EXPLORATION LOG SA108-A3

PROJECT: TRONOX PHASE B **PROJECT NO.:** 20092518V1 **EXPLORATION LOCATION:** TRONOX AREA 3 **EXPLORATION DATE:** 10-16-2009 **EXPLORATION SIZE (dia.):** 3" CORE BARREL **EQUIPMENT:** SDC550-24 SONIC CORE RIG **ELEVATION:** EXISTING GROUND SURFACE LOGGED BY: THOMPSON/GAREY INITIAL DEPTH TO WATER: NOT ENCOUNTERED **DATE MEASURED:** N/A FINAL DEPTH TO WATER: NOT ENCOUNTERED DATE MEASURED: N/A WELL CONSTRUCTION MOISTURE CONTENT (%) DRY DENSITY (pcf) Pocket Penetrometer (tsf) **ELEVATION/** SOIL & SAMPLE USCS **DESCRIPTION** DEPTH **SYMBOLS** FILL FILL: Manganese tailings, black (10R 2.5/1), 100% very fine Mn sand, medium loose, damp, low plasticity, no HCl reaction, faint chemical odor FILL FILL: 7' to 13' below ground surface (BGS), 7.5 reddish black (2.5YR 2.5/1) sand mixed with Mn tailings 12.5 FILL ...color to dark greyish brown (2.5YR 3/2), white streaks present on larger Mn fragments

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.

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GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.

Figure No.

EXPLORATION LOG SA108-A3

PROJECT: TRONOX PHASE B PROJECT NO.: 20092518V1

EXPLORATION LOCATION: TRONOX AREA 3 **EXPLORATION DATE:** 10-16-2009

EXPLORATION SIZE (dia.): 3" CORE BARREL **EQUIPMENT:** SDC550-24 SONIC CORE RIG

ELEVATION: EXISTING GROUND SURFACE **LOGGED BY**: THOMPSON/GAREY

INITIAL DEPTH TO WATER: NOT ENCOUNTERED DATE MEASURED: N/A

FINAL DEPTH TO WATER: NOT ENCOUNTERED DATE MEASURED: N/A

FINAL DEPTH TO WATER:		NOT ENCOUNTERED DATE MEASURED:			N/A						
ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	₫	1	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION		
- 17.5 -		FILL	wood fragments								
-		SW	SAND with gravel, reddish brown (5YR 4/4), 90% fine to coarse sand, 10% fine sub-								
- 20 22.5 25	8 7 6	SW	angular to sub-rounded gravel, loose, dry, no plasticity, zones of weak calcite cementation strong HCl reaction Collect SA108-20B, PID readings: 10.6 eV = 0.2 ppmV, 11.7 eV = 0.0 ppmV								
-		SW	trace volcanic cobbles								
- 30 - - - - - 32.5 -	29 31 29	SW	Collect SA108-30B, PID readings: 10.6 eV = 0.1 ppmV, 11.7 eV = 0.1 ppmV								

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Figure No.

EXPLORATION LOG SA108-A3

PROJECT: TRONOX PHASE B PROJECT NO.: 20092518V1

EXPLORATION LOCATION: TRONOX AREA 3 **EXPLORATION DATE:** 10-16-2009

EXPLORATION SIZE (dia.): 3" CORE BARREL **EQUIPMENT:** SDC550-24 SONIC CORE RIG

ELEVATION: EXISTING GROUND SURFACE **LOGGED BY**: THOMPSON/GAREY

INITIAL DEPTH TO WATER: NOT ENCOUNTERED DATE MEASURED: N/A

FINAL DEPTH TO WATER: NOT ENCOUNTERED DATE MEASURED: N/A

	THE TO WATER.	1101 211	DATE MEASURED.	11//	•				
ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	₫	1	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
- 35 		SW	Gravelly SAND, reddish brown (5YR 4/4), 85% fine to coarse sand, 15% fine to coarse subrounded volcanic gravel, dense, dry, no plasticity, strong HCI reaction						
- - 45	17	SW	strong gypsum cementation						
-	17 13 13	SW	Collect SA108-45B						
- - 47.5 - - - - - 50			END OF BORING AT 46.5 FEET						

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Figure No.