EXPLORATION LOG SA101-A4

PROJECT: TRONOX PHASE B **PROJECT NO.:** 20092518V1 **EXPLORATION LOCATION:** TRONOX AREA 4 **EXPLORATION DATE: 9-25-2009 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 CONSTRUCTION MOISTURE CONTENT (%) DRY DENSITY (pcf) Pocket Penetrometer (tsf) WELL ELEVATION/ SOIL & SAMPLE \exists USCS DESCRIPTION DEPTH **SYMBOLS** FILL FILL: sand and gravel cover PAVE ASPHALT approximately 5" thick **FILL** Collect SA101-0.5B, SA101-0.5BMS, SA101-0.5BMSD, PID readings: 10.6 eV = 0.1 ppmV, 11.7 eV = 1.4 ppmVFILL: SAND with gravel, SW, reddish brown (5YR 4/3), 90% fine to coarse sub- angular to sub-rounded sand, 10% fine to medium gravel, trace caliche fragments, loose to medium dense, damp, no plasticity, strong HCI reaction 7.5 SW SAND with gravel, reddish brown (5YR 4/4), 90% fine to coarse sub-angular to subrounded sand, 10% fine to medium subangular to sub-rounded gravel, loose to dense, damp, no plasticity, zones of calcite SW cementation, strong HCI reaction 16 Collect SA101-10B, PID readings: 10.6 eV = 0.1 ppmV, 11.7 eV = 2.3 ppmV12.5 SW ...12.5' to 16.5' below ground surface (BGS) is moderately cemented with calcite, strong HCI reaction, dense to very dense, dry, 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.

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EXPLORATION LOCATION: TRONOX AREA 4 **EXPLORATION DATE:** 9-25-2009

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

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| ELEVATION/ DEPTH | SOIL & SAMPLE SYMBOLS | USCS | DESCRIPTION | | ₫ | 11 | MOISTURE CONTENT (%) | DRY DENSITY (pcf) | Pocket Penetrometer (tsf) | WELL CONSTRUCTION |
| - 17.5 - - - - 20 - - - - | | SW | color to yellowish red (5YR 5/6), grave content to 5% | el | | | | | | |
| - - - - - 25 | | SW | sand is finer grained, mostly very fine | to fine | | | | | | |
| - | 50 46 39 | SW | Collect SA101-25B, PID readings: 10.6 0.0 ppmV, 11.7 eV = 0.0 ppmV | eV = | | | | | | |
| - 27.5 - - - | | SP | SAND, reddish yellow (7.5YR 6/6), trace 100% very fine to fine sand, medium loc medium dense, damp, low plasticity, moderate HCl reaction | e silt, ose to | | | | | | |
| - 30 - - - | | | | | | | | | | |
| — 32.5 - - - | | | | | | | | | | |

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EXPLORATION LOCATION: TRONOX AREA 4 **EXPLORATION DATE:** 9-25-2009

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 DEF | TH TO WATER. | INOT EIN | DATE WEASURED. | 11// | ٦ | | | | |
|---------------------|---------------------------|-----------------|---|---------|--------|-------------------------|-------------------|---------------------------------|----------------------|
| ELEVATION/ DEPTH | SOIL & SAMPLE SYMBOLS | USCS | DESCRIPTION | ٦ | П | MOISTURE CONTENT (%) | DRY DENSITY (pcf) | Pocket Penetrometer (tsf) | WELL CONSTRUCTION |
| - 35 | | SP | color to yellowish red (5YR 5/6), silt content to 5%, medium loose, damp, low to medium plasticity, trace caliche nodules | | | | | | |
| 42.5 | 14 20 20 | SP | Collect SA101-42B, PID readings: 10.6 eV = 0.4 ppmV, 11.7 eV = 1.2 ppmV END OF BORING AT 43.5 FEET | | | | | | |
| _ | | | | | | | | | |
| — 45 - | | | | | | | | | |
| - | | | | | | | | | |
| - 47.5 | | | | | | | | | |
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