EXPLORATION LOG SA212-A4

PROJECT:TRONOX PHASE BPROJECT NO.:20092518V1EXPLORATION LOCATION:TRONOX AREA 4EXPLORATION DATE:9-28-2009

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

FINAL DEPTH TO WATER:		NOT ENCOUNTERED DATE MEASURED:				<u>N/A</u>						
ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	Ы	П	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL			
- - - 2.5 - - - - - - -	23 22 18	FILL	Collect SA212-0.5B, PID readings: 10.6 eV = 0.0 ppmV, 11.7 eV = 0.2 ppmV FILL: SAND, SW, dark reddish brown (5YR 3/4), 95% fine to coarse sand, 5% fine to medium gravel, medium loose, no plasticity, strong HCI reaction									
- -7.5 - - - -10 - - - - -		SW	SAND, reddish brown (5YR 3/4), 95% fine to coarse sand, 5% fine to medium gravel, trace caliche, dense, dry, strong HCI reaction									
- - - - 15 - - - -	6 8 13	SW	Collect SA212-13B, SA212009-13B, PID readings: 10.6 eV = 0.4 ppmV, 11.7 eV = 0.2 ppmV SAND with gravel, reddish brown (5YR 4/3), 90% fine to coarse sand, 10% fine to medium sub-angular to sub-rounded volcanic gravel, loose, damp, no plasticity, strong HCl reaction									

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GEOTECHNICAL & ENVIRONMENTAL SERVICES, INC.

Figure No.

EXPLORATION LOG SA212-A4

PROJECT: TRONOX PHASE B **PROJECT NO.:** 20092518V1 **EXPLORATION LOCATION:** TRONOX AREA 4 **EXPLORATION DATE: 9-28-2009 EQUIPMENT:** SDC550-24 SONIC CORE RIG **EXPLORATION SIZE (dia.):** 3" CORE BARREL **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 CONSTRUCTION MOISTURE CONTENT (%) DRY DENSITY (pcf) Pocket Penetrometer (tsf) WELL ELEVATION/ SOIL & SAMPLE USCS **DESCRIPTION DEPTH** SYMBOLS SW ...zones of caliche present SP SAND, reddish brown (5YR 4/4), 100% fine to medium sand, dense, dry, weakly cemented zones SW SAND, reddish brown (5YR 3/4), 95% fine to coarse sand, 5% fine to medium gravel, trace caliche, very dense, dry, zones of cementation, strong HCI reaction 27.5 30 SP Collect SA212-30B, PID readings: 10.6 eV = 27 1.6 ppmV, 11.7 eV = 22 ppmV (likely read error) SAND, light reddish brown (5YR 6/4), 100% very fine to fine sand, dense, dry, no SP \plasticity, moderate gypsum cementation 32.5 ...trace silt, low plasticity, no cementation The descriptions contained within this exploration log apply only at the specific exploration location and at the time the exploration was made.

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Figure No.

EXPLORATION LOG SA212-A4

PROJECT: TRONOX PHASE B
EXPLORATION LOCATION: TRONOX AREA 4
EXPLORATION SIZE (dia.): 3" CORE BARREL

PROJECT NO.: 20092518V1
EXPLORATION DATE: 9-28-2009
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

FINAL DEPTH TO WATER:		NOT ENCOUNTERED DATE MEASURED:										
ELEVATION/ DEPTH	SOIL & SAMPLE SYMBOLS	USCS	DESCRIPTION	础	1	MOISTURE CONTENT (%)	DRY DENSITY (pcf)	Pocket Penetrometer (tsf)	WELL			
- 35 - - -												
- 37.5 - - - - - 40		SP	5% silt, no HCI reaction, trace calcite nodules									
- - - - 42.5												
- - 45 -	7 12 9	SP	Collect SA212-44B, PID readings: 10.6 eV = 0.4 ppmV, 11.7 eV = 0.6 ppmVcolor to reddish brown (5YR 4/4) END OF BORING AT 45.5 FEET									
- - - 47.5 - -												
- - - -												

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Figure No.