% gravel (granules to fine gravel to 1", angular to subangular), dry.	49 ft
57	M-120-60			7	0.8		From 49 to 57 ft: sand, silty or clayey. From 57 to 83 ft: sand, gravelly ± silt.	
80	M-120-80			7	1.8		Damp at 80' From 83 to 102 ft: sand, silty.	
85				15			Wet at 85'	
88				8				

Notes:

Checked by \_\_\_\_\_ SWB Date: 8/10/06





1220 Avenida Acaso  
 Camarillo, California 93012  
 (805) 388-3775

<i>Client:</i>	Tronox LLC	<b>Boring No. M-120</b>	
<i>Project Number:</i>	04020-023-151		
<i>Site Location:</i>	Henderson, NV		
<i>Coordinates:</i>	26715162.900 N, 828387.792 E, NAD 83	<i>Elevation:</i> 1875.81 ft, msl	<i>Sheet:</i> 2 of 2
<i>Drilling Method:</i>	Sonic - Continuous Core		<i>Monitoring Well Installed:</i> Yes
<i>Sample Type(s):</i>	Split Spoon/Core	<i>Boring Diameter:</i> 7-inch	<i>Screened Interval:</i> 80-100 feet

<i>Weather:</i> Windy, 40s to 58s F	<i>Logged By:</i> Ed Krish	<i>Date/Time Started:</i> 03/08/06 9:00 am	<i>Depth of Boring:</i> 107 feet
<i>Drilling Contractor:</i> Prosonic	<i>Ground Elevation:</i>	<i>Date/Time Finished:</i> 3/8/06	<i>Water Level:</i> 79.47 feet

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
110						SC/SM (GM)	<p><b>MUDDY CREEK FM - FIRST COARSE-GRAINED FACIES:</b> SAND, with silty gravel lenses present, silty gravel lenses present and varying amounts of silt, clay and/or gravel, cont'd</p> <p>From 102 to 107 ft: sand, silty, gravelly.</p>	107 ft
120							<p>Total Depth = 107 feet            Boring Terminated            Target depth achieved</p>	
130								
140								
150								
160								
170								
180								
190								
200								

**Notes:**

The Boring was backfilled with bentonite chips and hydrated. The surface was restored.  
 Groundwater was encountered in the boring at 79.47 feet.



1220 Avenida Acaso  
Camarillo, California 93012  
(805) 388-3775

Client:	Tronox LLC	<b>Boring No. M-121</b>			
Project Number:	04020-023-151				
Site Location:	Henderson, NV				
Coordinates:	26715001.237 N, 827694.571 E, NAD 83	Elevation: 1872.90 ft, msl	Sheet: 1 of 2		
Drilling Method:	Sonic	Monitoring Well Installed:	Yes		
Sample Type(s):	Split Spoon/Core	Boring Diameter:	7-inch	Screened Interval:	77-97 feet

Weather: Windy, cold, 30s F	Logged By: Ed Krish	Date/Time Started: 3/10/06 7:30 am	Depth of Boring: 107 feet
Drilling Contractor: Prosonic	Ground Elevation:	Date/Time Finished: 3/10/06 1:00 pm	Water Level: 76.1

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (ft.)
0.5	M-121-0.5	0.5		10		SM/GM	<b>ALLUVIUM; SILTY/GRAVELLY SAND</b> , brown (5YR 5/4), 15% silt with trace clay, 60% sand (very fine- to fine-grained, angular to subangular), 25% volcanic gravel (commonly 1/8" to 3/4", angular to subangular), dry, no unusual odors or staining.	
5	M-121-5	5		10	0.0			
5D	M-121-5D	5D		10	0.0			
10	M-121-10	10		10	0.0			
20	M-121-20	20		10	17.2			
30	M-121-30	30		10	2.0			
40	M-121-40	40		6	0.8		From 44 to 45ft: Silty Sand, 75% sand (very fine-grained sand with medium- to coarse-grained sand, angular to subangular), caliche zone with nodules to 4 1/2".	45 ft
50	M-121-50	50		4	3.3	SM (GM)	<b>MUDDY CREEK FM - FIRST COARSE-GRAINED FACIES: SILTY SAND and GRAVELLY SAND</b> , with silty gravel lenses present, brown (5YR 5/5), locally very silty to 40% silt with trace clay, gravelly zones with 5 to 15% gravel (granules and fine gravel to 1", commonly 1/8" to 1/4", angular to subangular), no unusual odors or staining. From 45 to 52 ft: with 5% granules to 1/4".  From 63 to 67 ft: with 10% granules to 1/4".  From 71 to 72 ft: with 5% granules to 1/8". Damp at 71'  From 77 to 79 ft: with 5% granules to 1/8".  From 80 to 82 ft: with 15% granules, fine gravel to 1". From 82 to 89 ft: with 5% granules to 1/8". Wet at 80'  From 89 to 92 ft: with 10% granules to 1/4".  From 97 to 102 ft: with 5% granules to 1/8".	
60	M-121-60	60		10	89.6			
70				13	104.0			
80	M-121-80	80		17	0.0			
90				10				
100				10				

Notes:



1220 Avenida Acaso  
 Camarillo, California 93012  
 (805) 388-3775

<i>Client:</i>	Tronox LLC	<b>Boring No. M-121</b>
<i>Project Number:</i>	04020-023-151	
<i>Site Location:</i>	Henderson, NV	
<i>Coordinates:</i>	26715001.237 N, 827694.571 E, NAD 83	<i>Elevation:</i> 1872.90 ft, msl
<i>Drilling Method:</i>	Sonic	<i>Monitoring Well Installed:</i> Yes
<i>Sample Type(s):</i>	Split Spoon/Core	<i>Boring Diameter:</i> 7-inch
		<i>Screened Interval:</i> 77-97 feet

<i>Weather:</i> Windy, cold, 30s F	<i>Logged By:</i> Ed Krish	<i>Date/Time Started:</i> 3/10/06 7:30 am	<i>Depth of Boring:</i> 107 feet
<i>Drilling Contractor:</i> Prosonic	<i>Ground Elevation:</i>	<i>Date/Time Finished:</i> 3/10/06 1:00 pm	<i>Water Level:</i> 76.1

Depth (ft)	Sample ID	Sample Depth (ft)	Blows per 6"	Recovery (feet)	Headspace (ppm)	U.S.C.S	MATERIAL IDENTIFICATION, color, description of fine grained material (silt and clay) description of coarse grained material (sand and gravel), structural or mineralogical features, density or stiffness, moisture content, odors or staining.	Depth (Ft.)
110						SM (GM)	MUDDY CREEK FM - FIRST COARSE-GRAINED FACIES: SILTY SAND and GRAVELLY SAND, with silty gravel lenses present, cont'd	107 ft
121							Total Depth = 107 feet Boring Terminated Target depth achieved	
130								
140								
150								
160								
170								
180								
190								
200								

**Notes:**

The Boring was backfilled with bentonite chips and hydrated. The surface was restored.  
 Groundwater was encountered in the boring at 79.10 feet.