EXPLORATION LOG SA117-A2

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

EXPLORATION LOCATION: TRONOX AREA 2 **EXPLORATION DATE**: 9-18-2009

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

ELEVATION: EXISTING GROUND SURFACE LOGGED BY: THOMPSON/GAREY

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

| | TH TO WATER: | | NCOUNTERED DATE MEASURED: | | | | | | | | | |
|---|--------------------------|------|--|--|---|-------------------------|----------------------|---------------------------------|----------------------|--|--|--|
| ELEVATION/ DEPTH | SOIL & SAMPLE SYMBOLS | | | | П | MOISTURE CONTENT (%) | DRY DENSITY (pcf) | Pocket Penetrometer (tsf) | WELL CONSTRUCTION | | | |
| - 0 | 20 19 18 | PAVE | ASPHALT, approximately 4" thick Collect SA117-0.5B, PID readings: 10.6eV = 0.0 ppmV, 11.7 eV = 0.0 ppmV SAND, reddish brown (5YR 4/4), approximately 95% fine to coarse, sub-rounded to sub-angular sand, approximately 5% fine sub-angular to sub-rounded gravel, variable calichified zones, loose to moderately loose, dry, no plasticity, strong HCI reaction | | | | | | | | | |
| - - - 10 - - - - - - 12.5 | 7 60 60 | SW | Collect SA117-9B, SA117-9BMS, SA117-9BMSD PID readings: 10.6 eV = 0.2 ppmV, 11.7 eV = 0.0 ppmVreddish brown (5YR 3/4), gravel to 10% | | | | | | | | | |
| - - - - 15 - - - | | SW | SAND with gravel, dark reddish brown (5YR 3/4), 90% fine to coarse sand, 10 % fine to medium sub-angular to sub-rounded volcanic gravel, caliche layers present, dense to very dense, dry, strong HCl reaction | | | | | | | | | |
| <u></u> 17.5 | - | | | | | | | | | | | |

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EXPLORATION LOG SA117-A2

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

EXPLORATION LOCATION: TRONOX AREA 2 **EXPLORATION DATE:** 9-18-2009

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 DEP | TH TO WATER: | NOT EN | COUNTERED DATE MEASURED: | N/ | 4 | | | | |
|---|--------------------------|--------|---|----|---|-------------------------|----------------------|---------------------------------|----------------------|
| ELEVATION/ DEPTH | SOIL & SAMPLE SYMBOLS | USCS | DESCRIPTION | I | 1 | MOISTURE CONTENT (%) | DRY DENSITY (pcf) | Pocket Penetrometer (tsf) | WELL CONSTRUCTION |
| - | | SW | 17.5' to 18' below ground surface (BGS) caliche present | | | | | | |
| - - - 20 - | - | SW | 19' to 19.5' below ground surface (BGS) caliche present | | | | | | |
| - - - 22.5 - - - | | SW | coarse sand is rounded | | | | | | |
| - 25 - - - - - - 27.5 | 10 50/6 | SW | Collect SA117-25B, PID readings: 10.6 eV = 0.0 ppmV, 11.7 eV = 0.0 ppmVgravel content 5% | | | | | | |
| - | | SW | gravel content to 10%, fine to medium, sub- angular to rounded | | | | | | |
| — 30 - - - - | | SP | SAND, strong brown (7.5YR 4/6), trace silt, approximately 95% very fine to fine sub-angular to sub-rounded sand, dense to very dense, dry to damp, low plasticity | | | | | | |
| — 32.5 - - - - | | | | | | | | | |
| — 35 - | | | | | | | | | |

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Figure No.

EXPLORATION LOG SA117-A2

| | | | SA117- | ·A2 | | | | | | | |
|---|--------------------------|----------------------------------|-------------|---|---|----|-------------------------|----------------------|---------------------------------|----------------------|--|
| PROJECT: TRONOX PHASE B EXPLORATION LOCATION: TRONOX AREA 2 | | | | PROJECT NO.: 20092518V1 EXPLORATION DATE: 9-18-2009 | | | | | | | |
| EXPLORATION SIZE (dia.): 3" CORE BARREL | | | | EQUIPMENT: SDC550-24 SONIC CORE RIG | | | | | | | |
| ELEVATIO | N: EXISTING GRO | LOGGED BY: THOMPSON/GAREY | | | | | | | | | |
| | PTH TO WATER: | DATE MEASURED: DATE MEASURED: | | | | | | | | | |
| ELEVATION/ DEPTH | SOIL & SAMPLE SYMBOLS | USCS | DESCRIPTION | | Ы | LL | MOISTURE CONTENT (%) | DRY DENSITY (pcf) | Pocket Penetrometer (tsf) | WELL SONSTRUCTION | |

37.5 40 SW ...40' to 42' coarse sub-rounded sand with gypsum crystals, dark reddish brown (5YR 3/3) Collect SA117-41 B, PID readings: 10.6 eV = VS 0.0 ppmV, 11.7eV 0.0 ppmV SAND, strong brown (7.5YR 4/6), trace silt, approximately 95% very fine to fine sub-angular, 42.5 to sub-rounded sand, dense to very dense, dry to damp, low plasticity **END OF BORING AT 42.5 FEET** 45 47.5 52.5

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Figure No.