EXPLORATION LOG SA148-A4

PROJECT: TRONOX PHASE B PROJECT NO.: 20092518V1 **EXPLORATION LOCATION:** TRONOX AREA 4 EXPLORATION DATE: 9-23-2009 EXPLORATION SIZE (dia.): 3" CORE BARREL EQUIPMENT: SDC550-24 SONIC CORE RIG **ELEVATION: EXISTING GROUND SURFACE** LOGGED BY: SEARS/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) Penetrometer (tsf) Pocket ELEVATION/ SOIL & SAMPLE USCS Ц DESCRIPTION ٩ DEPTH SYMBOLS 17 41 FILL Collect SA148-0.5B, PID readings: 10.6 eV = 0.0 ppmV, 11.7 eV = 0.0 ppmV 33 SAND, SW, brown (7.5YR 4/4), 95% fine to coarse sub-angular to sub-rounded sand, 5% fine sub-angular volcanic gravel, trace caliche 2.5 fragments, loose to medium dense, drv, no plasticity, strong HCI reaction 5 7.5 SW SAND, reddish brown (5YR 4/4), 95% fine to coarse sand, 5% fine to medium gravel, medium loose to dense, damp, no plasticity, strong HCI reaction 10 13 12 13 SW Collect SA148-10B, PID readings: 10.6 eV = 0.0 ppmV, 11.7 eV = 2.6 ppmV12.5 SW SAND with gravel, reddish brown (5YR 4/4), 90% fine to coarse sand, 10% fine to medium gravel, medium loose to very dense, damp, no plasticity, heavily cemented calichified zones, strong HCI reaction 15 17.5

> 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.

Figure No.

EXPLORATION LOG SA148-A4

PROJECT:	TRONOX PHASE	PROJECT	PROJECT NO.: 20092518V1							
	BARREI EXPLORA	EXPLORATION DATE: 9-23-2009								
ELEVATIO	N: EXISTING GRO	JRFACE LOGGED E	LOGGED BY: SEARS/GAREY							
INITIAL DE	PTH TO WATER:	NOT EI	COUNTERED DATE MEA	SURED:	N/A	4				
FINAL DEP	TH TO WATER:	COUNTERED DATE MEA	DATE MEASURED: N/A							
			DESCRIPTION				RE . (%)	SITY	eter	TION
ELEVATION/	SOIL & SAMPLE SYMBOLS	USCS			⊒	H	ISTU	DEN((pcf)	ocket strom (tsf)	VELL
								DRY	P. Pene	V NOC
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- 25										
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- 27.5										
-										
-										
- 30		SW	calichified zone (gypsum and calcite weak to moderate HCI reaction	e cement),						
	22 34 SW	SW	Collect SA148-30B, PID readings: 10.6 eV = 0.2							
-	50 -	SP	γ ppmV, 11.7 eV = 0.1 ppmV SAND vellowish red (5VR 5/8) 100%	wery fine						
-			to fine sand, dense to very dense, dry	/ to damp,						
F			low plasticity, variable calichified zone	S						
- 32.5										
-										
F										
— 35	10 14	SP	Collect SA148-35B, PID readings: 10.	6 eV = 0.0						
-	22		ppmV, 11.7 eV = 0.0 ppmV							
	N -									

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Figure No.

EXPLORATION LOG SA148-A4

PROJECT: TRONOX PHASE B **EXPLORATION LOCATION:** TRONOX AREA 4 EXPLORATION SIZE (dia.): 3" CORE BARREL **ELEVATION: EXISTING GROUND SURFACE INITIAL DEPTH TO WATER: NOT ENCOUNTERED** DATE MEASURED: N/A FINAL DEPTH TO WATER: NOT ENCOUNTERED DATE MEASURED: N/A ELEVATION/ SOIL & SAMPLE USCS DESCRIPTION DEPTH SYMBOLS SAND, reddish brown (5YR 4/4), 5% silt, 95% very fine to fine silt, trace gypsum crystals, medium dense, dry, low plasticity, weak HCI reaction 37.5 SP ...loose to medium loose, damp, moderate plasticity 40 SP ...caliche nodules up to 1" diameter, no HCI reaction 42.5 45 15 37 43 Collect SA148-45B, PID readings: 10.6 eV = 0.3 SP ppmV, 11.7 eV = 0.0 ppmV SAND, reddish brown (5YR 4/4), 5% silt, 95% very fine to fine sand, loose to dense, damp, moderate plasticity **END OF BORING AT 46.5 FEET** 47.5 50

- 52.5

PROJECT NO.: 20092518V1

EXPLORATION DATE: 9-23-2009 EQUIPMENT: SDC550-24 SONIC CORE RIG LOGGED BY: SEARS/GAREY

MOISTURE CONTENT (%)

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DRY DENSITY (pcf)

Pocket Penetrometer (tsf)

WELL CONSTRUCTION

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.

GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.

Figure No.