## **EXPLORATION LOG SA182-A1**

**PROJECT: TRONOX PHASE B PROJECT NO.:** 20092518V1

**EXPLORATION LOCATION:** TRONOX AREA 1 **EXPLORATION DATE: 7-22-2009** 

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

**ELEVATION: EXISTING GROUND SURFACE** LOGGED BY: SEARS/BRINKERHOFF

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

FINAL DEF	TH TO WATER:	NOT EN	COUNTERED DATE MEASURED:	N//	۸				
ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	Ы	П	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
- - - 2.5 - -		FILL	SILT with sand, SM, yellowish brown, 65% silt, 35% sand (80% fine, 20% coarse), trace gravel, dry, strong HCl reaction						
- 5 - - - - 7.5 - -		SP-SM	Silty SAND, reddish brown (5YR 4/4), 35% silt, 65% sand (80% fine sand, 20% coarse sand), trace gravel, laminated, very dense, dry, strong HCI reaction, weak to moderate cementation						
- 10 - - - - - 12.5	29 50/5	SP-SM	Collect SA182-10B, PID readings: 10.6 eV = 0.1 ppmV, 11.7 eV = 0.0 ppmV						
-		SP-SM	white (10YR 8/1), coating and matrix, strong HCI reaction, moderate cementation						
- 15 - - - - - 17.5		SP-SM	SAND with silt, yellowish brown (10YR 5/4), 30% silt, 70% sand (90% fine sand, 10% coarse sand), trace gravel, dense, moist, strong HCI reaction						
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INITIAL DEPTH TO WATER: NOT ENCOUNTERED DATE MEASURED: N/A

FINAL DEP	TH TO WATER:	NOT EN	COUNTERED DATE MEASURED:	N/	4				
ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	Ā	71	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
- - - 20 -									
- - 22.5 - - -		SC	MUDDY CREEK FORMATION: Clayey SAND, reddish brown (5YR 4/4), 40% lean clay, 60% fine sand, trace gravel, laminated, moist, weak to no HCI reaction						
- 25 - - - - - - 27.5	12 16 26	SC	Collect SA182-25B, PID readings: 10.6 eV = 0.4 ppmV, 11.7 eV = 0.6 ppmV						
- - - - - 30		SC	moisture content increases						
- - - - - 32.5		CL	Sandy CLAY, light yellowish brown (10YR 6/4), 60% lean clay, 40% fine sand, trace gravel, laminated, stiff, moist, weak HCl reaction						
- - - - 35 -		SC	Clayey SAND, yellowish brown (10YR 5/4),						

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Figure No.

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

SOIL & SAMPLE   USCS   DESCRIPTION   a   J   V   V   V   V   V   V   V   V   V		TH TO WATER:								
35% lean clay, 65% fine sand, trace gravel, laminated, approximately 1" thick layers of poorly graded sand, wet, no HCL reaction  SC Collect SA-182-38B, PID readings: 10.6 eV = 4.2 ppmV, 11.7 eV = 2.8 ppmV  END OF BORING AT 39.5 FEET  -42.5  -45.5  -50			USCS	DESCRIPTION	ā	1	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
END OF BORING AT 39.5 FEET  - 42.5  - 47.5  - 50	- - - 37.5			laminated, approximately 1" thick layers of						
- 40	-	6 8 10	SC	Collect SA-182-38B, PID readings: 10.6 eV = 4.2 ppmV, 11.7 eV = 2.8 ppmV						
- 45 - 45 47.5 50 	- 40			END OF BORING AT 39.5 FEET						
- 45 - 45 47.5 50 	_									
- 45 - 45 47.5 50 	_									
	- 42.5									
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	<b>— 47.</b> 5									
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- - - 52.5	<del>-</del> 50									
- 52.5 -	-									
— 52.5 - -	-									
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Figure No.