## EXPLORATION LOG SA41-A2

PROJECT: TRONOX PHASE B

EXPLORATION LOCATION: TRONOX AREA 2 EXPLORATION SIZE (dia.): <u>3" CORE BARREL</u> ELEVATION: EXISTING GROUND SURFACE PROJECT NO.: 20092518V1

EXPLORATION DATE: 9-11-2009 EQUIPMENT: SDC550-24 SONIC CORE RIG

LOGGED BY: THOMPSON/GAREY

**INITIAL DEPTH TO WATER:** <u>NOT ENCOUNTERED</u> **FINAL DEPTH TO WATER:** <u>NOT ENCOUNTERED</u>

# DATE MEASURED: N/A

DATE MEASURED: N/A

ELEVATION/ DEPTH			DESCRIPTION	Гd	ΓΓ	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
- 0  - 2.5   		SW	SAND, dark brown (10YR 3/2), 100% fine to coarse sand, trace fine gravel, dense, dry, weak HCI reaction, chemical staining present						
- 5 - - - 7.5 - - - - - - - - 10 -		SW	SAND, reddish brown (5YR 4/4), 95% fine to coarse sand, 5% fine volcanic gravel, dense, dry, no plasticity, small cemented zones (calcite cement), strong HCI reaction						
- - - - - - - - - - - - - - - - - - -	46 50/5	SW	gravel content to 10% Collect SA41-12B, PID readings: 10.6 eV = 0.2 ppmV, 11.7 eV = 0.0 ppmV SAND, reddish brown (5YR 4/4), 90% fine to coarse sand, 10% fine to coarse sub- angular to sub-rounded volcanic gravel, very dense, dry, no plasticity, strongly cemented zones						
- 	The descriptions contained	SW swithin this	black volcanic cobbles present	e tim	e the ex	ploration	was made		

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.

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 TRONOX PHASE B

 EXPLORATION LOCATION:
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 EXPLORATION SIZE (dia.):
 3" CORE BARREL

 ELEVATION:
 EXISTING GROUND SURFACE

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EXPLORATION DATE: 9-11-2009 EQUIPMENT: SDC550-24 SONIC CORE RIG

LOGGED BY: THOMPSON/GAREY

# INITIAL DEPTH TO WATER:NOT ENCOUNTEREDFINAL DEPTH TO WATER:NOT ENCOUNTERED

### DATE MEASURED: N/A DATE MEASURED: N/A

ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	Ē	ΓΓ	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL CONSTRUCTION
	-	SW	Gravelly SAND, reddish brown (5YR 4/4), 85%						
- - 20 - - -			fine to coarse sand, 15% fine to coarse gravel, dense, dry						
- 22.5 - - - -		SW	gravel content to 5% 24.5' to 25.5' below ground surface (BGS)						
- 25 - - - -		SP	gypsum rich zone Collect SA41-25B, PID readings: 10.6 eV = 0.2 ppmV, 11.7 eV = 0.0 ppmV SAND, pale brown (10YR 7/3), 100% very fine to fine sand, very dense, dry, no plasticity, variable cementation (calcite cement), strong						
- 27.5 - - -			HCI reaction						
- 30 - - -									
- 32.5 - - - -									
— 35 -	The descriptions contained	d within this e	exploration log apply only at the specific exploration location and at the	ne time	e the ex	ploration	was made		

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### **GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.**

Figure No.

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PROJECT: TRONOX PHASE B EXPLORATION LOCATION: TRONOX AREA 2				PROJECT NO.: 20092518V1 EXPLORATION DATE: 9-11-2009							
EXPLORATION SIZE (dia.): <u>3" CORE BARREL</u> ELEVATION: EXISTING GROUND SURFACE				EQUIPMENT: SDC550-24 SONIC CORE RIG							
INITIAL DE	PTH TO WATER:	LOGGED BY: THOMPSON/GAREY DATE MEASURED: N/A DATE MEASURED: N/A									
ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIF	PTION	Ē	LL	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)		
- 37.5 - 40 - 40 - 40 - 42.5 - 42.5 - 45 - 45 - 47.5 - 50 - 50		SP	Collect SA41-38B, PID re ppmV, 11.7 eV = 0.0 ppm SAND, reddish brown (5V very fine to fine sand, loo moderate plasticity, no H END OF BORING	nV YR 4/4), 5% silt, 95% se, damp, low to Cl reaction							
— 52.5 -											

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Figure No.

WELL CONSTRUCTION