

EXPLORATION LOG M-137

PROJECT: TRONOX PHASE B
 EXPLORATION LOCATION: TRONOX AREA 4
 EXPLORATION SIZE (dia.): 6" CORE BARREL
 ELEVATION: EXISTING GROUND SURFACE

PROJECT NO.: 20092518V1
 EXPLORATION DATE: 7/27/2009
 EQUIPMENT: BOART SONIC CORE RIG
 LOGGED BY: BOART/KRISH

INITIAL DEPTH TO WATER: 54
 FINAL DEPTH TO WATER: 54

DATE MEASURED: 7/27/09
 DATE MEASURED: 7/27/09

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	PI	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL CONSTRUCTION
		SM	<p>Alluvium. Pale brown (10YR 6/3) and moderate yellow brown (10YR 5/4) silty SAND. 60-70% m-cg sand with minor fg and vcg, SA, qtz and volc. frags, 20-30% silt, tr clay. Up to 10% volc. granules to 3/8 inch, SA-A, trace caliche to 19' then increasing to com. 23-30 feet.</p> <p>11-11.5 feet, cobbles/pebbles to 3", A, volc.</p>						

The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made. It is not intended to be representative of subsurface conditions at other locations or times.

EXPLORATION LOG M-137

PROJECT: TRONOX PHASE B
 EXPLORATION LOCATION: TRONOX AREA 4
 EXPLORATION SIZE (dia.): 6" CORE BARREL
 ELEVATION: EXISTING GROUND SURFACE

PROJECT NO.: 20092518V1
 EXPLORATION DATE: 7/27/2009
 EQUIPMENT: BOART SONIC CORE RIG
 LOGGED BY: BOART/KRISH

INITIAL DEPTH TO WATER: 54
 FINAL DEPTH TO WATER: 54

DATE MEASURED: 7/27/09
 DATE MEASURED: 7/27/09

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	PI	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL CONSTRUCTION
			<p>19-23 feet, minor caliche as nodules and coatings, moderate yellow brown (10YR 5/4), minor cg SA sand and 10% granules to 3/8".</p> <p>23-30 feet, com. caliche as nodules to 1", grain coatings and semi-hard cement, very pale brown (10YR 7/4) in f-mg sand matrix. Caliche up to 50%.</p>						
		ML	Muddy Creek Formation (MCfg1). Dark yellow orange (10YR 6/6) SILT, with 5-10% vfg sand, 5% clay. Minor scattered caliche nodules to 1" and coatings.						

The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made. It is not intended to be representative of subsurface conditions at other locations or times.

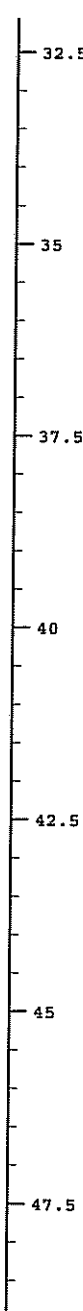
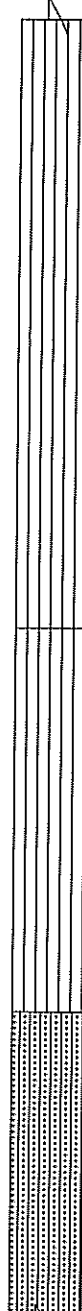
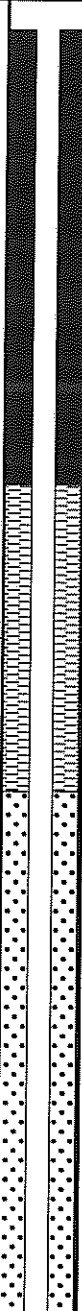
EXPLORATION LOG M-137

PROJECT: TRONOX PHASE B
 EXPLORATION LOCATION: TRONOX AREA 4
 EXPLORATION SIZE (dia.): 6" CORE BARREL
 ELEVATION: EXISTING GROUND SURFACE

PROJECT NO.: 20092518V1
 EXPLORATION DATE: 7/27/2009
 EQUIPMENT: BOART SONIC CORE RIG
 LOGGED BY: BOART/KRISH

INITIAL DEPTH TO WATER: 54
 FINAL DEPTH TO WATER: 54

DATE MEASURED: 7/27/09
 DATE MEASURED: 7/27/09

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	PI	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL CONSTRUCTION
									
		ML	Dark yellow orange (10YR 6/6) sandy SILT. 60% silt, 35% vfg sand, 5% clay.						
		SM	Interbedded moderate yellow brown (10YR 5/4) silty SAND and dark yellow brown (10YR 4/2) gravelly SAND. Silty sand 60% vf-fg with minor mg sand, 35% silt, 5% clay. Gravelly sand 80% f-cg with com. ng and sparse vcg, SA-SR, sand, 20% volc. granules to 3/8", SA. Gravelly sand occurs at 45-48, 54-56, 64-65.5, 70.5-72 feet. Water at 54 feet.						

The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made. It is not intended to be representative of subsurface conditions at other locations or times.

EXPLORATION LOG M-137

PROJECT: TRONOX PHASE B
 EXPLORATION LOCATION: TRONOX AREA 4
 EXPLORATION SIZE (dia.): 6" CORE BARREL
 ELEVATION: EXISTING GROUND SURFACE

PROJECT NO.: 20092518V1
 EXPLORATION DATE: 7/27/2009
 EQUIPMENT: BOART SONIC CORE RIG
 LOGGED BY: BOART/KRISH

INITIAL DEPTH TO WATER: 54
 FINAL DEPTH TO WATER: 54

DATE MEASURED: 7/27/09
 DATE MEASURED: 7/27/09

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	PI	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL CONSTRUCTION
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>50</p><p>52.5</p><p>55</p><p>57.5</p><p>60</p><p>62.5</p><p>65</p> </div> </div>									

The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made. It is not intended to be representative of subsurface conditions at other locations or times.

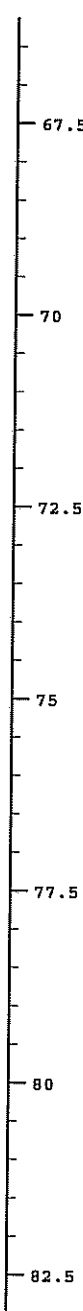
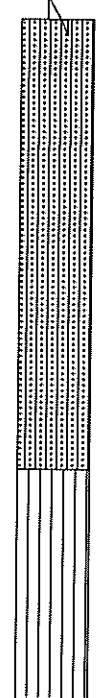
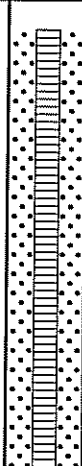
EXPLORATION LOG M-137

PROJECT: TRONOX PHASE B
 EXPLORATION LOCATION: TRONOX AREA 4
 EXPLORATION SIZE (dia.): 6" CORE BARREL
 ELEVATION: EXISTING GROUND SURFACE

PROJECT NO.: 20092518V1
 EXPLORATION DATE: 7/27/2009
 EQUIPMENT: BOART SONIC CORE RIG
 LOGGED BY: BOART/KRISH

INITIAL DEPTH TO WATER: 54
 FINAL DEPTH TO WATER: 54

DATE MEASURED: 7/27/09
 DATE MEASURED: 7/27/09

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	PI	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	% SWELL	WELL CONSTRUCTION
									
		ML	Dark yellowish brown (10YR 4/2) sandy SILT with 10-15% vfg sand, 1-2% clay, minor scattered caliche nodules and coatings.						
			END OF BORING AT 75.0 FEET						

The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made. It is not intended to be representative of subsurface conditions at other locations or times.