Summary of Available Data for LOU 60 Acid Drain System Area III

Tronox Facility – Henderson, Nevada

Name of LOU: **Acid Drain System in Area III**

Goal of Closure:

- Closure for future commercial/industrial use.

Site Investigation Area:

- Size: Approximately 9,000 linear feet in Area III and approximately 21,100 linear feet throughout the Site.
- Location: Eastern portion of the Site, in the vicinity of Units 5 and 6 and the Leach Plant Area.
- Current Status/Features: The Acid Drain System is currently inactive and inlet drains have been plugged. In Area III all of the Acid Drain System is buried.
- In Area III, the Acid Drain System is configured as two separate systems south of the Leach Bed in LOU 24. The western segment of the system received wastes from Unit 5 and the Acid Drain System in Area IV. The eastern segment of the system, received wastes from Unit 6, the former platinum by-product filter outside of Unit 5, and from properties to the east. The former two systems joined in the northwest corner of Area III, prior to entering the flume that crosses Area II.

Description:

Acid Drain System in Area III

- Between 1945 and 1976 the segments of the Acid Drain System in Area III may have carried effluent from the basements of Units 5 and 6 [Ref. 3]
- The Acid Drain System consisted of a network of pipes, sumps and treatment areas used to collect waste acid effluent from throughout the BMI complex in the 1940's (Figure 1) [Ref. 3].
- Acid-resistant materials were used to construct components of the Acid Drain System [Ref. 3].

A description of the Site-wide extent of the Acid Drain System is detailed below to provide the current understanding (based the documents reviewed) of the historical and current use of the system and the process waste streams that are known to have entered or may have potentially entered the system. Phase B Source Area Investigations for the segments of the Acid Drain System in Area III are discussed in the "Proposed Phase B Soil Investigation/Rationale" section of this LOU Summary document.

Acid Drain System (Site-wide)

- The Acid Drain System consisted of a network of pipes, sumps and treatment areas used to collect waste acid effluent from throughout the BMI Industries Complex in the 1940s [Ref. 3].

- Acid-resistant materials were used to construct components of the Acid Drain System [Ref. 3].

Circa 1941 or 1942 to November 1945:

- The Acid Drain System was utilized until 1945, during production of magnesium metal at the BMI complex [Ref. 3].
- The Acid Drain System received acid effluent from various sources in the BMI complex, including the following [Ref. 3]:
  - the chlorine plant (located west of the Site on Olin Chemical LLC property);
  - the preparation building (present day location is within the Chemstar area);
  - the flux plant (present-day location unknown) and neutralization area (presently occupied by the Mn Leach Plant Area); and
  - all 10 chlorination buildings and associated electrolysis buildings (Units 1 through 10).
- The Acid Drain System had a single outfall point located west of the Acid Effluent Neutralization Plant (present-day location is north of the Tronox Steam Plant) [Ref. 3].
- Acid effluent was originally neutralized (using waste caustic liquor from the chlorine plant) prior to disposal in LOU 1 (Trade Effluent Settling Ponds) [Ref. 3].
- From the former Acid Effluent Neutralization Plant (part of the LOU 60 system), effluent was transported along a surface conveyance (e.g., a flume) for disposal at LOU 1 (Trade Effluent Settling Ponds) [Ref. 3].
- Acid neutralization was discontinued when the pipeline carrying caustic liquor to the Acid Effluent Neutralization Plant disintegrated [Ref. 3].
- Since then, un-treated acid waste was apparently discharged directly to the Trade Effluent Settling Ponds (LOU 1) [Ref. 3].

1945 – 1976:

- Use of the Acid Drain System after 1945 is not well documented [Ref. 1 and 3].
- The Acid Drain System was used by several companies to discharge various wastes from 1945 to 1976 [Ref. 3].
- Segments of the Acid Drain System may have carried effluent from the basements of Units 1 through 5. As a result, this segment of the system could have carried effluents from State Industries, a Timet shop (location unknown), Jones Chemical, a Stauffer office building, and U.S. Lime (Chemstar) [Ref. 3].

Summary of Available Data for LOU 60 Acid Drain System
Area III
Tronox Facility – Henderson, Nevada

- Another segment of the Acid Drain System provided drainage from the Unit 6 manganese dioxide process and various portions of Timet [Ref. 3].
- Between 1945 and 1990, Unit 5 was used to produce sodium perchlorate. Process waste streams may have been discharged from Unit 5 into the Acid Drain System [Ref. 3].
- Magnesium perchlorate was produced in Unit 5 for a short time between 1969 and 1976. Process waste streams were discharged from this process through the Acid Drain System [Ref. 3].
- Review of a July 11, 1950 aerial photograph indicates that the flume that conveyed waste from the Acid Effluent Neutralization Plant to LOU 1 (Trade Effluent Settling Ponds) had been removed. Discharges from the Acid Drain System after this conveyance was disconnected would have followed surface drainage patterns and entered the Beta Ditch [Ref. 3].

Post 1976:

- A March 16, 1984 letter from Kerr-McGee Chemical Corporation to NDEP indicates the Acid Drain System was plugged many years ago, and that basement drains in Units 4 and 5 were being sealed with concrete in March 1984 [Ref. 3].

Process Waste Streams Associated with LOU 60	Known or Potential Constituents Associated with LOU 60
Process Waste Streams from magnesium production during U.S. Government activities [Ref. 3]: - Caustic liquor - Acid process liquors - Magnesium chloride solutions	• Metals (Magnesium) • Sodium hydroxide • Hydrochloric acid solutions • Chlorides
Acid spills from within an acid storage tank [Ref. 3]	• Inorganic acids (hydrochloric or sulfuric acid) • Wet chemistry analytes

Summary of Available Data for LOU 60 Acid Drain System
Area III
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Effluent from drains in basements of Units 1 through 5 prior to 1984 [Ref. 3].	• Metals (hexavalent chromium, magnesium, boron) • Phosphates • Chlorides • Perchlorate • Ammonia • Chlorate • Wet chemistry analytes
Unknown effluents from off-site facilities (Timet, Jones Chemical, Chemstar, Stauffer) were discharged into the Acid Drain System from 1945 through 1976.	• Metals • Hexavalent chromium • Sulfates • Wet chemistry analytes • VOC • SVOC • TPH • Organochlorine pesticides
Process Waste Streams Associated with LOU 43 (Unit 4) & LOU 61 (Unit 5) that May Have Been Conveyed by LOU 60	**Known or Potential Constituents Associated with LOU 43 (Unit 4) & LOU 61 (Unit 5)**
Process liquor, spillage and washwater collected in basements of Units 4 and 5 [Ref. 3].	• Metals (magnesium, boron) • Hexavalent chromium • Chlorate • Perchlorate • Ammonia • Wet chemistry analytes
Effluent solutions from chlorates, perchlorates and magnesium metal processes in Unit 4 between 1945 and 1983 [Ref. 3].	• Metals • Hexavalent chromium • Perchlorate • Ammonia • Chlorate • Wet chemistry analytes
Prior to 1976, brine rinse and wash-water from water softeners from sodium perchlorate process in Unit 5 [Ref. 3].	• Metals • Wet chemistry analytes
Unit 5 cooling tower blowdown and reboiler wastes discharged between 1972 and prior to January 1976 [Ref. 3].	• Metals (manganese) • Hexavalent chromium • Hexametaphosphates • Neutralized sulfuric acid • Sodium • Sulfite and borate ions

Summary of Available Data for LOU 60 Acid Drain System
Area III
Tronox Facility – Henderson, Nevada

Condensate from various steam traps, and wash-water from trenches along north wall of cell floor in Unit 5 [Ref. 3].	• Metals (magnesium) • Hexavalent chromium • Chlorides • Phosphates • Perchlorate • Chlorate • Ammonia • Wet chemistry analytes
Boron process neutralization tank waste solution from Unit 5 [Ref. 3]	• Metals (boron) • Magnesium sulfate • Neutralized sulfuric acid • Neutralized boric acid
Halide wall solid and screen filter wastes from Unit 5 were sluiced and discharged to the BMI ponds via the Acid Drain System prior to January 1976 [Ref. 3].	• Solid silicate scale
Process Waste Streams Associated with LOU 62 (State Industries, Inc. Site) that May Have Been Conveyed by LOU 60	**Known or Potential Constituents Associated with LOU 62 (State Industries, Inc. Site)**
State Industries, Inc. pickling process wastes from process lines and a surface impoundment that was periodically drained for pond maintenance [Ref. 3].	• Metals (iron, total chromium, barium, arsenic, cadmium, lead, and selenium) • Sulfuric acid • Borax • Soda ash • Phosphates • pickle liquor ($FeSO_4$) • TURCO II HTC Soap • Wet chemistry analytes
Neutralized and un-neutralized waste cyanide solution [Ref. 3]	• Cyanide
Process Waste Streams Associated with LOU 44 (Unit 6) that May Have Been Conveyed by LOU 60	**Known or Potential Constituents Associated with LOU 44 (Unit 6)**
Solutions from the basement of Unit 6 [Ref. 3].	• Metals (hexavalent chromium) • Manganese sulfates
Ammonium Perchlorate process waste including filter slurry [Ref. 3].	• Metals (chromium) • Ammonia • Perchlorate • Wet chemistry analytes

Summary of Available Data for LOU 60 Acid Drain System
Area III

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Process Waste Streams Associated with LOU 4 (Former Hardesty Chemical Company Site) that May Have Been Conveyed by LOU 60	Known or Potential Constituents Associated with LOU 4 (Former Hardesty Chemical Company Site)
Effluents from Former Hardesty Chemical Company Site [Ref. 3].	• Metals • Wet chemistry analytes • VOC • SVOC • TPH • Organochlorine pesticides

Overlapping or Adjacent LOUs:

The following LOUs overlap or are adjacent to LOU 60 in Area III:

Overlapping LOUs

- LOU 24 (Leach Beds, Associated Conveyance Facilities and Mn Tailings Area) – Overlaps two of the northern segments of the eastern branch of LOU 60.
- LOU 33 (Sodium Perchlorate Platinum By-Product Filter, Unit 5) – Overlaps one of the southern segments of the eastern branch of LOU 60.
- LOU 34W (Former Manganese Tailings Area, West) – Overlaps one of the northern segments of the western branch of LOU 60.
- LOU 37 (Former Satellite Accumulation Point: Unit 6, Maintenance Shop) – Overlaps one of the southern segments of the eastern branch of LOU 60.
- LOU 47 (Leach Plant Area Manganese Ore Piles) – Overlaps one of the central segments of the eastern branch of LOU 60.
- LOU 44 (Unit 6 Basement) – Overlaps one of the southern segments of the eastern branch of LOU 60.
- LOU 50 (Leach Plant Area Leach Tanks) – Overlaps one of the central segments of the western branch of LOU 60.
- LOU 51 (Leach Plant Area Transfer Lines) – Overlaps small segments of both the east and west branches of LOU 60.
- LOU 61 (Unit 5 Basement and Old Sodium Chlorate Plant Decommissioning) – Overlaps a southern segment of the western branch of LOU 60.

Adjacent LOUs

- LOU 34E (Former Manganese Tailings Area, East) – The eastern portion of LOU 34E is located west of a branch of LOU 60.

- LOU 46 (Former Old Main Cooling Tower and Recirculation Lines) – The eastern boundary of LOU 46 is located west of a portion of LOU 60.
- LOU 48 (Leach Plant Anolyte Tanks) – The eastern boundary of LOU 48 is located west of a portion of LOU 60.
- Area 70 (Former U.S. Vanadium Site) – The eastern boundary of LOU 70 is located west of a portion of LOU 60.
- The Acid Drain System was a conveyance feature that carried effluent from the following LOUs located in other Areas:
  - LOU 4 – (Former Hardesty Chemical Company Site).
  - LOU 43 – (Unit 4 Basement and Old Sodium Plant Decommissioning).
  - LOU 62 – (Former State Industries, Inc. Site).
- With the exception of LOUs, 4, 43, and 61, and 62, known or potential chemical classes associated with adjacent or overlapping LOUs are consistent with those listed for LOU 60; therefore, no additional chemical classes have been added to the Phase B Analytical Plan for LOU 60.
- For detailed information on these LOUs, please refer to the specific LOU data package.

LOUs Potentially Affecting Soils in LOU 60:

- LOU 4 – Former Hardesty Chemical Company Site: Process waste streams from LOU 4 may have been discharged to the Acid Drain System between 1946 and 1947. As a result, the analytical plan for samples collected from LOU 60 will include analyses for VOCs, SVOCs, TPH, and OCPs. This LOU would only potentially impact the western branch of LOU 60 in Area III.
- LOU 43 & 61 – Unit 4 and Unit 5 Basements and Old Sodium Plant Decommissioning: Process waste streams from these LOUs may have been discharged to the Acid Drain System prior to 1984. As a result, the analytical plan for samples collected from LOU 60 will include analyses for perchlorate.
- LOU 62 – State Industries Inc. Site: Process waste streams from LOU 62 may have been discharged to the Acid Drain System [Ref. 3]. As a result, the analytical plan for samples collected from LOU 60 will include analyses for cyanide (western branch of LOU 60 only).

Summary of Available Data for LOU 60 Acid Drain System
Area III
Tronox Facility – Henderson, Nevada

	• Unknown Off-Site Sources: An off-site branch of LOU 60 running east to west connects to the north-south trending branch of the eastern segment of LOU 60 near Unit 6. As a result, the analytical plan for samples collected from LOU 60 will include analyses for VOCs, SVOCs, and TPH. For further information on the LOUs, please refer to the specific LOU data packages.
Known or Potential Chemical Classes:	• Metals • Hexavalent chromium • Cyanide (associated with LOU 62) • Perchlorate (associated with LOUs 43 & 61) • Wet chemistry analytes • VOC (associated with LOU 4) • SVOC (associated with LOU 4) • TPH (associated with LOU 4) • Organochlorine pesticides (associated with LOU 4)
Known or Potential Release Mechanisms:	• Releases to soil, surface water, or groundwater could have been waste constituent pathways associated with the Acid Drain System [Ref. 3]. • Releases to soil could have occurred due to breakage of liner pipes or from leakage at pipe joints and connections (no releases documented) [Ref. 3]. • If releases occurred on an on-going basis, migration to groundwater was possible (no releases documented) [Ref. 3]. • If constituents were present in waters conveyed by the surface drainage system, they could have discharged to the surface water of Beta Ditch during infrequent flow events of that channel [Ref. 3].
Results of Historical Sampling:	• No known historical soil sampling was identified in documents reviewed to have been specifically conducted for this LOU in Area III. • Upgradient and downgradient monitoring wells (M-11, M-13) are tested for chromium, hexavalent chromium, perchlorate, manganese, TDS, pH, and electrical conductivity as part of periodic or routine groundwater monitoring programs [Ref. 4]. Analytical results for groundwater from historical sampling events are summarized in LOU 60 Table 6 (see attached).
Did Historical Samples Address Potential Release?	• No

Summary of Available Data for LOU 60 Acid Drain System
Area III
Tronox Facility – Henderson, Nevada

Summary of Phase A SAI:

Soil

- Phase A Source Area Investigation borings SA07 and SA08 are located adjacent or in close proximity to the pipelines for LOU 60 in Area III. These borings were specifically sampled to evaluate LOU 60 [Ref. 2].
- Phase A Source Area Investigation boring SA13 is located adjacent (upgradient) and in very close proximity to LOU 60. However, this boring was not specifically designed to evaluate LOU 60.

Groundwater

- Phase A Source Area Investigation wells M-11 and GWSA08 are located near the pipelines for LOU 60 and were sampled specifically to evaluate this LOU [Ref. 2].

Chemical classes detected in Phase A soil borings SA07 and SA08:

- Metals
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- Organochlorine pesticides (SA22 only)
- Dioxins/furans
- Radionuclides
- Asbestos (SA23 only)

As a result of the Phase A data, the Phase B Analytical Plan for samples collected from LOUs in Area III will be expanded to include analyses for dioxins/furans, radionuclides, and asbestos.

Analytical results for soil and groundwater from the Phase A sampling event are summarized in LOU 60 Tables 1 through 5 and LOU 60 Tables 1 through 5 and Tables 7 through 22(see attached) [Ref. 2].

Are Phase A Sample Locations in "Worst Case" Areas?

- No

Is Phase B Investigation Recommended?

- Yes

Summary of Available Data for LOU 60 Acid Drain System
Area III
Tronox Facility – Henderson, Nevada

Proposed Phase B Soil Investigation/Rationale:

The Phase B Source Area Investigation of this segment of LOU 60 consists of collecting soil samples from eight (8) locations along the conveyance route in Area III. These boring are SA141, SA142, SA178, SA171, RSAP7, RSAQ7, SA174 and SA177.

- Soil sample locations consist of both judgmental and randomly-placed locations.
- Judgmental sample locations:
  - Designed to evaluate soil for known or potential chemical classes associated with LOU 60, based on the known process waste streams.
  - Six (6) of the eight sample locations are judgmental locations and consist of soil borings SA141, SA142, SA178, SA171, SA174 and SA177.
- Random sample grid locations:
  - Designed to assess whether unknown constituents associated with LOU 60 are present.
  - Two (2) soil borings (RSAP7 and RSAQ7) are randomly-placed sample locations.
  - All nine soil borings along with the analytical program to evaluate soil samples from LOU 60 are listed in **Table A – Soil Sampling and Analytical Plan for LOU 60**.

Proposed Chemical Classes for Phase B Investigation for soils:

Both judgmental and random sample locations will be analyzed for the following constituents:

- Metals (Phase A list)
- Hexavalent chromium
- Perchlorate
- Cyanide (SA154, SA178, RSAP7 and RSAQ7 only)
- Wet chemistry analytes
- VOCs
- SVOCs
- TPH-DRO/ORO
- Organochlorine pesticides
- Dioxins/furans
- Radionuclides
- Asbestos

Summary of Available Data for LOU 60 Acid Drain System
Area III
Tronox Facility – Henderson, Nevada

Proposed Phase B Groundwater Investigation/Rationale:

The Phase B Source Area Investigation of this segment of LOU 60 consists of collecting groundwater samples from seven (7) locations.

- Wells M-34, CLD4-R, M-50, M-52, M-11, M-122, and MW-6R are all located within 60 feet of the Acid Drainage System to provide evaluation.
- The seven wells along with the analytical program to evaluate groundwater samples associated with LOU 60 are listed on **Table B: Groundwater Sampling and Analytical Plan for LOU 60**.

Proposed Phase B Constituents List for Groundwater:

Groundwater samples will be analyzed for the following analytes:

- Metals (Phase A list)
- Hexavalent chromium
- Perchlorate
- Wet chemistry analytes
- VOCs
- SVOCs
- Organochlorine pesticides
- Radionuclides

Proposed Phase B Soil Gas Investigation/Rationale:

In Area III, soil gas samples will be collected from four (4) locations to evaluate area conditions for the presence of vapor-phase VOCs in the vadose zone.

- SG85 is located to evaluate VOCs associated with LOU 60 and LOU 24 and is a companion to soil boring SA142.
- SG84 is located to evaluate VOCs associated with LOU 60 and LOU 50.
- SG37 is located to evaluate VOCs associated with LOU 60 and is a companion to monitoring well M-22 and boring SA08.
- SG36 is located to evaluate VOCs associated with LOU 60 and is a companion to monitoring well M-11 and boring SA07.

Details of the soil gas sampling program are contained in the NDEP-approved (March 26, 2008) Soil Gas Survey Work Plan, Tronox LLC, Henderson, Nevada, dated March 20, 2008.

Proposed Phase B Constituents List for Soil Gas:

- VOCs (EPA TO-15)

Summary of Available Data for LOU 60 Acid Drain System
Area III

Tronox Facility – Henderson, Nevada

References:

1. ENSR, 2005, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, ENSR, Camarillo, California, 04020-023-130, February 2005 and August 2005.
2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
3. Kleinfelder, 1993, Environmental Conditions Assessment, Kerr-McGee Chemical Corporation, Henderson, Nevada Facility, April 15, 1993 (Final).

Summary of Available Data for LOU 60 Acid Drain System
Area III

Tronox Facility – Henderson, Nevada

LOU Figure

J:\TronoxGIS\mxd\Phase_B_WorkPlan\LOUs\lou-60_Acid_Drains_Area-3.mxd

N

1:2,400
1 inch equals 200 feet
200 100 0 200
Feet

AREA II
AREA III
LOU #5 BOUNDARY
LOU #18 BOUNDARY
LOU #16 BOUNDARIES
LOU #17 BOUNDARY
LOU #53 BOUNDARY
LOU #20 BOUNDARY
LOU #21 BOUNDARY
LOU #24 BOUNDARY
LOU #9 BOUNDARY
LOU #13 BOUNDARY
LOU #7 BOUNDARY
LOU #14 BOUNDARY
LOU #34W BOUNDARY
LOU #45 BOUNDARY
LOU #46 BOUNDARY
LOU #49 BOUNDARY
LOU #50 BOUNDARY
LOU #47 BOUNDARY
LOU #48 BOUNDARIES
LOU #34E BOUNDARY
LOU #48 BOUNDARY
LOU #51 PIPELINE
LOU #37 BOUNDARY
LOU #44 BOUNDARY
LOU #61 BOUNDARY
LOU #33 BOUNDARY
LOU #40 BOUNDARY
LOU #15 BOUNDARY
LOU #65A BOUNDARY
LOU #43 BOUNDARY
LOU #29 BOUNDARY
FORMER U.S. VANADIUM SITE (AREA 70)
9th STREET
10th STREET
11th STREET
AVENUE G
AVENUE H
UNIT 4
UNIT 5
UNIT 6
CLD4-R
CLU1
M-34
M-50
M-52
M-11
SA07
SG36
SA13
SA171
SA178
SA141
SG85
SA142
RSAP7
SG84
RSAQ7
SA174
SG37
M-122
MW-6R
SA08
GWSA08
SA177
Acid Drain Reference:
Kleinfelder 1993, Map 31

LEGEND

- LOU #60 Acid Drain System with manholes and sumps with flow direction in Area IV
- LOU #59 Storm Sewer System with manholes and sumps with flow direction
- LOU #60 Acid Drain System with manholes and sumps with flow direction in other areas
- Other LOU Boundary
- Other LOU Associated Pipelines

Proposed Phase B Explorations for LOU
- Groundwater Monitoring Well Location
- Boring Location
- Soil Gas Location

Other Explorations
- Phase A Boring Location (Sep. 2007)
- Phase II BRC Sample Location (Oct. 2007)
- Historic Sample Location (pre 2006)
- Existing Well Location (No Proposed Sampling)
- Proposed Phase B Groundwater Location (Other LOU)
- Proposed Phase B Soil Boring Location (Other LOU)
- Proposed Phase B Soil Gas Location (Other LOU)
- Tronox Facility Boundary
- Area Boundary
- Parcel Boundary
- Four Acre Grid Line (Cell reference displayed as row-column, i.e. M-8)

Base Aerial Photo from PBS&J, October 2006

FIGURE NUMBER: 1
SHEET NUMBER: X

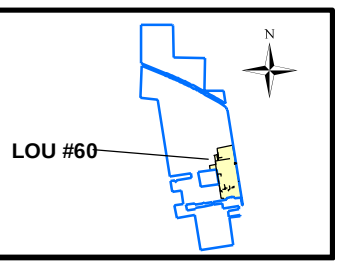
SAMPLE LOCATIONS FOR LOU #60 IN AREA III FORMER ACID DRAIN SYSTEM SEGMENT

Phase B Area III Source Area Investigation
Tronox Facility
Henderson, Nevada

SCALE:	DATE:	PROJECT NUMBER:
AS SHOWN	6/3/2008	04020-023-430

ENSR | AECOM
ENSR CORPORATION
1220 AVENIDA ACASO
CAMARILLO, CALIFORNIA 93012
PHONE: (805) 388-3775
FAX: (805) 388-3577
WEB: HTTP://WWW.ENSR.AECOM.COM

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
B. Ho	M. Scop	C. Schnell	B. Ho



Summary of Available Data for LOU 60 Acid Drain System
Area III

Tronox Facility – Henderson, Nevada

Sampling and Analytical Plan for LOU 60:

Table A – Soil Sampling and Analytical Plan for LOU 60
Table B – Groundwater Sampling and Analytical Plan for LOU 60

Table A
Soil Sampling and Analytical Plan for LOU 60
Phase B Source Area Investigation Work Plan
Tronox Facility - Henderson, Nevada

Grid Location	LOU Number	Phase B Boring No.	Sample ID Number	Sample Depths[1.] (ft. bgs)	Perchlorate (EPA 314.0)	Metals (EPA 6020)	Hex Cr (EPA 7199)	TPH-DRO/ORO (EPA 8015B)	TPH-GRO (EPA 8015B)	VOCs [2.] (EPA 8260B)	Wet Chemistry [3.]	Total Cyanide (EPA 9012A)	OCPs [4.] (EPA 8081A)	SVOCs [5.] (EPA 8270C)	Radio-nuclides [6.]	Dioxins/ Furans [7.]	PCBs[8.] (EPA 8082 and 1668A)	Asbestos [9.] EPA/540/R-97/028	Geo-technical Tests [10.]	Rationale
Borings are organized by grid location as shown on Plate A - Starting point is on the northwestern most grid in Area 3 (N-7) and ending with the southeastern most grid in Area 3 (S-8).																				
O-7	34W, 60, 20, 22, 23	SA178	SA178-0.0	0.0														X		Boring located to evaluate LOU 20 (Pond C-1 Associated Piping Associated Piping), LOU 22
O-7	34W, 60, 20, 22, 23		SA178-0.5	0.5	X	X	X			X	X	X	X	X	X	X				(WC-West Associated Piping), LOU 23 (WC-East Associated Piping), LOU 34W (Historic Mn
O-7	34W, 60, 20, 22, 23		SA178-10	10	X	X	X			X	X	X	Hold	X	X						Tailings Pile Area, West), and LOU 60 (Acid Drain system). Located within this cluster of
O-7	34W, 60, 20, 22, 23		SA178-20	20	X	X	X			X	X	X	Hold	X	X						LOUs at a likely high release potential location for all five LOUs (low point,edge of road).
O-7	34W, 60, 20, 22, 23		SA178-30	30	X	X	X			X	X	X	Hold	X	X						
O-7	34W, 60, 20, 22, 23		SA178-40	40	X	X	X			X	X	X	X	X	X						
O-8	24, 46, 60	SA141	SA141-0.0	0.0														X		Boring located to evaluate LOU 24 (Mn Tailings Pile Area), LOU 46 (Former Old Main Cooling
O-8	24, 46, 60		SA141-0.5	0.5	X	X	X			X	X		X		X	X					Tower and Recirculation Lines), and LOU 60 (Acid Drain System). Located within LOU 24, just
O-8	24, 46, 60		SA141-10	10	X	X	X			X	X		Hold		X						downgradient of LOU 46 and adjacent to LOU 60 drain pipe to evaluate likely release locations
O-8	24, 46, 60		SA141-20	20	X	X	X			X	X		Hold		X						from all three LOUs.
O-8	24, 46, 60		SA141-30	30	X	X	X			X	X		Hold		X						
O-8	24, 46, 60		SA141-40	40	X	X	X			X	X		X		X						
O-8	24, 46, 60	SA142	SA142-0.0	0.0														X		Boring located to evaluate LOU 24 (Mn Tailings Pile Area), LOU 46 (Former Old Main Cooling
O-8	24, 46, 60		SA142-0.5	0.5	X	X	X			X	X		X		X	X					Tower and Recirculation Lines), and LOU 60 (Acid Drain System).Located within LOU 24, just
O-8	24, 46, 60		SA142-10	10	X	X	X			X	X		Hold		X						downgradient of LOU 46 and adjacent to LOU 60 drain pipe to evaluate likely release locations
O-8	24, 46, 60		SA142-20	20	X	X	X			X	X		Hold		X						from all three LOUs.
O-8	24, 46, 60		SA142-30	30	X	X	X			X	X		Hold		X						
O-8	24, 46, 60		SA142-40	40	X	X	X			X	X		X		X						
O-8	21, 24, 46, 59, 60	SA171	SA171-0.0	0.0														X		Boring located to evaluate LOU 21 (Pond Mn-1 and Associated Piping), LOU 24 (Mn Tailings
O-8	21, 24, 46, 59, 60		SA171-0.5	0.5	X	X	X			X	X		X		X	X					Pile Area), LOU 46 (Former Old Main Cooling Tower and Recirculation Lines), LOU 59 (Storm
O-8	21, 24, 46, 59, 60		SA171-10	10	X	X	X			X	X		Hold		X						Sewer System), and LOU 60 (Acid Drain System). Located within LOU 24 nearby LOU 46 and
O-8	21, 24, 46, 59, 60		SA171-20	20	X	X	X			X	X		Hold		X						adjacent to LOUs 21,59 and 60 piping at a reasonable release location to evaluate all five LOUs
O-8	21, 24, 46, 59, 60		SA171-30	30	X	X	X			X	X		Hold		X						
O-8	21, 24, 46, 59, 60		SA171-40	40	X	X	X			X	X		X		X						
P-7	60, 20, 22, 23	RSAP7	RSAP7-0.0	0.0														X		Boring located to evaluate LOU 20 (Pond C-1 Associated Piping Associated Piping), LOU 21
P-7	60, 20, 22, 23		RSAP7-0.5	0.5	X	X	X	X		X	X	X	X	X	X	X					(Pond Mn-1 and Associated Piping), LOU 22 (WC-West Associated Piping), LOU 23 (WC-East
P-7	60, 20, 22, 23		RSAP7-10	10	X	X	X	X		X	X	X	Hold	X	X						Associated Piping), and LOU 60 (Acid Drain System). Random boring located within a cluster
P-7	60, 20, 22, 23		RSAP7-20	20	X	X	X	X		X	X	X	Hold	X	X						of five LOUs for area coverage of all five.
P-7	60, 20, 22, 23		RSAP7-30	30	X	X	X	X		X	X	X	Hold	X	X						
P-7	60, 20, 22, 23		RSAP7-40	40	X	X	X	X		X	X	X	X	X	X						
Q-7	20, 22, 23, 48, 50, 51, 60	RSAQ7	RSAQ7-0.0	0.0														X		Boring located to evaluate LOU 20 (Pond C-1 Associated Piping), LOU 22 (WC-West Assoc.
Q-7	20, 22, 23, 48, 50, 51, 60		RSAQ7-0.5	0.5	X	X	X	X		X	X	X	X	X	X	X					Piping), LOU 23 (WC-East Associated Piping), LOU 48 (Leach Plant Anolyte Storage Tanks),
Q-7	20, 22, 23, 48, 50, 51, 60		RSAQ7-10	10	X	X	X	X		X	X	X	Hold	X	X						LOU 50 (Leach Plant Area Leach Tanks), and LOU 60 (Acid Drain System). Random boring
Q-7	20, 22, 23, 48, 50, 51, 60		RSAQ7-20	20	X	X	X	X		X	X	X	Hold	X	X						located within area piping for all five LOUs for likely release points.
Q-7	20, 22, 23, 48, 50, 51, 60		RSAQ7-30	30	X	X	X	X		X	X	X	Hold	X	X						
Q-7	20, 22, 23, 48, 50, 51, 60		RSAQ7-40	40	X	X	X	X		X	X	X	X	X	X						
Q-8	21, 59, 60	SA174	SA174-0.0	0.0														X		Boring located to evaluate LOU 21 (Pond Mn-1 and Associated Piping), LOU 59 (Storm Sewer
Q-8	21, 59, 60		SA174-0.5	0.5	X	X	X			X	X		X		X	X					System), and LOU 60 (Acid Drain System). Located adjacent to all three LOU pipelines at a
Q-8	21, 59, 60		SA174-10	10	X	X	X			X	X		Hold		X						reasonable release location from edge of street with differential load potiential.
Q-8	21, 59, 60		SA174-20	20	X	X	X			X	X		Hold		X						
Q-8	21, 59, 60		SA174-30	30	X	X	X			X	X		Hold		X						
Q-8	21, 59, 60		SA174-40	40	X	X	X			X	X		X		X						
Q-8	34E, 37, 44, 60	SA177	SA177-0.0	0.0														X		Boring located to evaluate LOU 37 (Former Satellite Accumulation Point for Unit-6),
Q-8	34E, 37, 44, 60		SA177-0.5	0.5	X	X	X			X	X		X	X	X	X					LOU 44 (Unit-6 Basement), and LOU 60 (Acid Drain System). Located at a close but
Q-8	34E, 37, 44, 60		SA177-10	10	X	X	X			X	X		Hold	X	X						accessible location to evaluate releases from LOUs 37 and 44, and adjacent to LOU 60 piping
Q-8	34E, 37, 44, 60		SA177-20	20	X	X	X			X	X		Hold	X	X						at worst case location for releases at a junction.
Q-8	34E, 37, 44, 60		SA177-30	30	X	X	X			X	X		Hold	X	X						
Q-8	34E, 37, 44, 60		SA177-40	40	X	X	X			X	X		X	X	X						
Number of Borings:		**8**																		
Number of Samples:					**40**	**40**	**40**	**10**	**0**	**40**	**40**	**15**	**16**	**20**	**40**	**8**	**0**	**8**	**0**	

Notes:

n/a Not applicable - boring is not associated with a specific LOU but is located to evaluate soil for general area-wide coverage.
X Sample will be collected and analyzed.
No sample collected under Phase B sampling program.
DD* Sample depth to be determined in the field where DD = sample depth (ft).
TPH-DRO/ORO Total petroleum hydrocarbons - Diesel-Range Organics/Oil-Range Organics.

1. The 0.5 ft bgs sample will be collected from the 0.0 to 0.5 ft bgs interval, unless the area is paved. If area is paved, samples will be collected at 0.5 feet below or from a representative depth beneath the pavement. Alternately, if an unpaved area is within a reasonable distance, the sample will be moved to the unpaved area.
2. Samples for VOC analysis will be preserved in the field using sodium bisulfate (or DI water) and methanol preservatives per EPA Method 5035.
3. Consists of wet chemistry parameters (including pH) listed on Table 1 of the Phase B Source Area Work Plan.
4. Organochlorine Pesticides (includes analysis for hexachlorobenzene).
5. Semi-volatile Organic Compounds
6. Radionuclides consists of alpha spec reporting for isotopic Thorium and isotopic Uranium, and Radium-226, plus Radium-228 by beta counting (per NDEP).
7. Dioxins/furans will be analyzed by EPA Method 8290 for all samples. Screening reports will be provided for 90% of the samples and full data packages for 10% of the samples.
8. Polychlorinated biphenyls - Sample locations will be analyzed by USEPA methods 8082 and 1668A. Concrete srufaces at these locations will also include chip and/or wipe samples per EPA Region 1 SOP for Sampling Concrete in the Field (199
9. Soil samples for asbestos analyses will be collected from a depth of 0 to 2-inches bgs.
10. Geotechnical Tests consist of: moisture content (ASTM D-2216), grain size analysis (ASTM D-422 and C117-04), Soil Dry Bulk Density (ASTM D-2937), Grain Density (ASTM D-854, Soil-Water Filled Porosity (ASTM D-2216); Vertical Hydraulic Conductivity (ASTM D-5084/USEPA 9100).

Table B
Groundwater Sampling and Analysis Plan for LOU 60
Phase B Source Area Investigation Area III Work Plan
Tronox Facility - Henderson, Nevada

Grid Location	Location Area	Monitoring Well No.	Screen Interval (ft bgs)	Soil Type Expected Across Screen Interval[1.]	Well Sampled for Phase A? (y/n)	Perchlorate (EPA 314.0)	Hex Cr (EPA 7199)	Metals	VOCs[2.] (EPA 8260)	Wet Chemistry (a)	OCPs[3.] (EPA 8081A)	SVOCs[4.] (EPA 8270C)	Radio-nuclides[5.]	Rationale
Wells are organized by grid location as shown on Plate A - Starting point is on the northwestern-most grid in Area III (N-7) and ending with the southeastern-most grid covering Area III (Q-9).														
N-7	IIIW	M-34	25 - 40	Qal/MCfg1	no	X	X	X	X	X	X	X	X	Located to serve as a downgradient step out for LOU 46; as a cross-gradient step out for LOUs 20, 22, 23, and 60; and for general Site coverage.
O-6	III	M-50	39.6 - 59.6	MCfg1	no	X	X	X	X	X	X	X	X	Located to evaluate LOU 34W; as an upgradient step out for LOU 60; and for general Site coverage.
N-9	IIIE	CLD-4R	nr	nr	no	X	X	X	X	X	X	X	X	Serves as a step out downgradient well for LOUs 24 and 46; as a step out upgradient well for LOU 21; as a cross-gradient step out t LOUs 59 and 60; and general Site coverage located on Timet.
P-7	III	M-52	34.5 - 44.5	MCfg1	no	X	X	X	X	X	X	X	X	Located to evaluate LOUs 34E, 47 through 51, and Area 70 (former U.S. Vanadium); as a crossgradient step out for LOUs 20, 22, 23, and 60; and for general Site coverage.
Q-7	III	M-11	33.3 - 53	Qal/MCfg1	yes	X	X	X	X	X	X	X	X	Located as a downgradient step out for LOU 61; as an upgradient step out for LOUs 34E, 47 through 51 and Area 70 (former U.S. Vanadium); as a crossgradient step out for LOUs 20, 22, 23, and 60, and for general Site coverage.
Q-8	III	M-122	TBD	TBD	new well	X	X	X	X	X	X	X	X	New monitoring well located to serve as a downgradient step out for LOUs 37, 44, and 60; as an upgradient step out for LOUs 34E, 47, 48, 51, 59 and Area 70 (former U.S. Vanadium); to evaluate possible offsite sources to the east; and for general Site coverage.
Q-9	IIIE	MW-6R	nr	nr	no	X	X	X	X	X	X	X	X	Located to serve as a downgradient step out for LOUs 37and 44; as a crossgradient step out for LOUs 59 and 60; to evaluate possible offsite sources to the east; and for general Site coverage.
				Number of Field Samples:		**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	

Notes:

X	Sample will be collected and analyzed.
1	It is anticipated that the large majority of the flow to the well will be from the coarse-grained sediments. As such, in the cases where there are two lithologies present across the screen interval, the water sampled will represent conditions in the coarse-grained interval.
2	VOCs = Volatile organic compounds (to include analysis for naphthalene).
3	OCPs = Organochlorine pesticides (to include analysis for hexachlorobenzene).
4	SVOCs = Semi volatile organic compounds.
5	Radionuclides consists of alpha spec reporting for isotopic Thorium and isotopic Uranium, and Radium-226, plus Radium-228 by beta counting (per NDEP).
(a)	Complete list of wet chemistry parameters are shown on Table 1. All groundwater samples will have pH measured in the field.
IIIN/E/W/S	Well located outside (north, east, west, or south) of Area III.
TBD	To be determined when well is constructed.
nr	Not recorded in the All Wells Database (June 2008).
Qal	Quaternary Alluvium
MCfg1	Muddy Creek Formation - first fine-grained facies
MCcg1	Muddy Creek Formation - first coarse-grained facies
MCfg2	Muddy Creek Formation - second fine-grained facies

Summary of Available Data for LOU 60 Acid Drain System
Area III

Tronox Facility – Henderson, Nevada

Soil and Groundwater Characterization Data

Summary of Available Data for LOU 60 Acid Drain System
Area III

Tronox Facility – Henderson, Nevada

LOU-specific analytes identified include:

- Wet chemistry analytes
- Dioxins/furans
- Metals
- Hexavalent chromium
- Organochlorine pesticides
- Perchlorate
- Radionuclides
- VOCs
- TPH-DRO/ORO
- SVOCs
- VOCs
- Asbestos
- Cyanide

The tables in **BOLD** below present historical data associated with these LOU-specific analytes.

LOU 60 Table 1 – Soil Characterization Data – Wet Chemistry

LOU 60 Table 2 – Groundwater Characterization Data – Wet Chemistry

LOU 60 Table 3 – Soil Characterization Data – Dioxins and Dibenzofurans

LOU 60 Table 4 – Soil Characterization Data – Metals

LOU 60 Table 5 – Groundwater Characterization Data – Metals

LOU 60 Table 6 – Groundwater Characterization Data – Routine Monitoring

LOU 60 Table 7 – Soil Characterization Data – Organochlorine Pesticides (OCPs)

LOU 60 Table 8 – Groundwater Characterization Data – Organochlorine Pesticides (OCPs)

LOU 60 Table 9 – Soil Characterization Data – Organophosphorus Pesticides (OPPs)

LOU 60 Table 10 – Groundwater Characterization Data – Organophosphorus Pesticides (OPPs)

LOU 60 Table 11 – Soil Characterization Data – PCBs

LOU 60 Table 12 – Groundwater Characterization Data – PCBs

LOU 60 Table 13 – Soil Characterization Data – Perchlorate

LOU 60 Table 14 – Groundwater Characterization Data – Perchlorate

LOU 60 Table 15 – Soil Characterization Data – Radionuclides

LOU 60 Table 16 – Groundwater Characterization Data – Radionuclides

LOU 60 Table 17 – Soil Characterization Data – SVOCs

LOU 60 Table 18 – Groundwater Characterization Data – SVOCs

LOU 60 Table 19 – Soil Characterization Data - TPH and Fuel Alcohols

LOU 60 Table 20 – Soil Characterization Data – VOCs

LOU 60 Table 21 – Groundwater Characterization Data – VOCs

LOU 60 Table 22 – Soil Characterization Data – Long Asbestos Fibers in Respirable Soil Fraction

Notes for Phase A Data all tables are presented at the end of the tables.

LOU 60 Table 1
Soil Characterization Data - Wet Chemistry

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA3	SA3	SA3	SA3	SA3	SA3	SA4	SA4	SA4	SA4	SA4	
Sample ID		SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	SA4-0.5	SA4-10	SA4-20	SA4-30	SA4-40	
Sample Depth (ft)		0.5	0.5	10	20	30	40	0.5	10	20	30	40	
Sample Date		11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	
Wet Chemistry Parameter	**MSSL[2] mg/kg**												**Units**
Percent moisture	--	**6.4**	**6.3**	**6.3**	**8.9**	**22.4**	**32.1**	**9.0**	**6.0**	**8.5**	**12.3**	**5.9**	percent
Alkalinity (as CaCO3)	--	**324**	**269**	**162**	**134**	64.4 U	**451**	**476**	**437**	**595**	**278**	**77.5**	mg/kg
Bicarbonate	--	**675**	**296**	**916**	**476**	**139**	**1670**	**1480**	**1630**	**1740**	**723**	**149**	mg/kg
Total Alkalinity	--	**999**	**566**	**1080**	**611**	**139**	**2120**	**1950**	**2070**	**2330**	**1000**	**227**	mg/kg
Ammonia (as N)	--	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ	5.5 UJ	5.3 UJ	5.5 UJ	5.7 UJ	5.3 UJ	mg/kg
Cyanide	1.37E+04	R	R	R	R	R	R	R	R	R	R	R	mg/kg
MBAS	--	2.2 U	2.2 U	2.1 U	2.2 U	2.8 U	3.1 U	2.2 U	2.1 U	2.2 U	**2.7 J**	**2.8 J**	mg/kg
pH (solid)	--	**8.8**	**8.8**	**8.6**	**8.8**	**7.7**	**8.5**	**10**	**7.8**	**9.8**	**9.4**	**8.4**	none
Bromide	--	2.7 U	2.7 U	2.7 U	2.7 U	**3.4**	3.7 U	2.7 U	2.7 U	**92.0**	**1.4 J**	**2.0 J**	mg/kg
Chlorate	--	5.3 U	5.3 U	5.3 U	**17.6 J-**	6.4 UJ	7.4 UJ	5.5 UJ	5.3 U	5.5 U	**91.3 J-**	**119 J-**	mg/kg
Chloride	--	**0.90 J**	**1.0 J**	**13.2**	**130**	**1240**	**120**	**2.8**	**4.4**	**172**	**46.5**	**71.2**	mg/kg
Nitrate (as N)	--	0.21 U	0.21 U	**2.6**	**8.2**	**12.7**	**1.6**	**0.53 J+**	**0.35 J+**	**1.0 J+**	**1.4 J+**	**1.5 J+**	mg/kg
Nitrite	--	0.21 U	0.21 U	0.21 U	**1.7 J**	**11.9**	29.5 U	**0.047 J**	**0.34**	0.22 U	**0.059 J**	**0.14 J**	mg/kg
ortho-Phosphate	--	5.3 U	5.3 U	**1.4 J**	5.5 U	6.4 U	7.4 U	**2.7 J**	**3.1 J**	5.5 U	5.7 U	5.3 U	mg/kg
Sulfate	--	**7.2**	**8.6**	**156**	**267**	**573**	**325**	**19.5**	**24.9**	**87.4**	**733**	**177**	mg/kg
Total Organic Carbon	--	**2780**	**2680**	**3720**	**8300**	**15900**	**6600**	**9550**	**7100**	**7500**	**1600**	**7800**	mg/kg

LOU 60 Table 1 (continued)
Soil Characterization Data - Wet Chemistry

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA5	SA5	SA5	SA5	SA5	SA6	SA6	SA6	SA6	SA6	SA6	
Sample ID		SA5-0.5	SA5-10	SA5-20	SA5-30	SA5-37	SA6-0.5	SA6-0.5D	SA6-10	SA6-20	SA6-30	SA6-35	
Sample Depth (ft)		0.5	10	20	30	37	0.5	0.5	10	20	30	35	
Sample Date		11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	
Wet Chemistry Parameter	**MSSL[2] mg/kg**												**Units**
Percent moisture	--	**22.6**	**14.2**	**15.2**	**7.6**	**39.9**	**5.8**	**13.8**	**7.6**	**7.7**	**5.0**	**32.6**	percent
Alkalinity (as CaCO3)	--	**561**	58.2 U	**90.7**	54.1 U	83.2 U	**637 J**	**352 J**	**109 J**	**131 J**	52.6 UJ	**148 J**	mg/kg
Bicarbonate	--	**1400**	**861**	**363**	**301**	**411**	**2970 J**	**1410 J**	**530 J**	**690 J**	**292 J**	**387 J**	mg/kg
Total Alkalinity	--	**1960**	**874**	**454**	**314**	**430**	**3610 J**	**1760 J**	**640 J**	**821 J**	**304 J**	**536 J**	mg/kg
Ammonia (as N)	--	6.5 UJ	5.8 UJ	5.9 UJ	5.4 UJ	8.3 UJ	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 UJ	mg/kg
Cyanide	1.37E+04	R	R	R	R	R	R	R	R	R	R	R	mg/kg
MBAS	--	**2.4 J**	**2.5 J**	2.1 U	**2.5 J**	**4.6 J**	**2.4 J**	2.2 U	2.2 U	2.2 U	2.2 U	3.1 U	mg/kg
pH (solid)	--	**10.0**	**7.9**	**8.3**	**8.3**	**7.8**	**9.6**	**9.5**	**8.4**	**9.0**	**8.1**	**7.9**	none
Bromide	--	3.2 U	29.1 U	29.5 U	27.1 U	41.6 U	2.7 U	2.9 U	2.7 U	2.7 U	26.3 U	37.1 U	mg/kg
Chlorate	--	**14.4 J-**	**642 J-**	**1310 J-**	**429 J-**	8.3 UJ	5.3 UJ	5.8 UJ	**2.8 J-**	**3.0 J-**	**86.9 J-**	**207 J-**	mg/kg
Chloride	--	**13.0**	**377**	**1560**	**1070**	**5600**	**5.1**	**8.5**	**9.8**	**13.9**	**77.7**	**414**	mg/kg
Nitrate (as N)	--	0.26 U	**4.3 J+**	**20.2 J+**	**21.0**	**68.2**	**0.48 J+**	**0.27 J+**	**1.6 J+**	**2.3 J+**	**19.6**	**26.5**	mg/kg
Nitrite	--	**0.21 J**	2.3 U	2.4 U	2.2 U	3.3 U	0.21 U	0.23 U	**0.32**	**0.93**	2.1 U	3.0 U	mg/kg
ortho-Phosphate	--	6.5 U	5.8 U	5.9 U	5.4 U	166 U	5.3 U	5.8 U	**3.9 J**	**1.6 J**	**79.6 J**	7.4 U	mg/kg
Sulfate	--	**77.0**	**479**	**168**	**1030**	**804**	**115**	**147**	**175**	**214**	**7710**	**599**	mg/kg
Total Organic Carbon	--	**15200**	**6000**	**8300**	**6600**	**11200**	**9100**	**4300**	**6420**	**7220**	**900 J**	**9150**	mg/kg

LOU 60 Table 1 (continued)
Soil Characterization Data - Wet Chemistry

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA7	SA7	SA7	SA7	SA7	SA7	SA8	SA8	SA8	SA8	SA8	
Sample ID		SA7-0.5	SA7-10	SA7-10D	SA7-20	SA7-30	SA7-34	SA8-0.5	SA8-10	SA8-20	SA8-30	SA8-37	
Sample Depth (ft)		0.5	10	10	20	30	34	0.5	10	20	30	37	
Sample Date		11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	
Wet Chemistry Parameter	**MSSL[2] mg/kg**												**Units**
Percent moisture	--	**5.3**	**5.6**	**7.1**	**7.6**	**6.3**	**23.3**	**4.8**	**6.3**	**4.7**	**8.4**	**26.6**	percent
Alkalinity (as CaCO3)	--	**68.9**	53.0 U	**70.2**	**174**	**158**	65.2 U	**134**	53.4 U	52.4 U	**279**	68.1 U	mg/kg
Bicarbonate	--	**178**	**212**	**193**	**131**	**340**	**290**	**358**	**247**	**293**	**1050**	**157**	mg/kg
Total Alkalinity	--	**247**	**249**	**263**	**305**	**497**	**319**	**492**	**281**	**333**	**1330**	**157**	mg/kg
Ammonia (as N)	--	5.3 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	6.5 UJ	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ	mg/kg
Cyanide	1.37E+04	R	R	R	R	R	R	R	R	R	R	R	mg/kg
MBAS	--	4.2 U	4.4 U	4.4 U	4.4 U	4.4 U	5.0 U	**5.9**	4.2 U	4.4 U	4.3 U	5.6 U	mg/kg
pH (solid)	--	**8.2**	**7.9**	**8.0**	**8.3**	**8.5**	**7.6**	**8.4**	**8.2**	**8.5**	**8.9**	**7.7**	none
Bromide	--	**1.1 J**	**0.65 J**	2.7 U	2.7 U	2.7 U	32.6 U	2.6 U	2.7 U	2.6 U	2.7 U	**1.5 J**	mg/kg
Chlorate	--	**108 J+**	**138 J+**	**183 J+**	**201 J+**	**28.7 J+**	**66.2 J+**	**16.7 J-**	**1.9 J-**	**3.2 J-**	**4.8 J-**	**16.8 J-**	mg/kg
Chloride	--	**127**	**160**	**177**	**208**	**46.7**	**95.6**	**495 J+**	**62.3 J+**	**345 J+**	**84.5 J+**	**395 J+**	mg/kg
Nitrate (as N)	--	**8.9**	**7.0**	**5.3**	**6.1**	**0.71 J+**	**0.89 J+**	**2.6 J+**	**1.7 J+**	**4.4 J+**	**8.2 J+**	**14.9**	mg/kg
Nitrite	--	R	2.1 UJ	2.2 UJ	2.2 UJ	2.1 UJ	2.6 UJ	**4.7 J-**	2.1 UJ	**4.0 J-**	2.2 UJ	2.7 UJ	mg/kg
ortho-Phosphate	--	**7.2**	5.3 U	**10.6**	5.4 U	**2.8 J**	6.5 U	**2.4 J**	5.3 U	5.2 U	5.5 U	**6.8 U**	mg/kg
Sulfate	--	**449 J**	**805 J**	**120 J**	**145 J**	**67.5 J**	**5380 J**	**177**	**696**	**181**	**193**	**15100**	mg/kg
Total Organic Carbon	--	**6780 J-**	**1950 J-**	**4480 J-**	**5000 J-**	**925 J-**	**11600 J-**	**3480 J-**	**1220 J-**	**3150 J-**	**6400 J-**	**12900 J-**	mg/kg

LOU 60 Table 1 (continued)
Soil Characterization Data - Wet Chemistry

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA13	SA13	SA13	SA13	SA13	SA13	
Sample ID		SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40	
Sample Depth (ft)		0.5	0.5	10	20	30	40	
Sample Date		11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	
Wet Chemistry Parameter	**MSSL[2] mg/kg**							**Units**
Percent moisture	--	**14.1**	**9.6**	**4.3**	**6.1**	**5.1**	**20.7**	percent
Alkalinity (as CaCO3)	--	58.2 UJ	**235 J**	**71.3 J**	53.2 UJ	**98.4 J**	**136 J**	mg/kg
Bicarbonate	--	**279 J**	**1930 J**	**523 J**	**269 J**	**246 J**	**699 J**	mg/kg
Total Alkalinity	--	**279 J**	**2170 J**	**594**	**303 J**	**344 J**	**835 J**	mg/kg
Ammonia (as N)	--	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ	mg/kg
Cyanide	1.37E+04	R	R	R	R	R	R	mg/kg
MBAS	--	4.2 U	4.3 U	4.2 U	4.3 U	4.3 U	4.8 U	mg/kg
pH (solid)	--	**7.4**	**7.7**	**8.1**	**8.1**	**8.4**	**7.8**	none
Bromide	--	2.9 U	2.8 U	2.6 U	2.7 U	2.6 U	3.2 U	mg/kg
Chlorate	--	5.8 U	5.5 UJ	5.2 UJ	5.3 U	5.3 U	6.3 U	mg/kg
Chloride	--	**269 J**	**15.0 J**	**13.5 J**	**16.3 J**	**19.9 J**	**41.3 J**	mg/kg
Nitrate (as N)	--	0.23 U	**0.42 J+**	**0.80 J+**	**0.57 J+**	**0.17 J+**	**3.2 J+**	mg/kg
Nitrite	--	**5.7 J**	**0.10 J**	**0.55 J**	**0.11 J**	**0.74 J**	**0.13 J**	mg/kg
ortho-Phosphate	--	5.8 U	**3.2 J**	5.2 U	5.3 U	5.3 U	6.3 U	mg/kg
Sulfate	--	**13800 J**	**1080 J**	**853 J**	**294 J**	**174**	**382 J**	mg/kg
Total Organic Carbon	--	**4200 J-**	**2100 J-**	**1200 J-**	**6900 J-**	**6800 J-**	**10900 J**	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

LOU 60 Table 2
Groundwater Characterization Data - Wet Chemistry

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	
Well ID		M-11	M-11D	M-13	
Sample ID		M-11	M-11D	M-13	
Sample Date		12/06/2006	12/06/2006	12/01/2006	
Wet Chemistry Parameters	**MCL[2] mg/L**				**Units**
Total Dissolved Solids	5.00E+02 j	**3270**	**3280**	**3440**	mg/L
Total Suspended Solids	--	**15.0 J**	**9.0 J**	**17.0 J**	mg/L
Alkalinity (as CaCO3)	--	5.0 U	5.0 U	5.0 U	mg/L
Bicarbonate	--	**205**	**184**	**111 J+**	mg/L
Total Alkalinity	--	**205**	**184**	**111 J+**	mg/L
Ammonia (as N)	--	50.0 U	50.0 U	50.0 U	ug/L
MBAS	--	**0.20**	**0.17 J**	0.16 U	mg/L
Cyanide	2.00E-01	R	R	R	ug/L
pH (liquid)	--	**7.7 J**	**7.6 J**	**7.5 J**	none
Specific Conductance	--	**2360 J+**	**2330 J+**	**2320**	umhos/cm
Bromide	--	25.0 U	25.0 U	**0.60**	mg/L
Chlorate	--	**421**	**444**	**279**	mg/L
Chloride	2.50E+02	**239**	**246**	**394**	mg/L
Nitrate (as N)	1.00E+01	**3.4**	**3.5**	**1.8**	mg/L
Nitrite	1.00E+00	**3.1**	2.0 U	R	mg/L
ortho-Phosphate	--	5.0 U	5.0 U	5.0 U	mg/L
Sulfate	2.50E+02 j	**1290**	**1380**	**1520**	mg/L
Total Organic Carbon	--	50 U	50 U	50.0 U	mg/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(j) Secondary Drinking Water Regulation value.

LOU 60 Table 3
Soil Characterization Data - Dioxins and Dibenzofurans

Acid Drain System
Tronox Facility - Henderson, Nevada

			Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
			Boring No.	SA3	SA3	SA4	SA5	SA6	SA6	SA7	SA8	SA13	SA13
			Sample ID	SA3-0.5	SA3-0.5D	SA4-0.5	SA5-0.5	SA6-0.5	SA6-0.5D	SA7-0.5	SA8-0.5	SA13-0.5	SA13-0.5D
			Sample Depth (ft)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
			Sample Date	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006
chemical_name:	**Method**	**Unit**	**MSSL[2] ng/kg**										
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--	**149.01**		**42.5**	**15.09**	**0.64**		**192**	**0.014**	**0.006**	
Dioxin SW 846 8290 Total TEQ-ENSR Calculated (a) ng/kg		ng/kg	--							**169**			
Dioxin 8290 SCREEN Total TEQ-ENSR Calculated (b) ng/kg		ng/kg	--	**149.01**		**42.5**	**15.09**	**0.72**		**192**	**0.063**	**0.1**	
Dioxin SW 846 8290 Total TEQ-ENSR Calculated (b) ng/kg		ng/kg	--							**169**			
1,2,3,4,6,7,8-Heptachlorodibenzofuran	8290 Screen	ng/kg	--	**669.842**	**849.298**	**18.965**	**80.879**	**7.730**	**2.554**	**927.107**	**0.479**	0.047 U	**0.325**
1,2,3,4,6,7,8-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--							**873.925 J**			
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**53.366**	**71.721**	**2.141**	**5.161**	**1.036**	**0.461**	**85.450**	**0.714**	0.054 U	**0.736**
1,2,3,4,6,7,8-Heptachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--							**85.45**			
1,2,3,4,7,8,9-Heptachlorodibenzofuran	8290 Screen	ng/kg	--	**269.014**	**344.266**	**8.238**	**36.815**	**2.617**	**0.801**	**392.108**	0.075 U	0.067 U	0.140 U
1,2,3,4,7,8,9-Heptachlorodibenzofuran	SW 846 8290	ng/kg	--							**392.11**			
1,2,3,4,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**281.567**	**356.494**	**23.006**	**37.078**	**2.392**	**0.864**	**372.915**	0.034 U	0.035 U	0.084 U
1,2,3,4,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--							**372.915**			
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**6.265**	**8.512**	**0.656**	**0.652**	0.059 U	0.055 U	**8.841**	0.043 U	0.041 U	0.060 U
1,2,3,4,7,8-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--							**8.841**			
1,2,3,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**157.518**	**196.405**	**9.753**	**20.664**	**1.665**	**0.552**	**249.626**	0.030 U	0.031 U	0.079 U
1,2,3,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--							**249.626**			
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**13.496**	**17.014**	**1.595**	**1.273**	**0.191**	**0.140**	**19.448**	0.036 U	0.035 U	0.055 U
1,2,3,6,7,8-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--							**19.448**			
1,2,3,7,8,9-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**45.354**	**27.487**	**4.476**	**5.906**	**0.259**	**0.145**	**31.354**	0.041 U	0.042 U	0.113 U
1,2,3,7,8,9-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--							**31.353**			
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**15.276**	**19.467**	**1.534**	**1.340**	**0.256**	**0.176**	**21.698**	0.040 U	0.038 U	0.058 U
1,2,3,7,8,9-Hexachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--							**21.698**			
1,2,3,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	**117.401**	**143.365**	**37.501**	**18.712**	**0.886**	**0.456**	**199.693**	0.023 U	0.028 U	0.050 U
1,2,3,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--							**199.692**			
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**11.897**	**13.508**	**3.343**	**0.846**	0.059 U	0.047 U	**16.175**	0.030 U	0.023 U	0.055 U
1,2,3,7,8-Pentachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--							**16.175**			
2,3,4,6,7,8-Hexachlorodibenzofuran	8290 Screen	ng/kg	--	**50.697**	**60.179**	**4.497**	**10.995**	**0.795**	**0.262**	**112.484**	0.034 U	0.035 U	0.092 U
2,3,4,6,7,8-Hexachlorodibenzofuran	SW 846 8290	ng/kg	--							**112.484**			
2,3,4,7,8-Pentachlorodibenzofuran	8290 Screen	ng/kg	--	**57.175**	**65.924**	**28.443**	**8.426**	0.279 U	**0.195**	**92.926**	0.022 U	0.027 U	0.049 U
2,3,4,7,8-Pentachlorodibenzofuran	SW 846 8290	ng/kg	--							**92.927**			
2,3,7,8-Tetrachlorodibenzofuran	8290 Screen	ng/kg	--	**298.648**	**320.832**	**201.573**	**19.343**	**1.724**	**0.752**	**369.233**	0.043 U	0.055 U	0.158 U
2,3,7,8-Tetrachlorodibenzofuran	SW 846 8290	ng/kg	--							**136.994 J**			
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	1.00E+03 h,v	**8.039**	**8.466**	**4.487**	**0.132**	0.077 U	0.059 U	**8.965**	0.028 U	0.036 U	0.141 U
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	1.00E+03 h,v							**8.965**			
Octachlorodibenzofuran	8290 Screen	ng/kg	--	**1674.507**	**2372.145**	**38.680**	**237.642**	**20.727**	**6.640**	**2502.073**	**1.403**	0.109 U	**0.670**

LOU 60 Table 3 (continued)
Soil Characterization Data - Dioxins and Dibenzofurans

Acid Drain System
Tronox Facility - Henderson, Nevada

			Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
			Boring No.	SA3	SA3	SA4	SA5	SA6	SA6	SA7	SA8	SA13	SA13
			Sample ID	SA3-0.5	SA3-0.5D	SA4-0.5	SA5-0.5	SA6-0.5	SA6-0.5D	SA7-0.5	SA8-0.5	SA13-0.5	SA13-0.5D
			Sample Depth (ft)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
			Sample Date	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006
chemical_name:	**Method**	**Unit**	**MSSL[2] ng/kg**										
Octachlorodibenzofuran	SW 846 8290	ng/kg	--							**2338.457 J**			
Octachlorodibenzo-p-Dioxin	8290 Screen	ng/kg	--	**57.568**	**90.351**	**2.582**	**7.486**	**6.287**	**2.965**	**191.912**	**6.973**	**0.660**	**3.166**
Octachlorodibenzo-p-Dioxin	SW 846 8290	ng/kg	--							**191.912**			
Tetrachlorinated Dibenzofurans, (Total)	SW 846 8290	ng/kg	--							**1642.861 J**			
Total HpCDD	SW 846 8290	ng/kg	--							**151.421**			
Total HpCDF	SW 846 8290	ng/kg	--							**1846.885 J**			
Total HxCDD	SW 846 8290	ng/kg	--							**158.189**			
Total HxCDF	SW 846 8290	ng/kg	--							**1786.919**			
Total PeCDD	SW 846 8290	ng/kg	--							**154.674**			
Total PeCDF	SW 846 8290	ng/kg	--							**1665.598**			
Total TCDD	SW 846 8290	ng/kg	--							**160.412**			

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(a) Calculated assuming 0 for non-detected congeners and 2006 toxic equivalency factors (TEFs).
(b) Calculated assuming 1/2 detection limit as proxy for non-detected congeners and 2006 TEFs.
(h) Dioxins and furans were expressed as 2,3,7,8- TCDD TEQ (toxic equivalents), calculated using the TEFs published by Van den Berg et al., 2006.
(v) USEPA. 1998. Approach for Addressing Dioxin in Soil at CERCLA and RCRA Sites. OSWER Directive 9200.4-26. April, 1998. A value of 1000 ng/kg is applicable to residential soils. The range of 5000 to 20000 ng/kg is applicable to commercial/industrial soils. The Agency for Toxic Substances and Disease Registry (ATSDR) provides a screening level of 50 ng/kg for dioxin in residential soil [http://www.atsdr.cdc.gov/substances/dioxin/policy/].

LOU 60 Table 4
Soil Characterization Data - Metals

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA3	SA3	SA3	SA3	SA3	SA3	SA4	SA4	SA4	SA4	SA4
Sample ID		SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	SA4-0.5	SA4-10	SA4-20	SA4-30	SA4-40
Sample Depth (ft)		0.5	0.5	10	20	30	40	0.5	10	20	30	40
Sample Date		11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
Metals	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	1.00E+05	**7000**	**6820**	**6130**	**6960**	**7760**	**13500**	**7490**	**6040**	**6640**	**4260**	**5630**
Antimony	4.50E+02	**0.17 J-**	**0.16 J-**	**0.17 J-**	**0.094 J-**	**0.13 J-**	**0.23 J-**	**0.17 J-**	**0.14 J-**	**0.17 J-**	**0.12 J-**	**0.15 J-**
Arsenic	2.80E+02	**3.5**	**2.9**	**3.0**	**3.5**	**61.6**	**27.7**	**13.4**	**11.3**	**5.3**	**6.1**	**8.6**
Barium	1.00E+05	**181 J+**	**144 J+**	**161 J+**	**188 J+**	**667 J**	**43.6 J**	**155 J+**	**151 J+**	**176 J+**	**79.7 J+**	**152 J+**
Beryllium	2.20E+03	**0.52**	**0.47**	**0.46**	**0.46**	**0.40 J**	**0.81**	**0.51**	**0.36**	**0.49**	**0.31**	**0.39**
Boron	1.00E+05	5.7 UJ	5.0 UJ	3.7 UJ	5.8 UJ	25.6 UJ	24.2 UJ	4.5 UJ	4.7 UJ	5.0 UJ	4.8 UJ	6.9 UJ
Cadmium	5.60E+02	**0.15**	**0.13**	**0.084**	**0.077**	**0.077**	**0.099**	**0.087**	**0.088**	**0.080**	**0.053 J**	**0.082**
Calcium	--	**40900 J**	**19800 J**	**19300 J**	**30200 J**	**120000 J**	**30000 J**	**21100**	**25300**	**38800**	**9480**	**26600**
Chromium (Total)	7.10E+01	**10.7**	**9.6**	**9.4**	**7.0**	**18.5 J-**	**34.6 J-**	**11.2**	**7.2**	**10.7**	**7.3**	**19.1**
Chromium-hexavalent	5.00E+02	**0.11 J**	0.21 U	0.21 U	0.22 U	0.26 U	0.29 U	**0.12 J**	0.21 U	**1.7**	0.23 U	**0.54**
Cobalt	2.10E+03	**6.5**	**6.3 J-**	**5.9 J-**	**6.9 J-**	**4.0 J-**	**5.1 J-**	**6.3 J-**	**3.8 J-**	**5.9 J-**	**3.7 J-**	**4.1 J-**
Copper	4.20E+04	**12.3 J-**	**13.3 J-**	**12.0 J-**	**10.3 J-**	**9.9 J**	**11.7 J**	**12.9 J-**	**8.4 J-**	**11.8 J-**	**9.1 J-**	**10.4 J-**
Iron	1.00E+05	**12000 J-**	**11300**	**12000**	**8290**	**6880**	**11900**	**13300**	**8350**	**11500**	**6470**	**11200**
Lead	8.00E+02	**12.4**	**12.1**	**8.0**	**7.7**	**4.6**	**8.3**	**14.5**	**6.3**	**7.0**	**6.3**	**6.3**
Magnesium	--	**7260 J-**	**6640 J-**	**5890 J-**	**10100 J-**	**45900 J-**	**40800 J-**	**7570 J-**	**5530 J-**	**10500 J-**	**5110 J-**	**6050 J-**
Manganese	3.50E+04	**329 J**	**369 J**	**264 J**	**289 J**	**119**	**160**	**254 J**	**176 J**	**295 J**	**157 J**	**186 J**
Molybdenum	5.70E+03	**0.49 J**	**0.57**	**0.52 J**	**0.31 J**	**0.44 J**	**0.80**	**0.45 J**	**0.42 J**	**0.51 J**	**0.46 J**	**1.7**
Nickel	2.30E+04	**13.5 J-**	**12.0 J-**	**11.5 J-**	**11.0 J-**	**10.2 J-**	**12.5 J-**	**13.2 J-**	**9.3 J-**	**12.2 J-**	**8.5 J-**	**11.1 J-**
Platinum	--	**0.019 J**	**0.016 J**	**0.016 J**	**0.015 J**	**0.019 J**	**0.023 J**	**0.033 J**	**0.012 J**	**0.017 J**	0.011 U	**0.014 J**
Potassium	--	**1890 J-**	**1830 J-**	**1600 J-**	**1480 J-**	**1570**	**3260**	**2080 J-**	**2480 J-**	**1300 J-**	**1100 J-**	**1590 J-**
Selenium	5.70E+03	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.14 UJ	0.16 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ	0.12 UJ
Silver	5.70E+03	**0.14 J**	**0.13 J**	**0.12 J**	**0.11 J**	**0.15 J**	**0.18 J**	**0.13 J**	**0.11 J**	**0.13 J**	**0.061 J**	**0.11 J**
Sodium	--	**383 J-**	**344 J-**	**317 J-**	**756 J-**	**1620 J-**	**669 J-**	**1520 J-**	**823 J-**	**556 J-**	**360 J-**	**609 J-**
Strontium	1.00E+05	**226 J+**	**152 J+**	**154 J+**	**228 J+**	**299 J**	**119 J**	**131 J+**	**187 J+**	**260 J+**	**175 J+**	**304 J+**
Thallium	--	0.10 U	0.15 U	0.082 U	0.12 U	0.09 U	0.18 U	0.077 U	0.074 U	0.076 U	0.08 U	0.074 U
Tin	--	**0.54**	**0.52**	**0.48**	**0.36**	**0.36**	**0.66**	**0.52**	**0.42**	**0.47**	**0.39**	**0.63**
Titanium	--	**527**	**498**	**504**	**353**	**363**	**581**	**586**	**429**	**507**	**330**	**517**
Tungsten	--	0.38 UJ	0.32 UJ	0.30 UJ	0.19 UJ	0.49 UJ	0.33 UJ	0.34 UJ	0.23 UJ	0.37 UJ	0.32 UJ	0.46 UJ
Uranium	--	**1.3**	**0.89**	**0.91**	**1.4**	**10.6**	**3.7**	**0.89**	**0.85**	**2.0**	**0.94**	**1.6**
Vanadium	5.70E+03	**32.6 J-**	**29.9 J-**	**33.9 J-**	**23.9 J-**	**36.2 J-**	**33.7 J-**	**35.4 J-**	**22.2 J-**	**34.2 J-**	**22.8 J-**	**30.6 J-**
Zinc	1.00E+05	**27.6 J-**	**29.0 J-**	**24.8 J-**	**22.9 J-**	29.5 UJ	49.2 UJ	**29.4 J-**	**20.1 J-**	**23.9 J-**	**17.3 J-**	**22.7 J-**
Mercury	3.41E+02 (t)	**0.013 J-**	**0.019 J-**	**0.013 J-**	0.0073 UJ	0.0086 UJ	0.0098 UJ	**0.014 J-**	**0.014 J-**	0.0073 UJ	0.0076 UJ	0.0071 UJ

LOU 60 Table 4 (continued)
Soil Characterization Data - Metals

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA5	SA5	SA5	SA5	SA5	SA6	SA6	SA6	SA6	SA6	SA6
Sample ID		SA5-0.5	SA5-10	SA5-20	SA5-30	SA5-37	SA6-0.5	SA6-0.5D	SA6-10	SA6-20	SA6-30	SA6-35
Sample Depth (ft)		0.5	10	20	30	37	0.5	0.5	10	20	30	35
Sample Date		11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
Metals	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	1.00E+05	**6440**	**5440**	**5450**	**4130**	**12500**	**6160**	**6710**	**6440**	**6220**	**5800**	**12500**
Antimony	4.50E+02	**0.32 J-**	**0.15 J-**	**0.13 J-**	**0.16 J-**	**0.25 J-**	**0.15 J-**	**0.15 J-**	**0.16 J-**	**0.18 J-**	**0.16 J-**	**0.27 J-**
Arsenic	2.80E+02	**3.2**	**2.7**	**2.5**	**10.9**	**27.6**	**2.4**	**3.1**	**3.1**	**4.0**	**4.2**	**24.4**
Barium	1.00E+05	**176 J+**	**129 J+**	**98.2 J+**	**100 J+**	**39.3 J+**	**163 J+**	**149 J+**	**162 J+**	**186 J+**	**143 J+**	**40.1 J+**
Beryllium	2.20E+03	**0.48**	**0.47**	**0.41**	**0.28**	**0.94**	**0.40**	**0.44**	**0.50**	**0.46**	**0.43**	**0.70**
Boron	1.00E+05	6.7 UJ	6.0 UJ	7.0 UJ	17.9 UJ	85.7 UJ	5.2 UJ	5.3 UJ	5.6 UJ	6.0 UJ	5.8 UJ	20.8 UJ
Cadmium	5.60E+02	**0.11**	**0.085**	**0.063**	**0.039 J**	**0.11**	**0.089**	**0.10**	**0.083**	**0.083**	**0.090**	**0.12**
Calcium	--	**22400**	**20700**	**24000**	**47100**	**31600**	**24600**	**19400**	**29300**	**33600**	**25500**	**32500**
Chromium (Total)	7.10E+01	**14.8**	**6.6**	**7.2**	**5.9**	**38.8**	**8.5**	**12.8**	**10.6**	**10.1**	**7.7**	**27.4**
Chromium-hexavalent	5.00E+02	**2.4**	0.23 U	0.24 U	**8.4**	0.33 U	**0.22**	**0.13 J**	0.22 U	0.22 U	0.21 U	**0.21 J**
Cobalt	2.10E+03	**8.8 J-**	**6.9 J-**	**6.1 J-**	**4.2 J-**	**4.5 J-**	**5.4 J-**	**5.9 J-**	**5.6 J-**	**6.4 J-**	**6.3 J-**	**5.2 J-**
Copper	4.20E+04	**14.3 J-**	**10.6 J-**	**11.3 J**	**7.6 J-**	**10.5 J-**	**10.1 J-**	**12.4 J-**	**11.4 J-**	**12.0 J-**	**12.4 J-**	**12.0 J-**
Iron	1.00E+05	**11800**	**10400**	**9680**	**6500**	**11300**	**9600**	**11600**	**11700**	**12000**	**11200**	**12600**
Lead	8.00E+02	**24.2**	**6.2**	**5.5**	**5.6**	**6.6**	**7.1**	**11.5**	**7.6**	**8.1**	**7.4**	**8.3**
Magnesium	--	**7040 J-**	**6850 J-**	**7480 J-**	**7810 J-**	**46100 J-**	**6570 J-**	**7250 J-**	**6730 J-**	**8850 J-**	**6880 J-**	**28300 J-**
Manganese	3.50E+04	**483 J**	**254 J**	**234 J**	**131 J**	**167 J**	**249 J**	**271 J**	**227 J**	**301 J**	**323 J**	**195 J**
Molybdenum	5.70E+03	**0.69**	**0.90**	**0.34 J**	**0.56**	**1.1**	**0.48 J**	**0.64**	**0.46 J**	**0.43 J**	**0.47 J**	**0.95**
Nickel	2.30E+04	**12.7 J-**	**13.7 J-**	**13.1 J-**	**10.1 J-**	**11.4 J-**	**12.8 J-**	**12.6 J-**	**12.1 J-**	**11.9 J-**	**12.2 J-**	**12.5 J-**
Platinum	--	**0.015 J**	0.012 U	0.012 U	0.011 U	**0.018 J**	**0.012 J**	**0.018 J**	**0.018 J**	**0.016 J**	**0.015 J**	**0.022 J**
Potassium	--	**2000 J-**	**1290 J-**	**980 J-**	**1110 J-**	**3110 J-**	**2100 J-**	**2200 J-**	**2030 J-**	**1220 J-**	**1050 J-**	**3180 J-**
Selenium	5.70E+03	0.14 UJ	0.13 UJ	0.13 UJ	0.12 UJ	0.18 UJ	0.12 UJ	0.13 UJ	0.12 UJ	0.12 UJ	0.11 UJ	0.16 UJ
Silver	5.70E+03	**0.13 J**	**0.088 J**	**0.081 J**	**0.074 J**	**0.14 J**	**0.10 J**	**0.13 J**	**0.13 J**	**0.12 J**	**0.12 J**	**0.17 J**
Sodium	--	**1790 J-**	**522 J-**	**532 J-**	**1120 J-**	**4560 J-**	**626 J-**	**560 J-**	**581 J-**	**443 J-**	**699 J-**	**577 J-**
Strontium	1.00E+05	**151 J+**	**200 J+**	**210 J+**	**1120 J+**	**102 J+**	**126 J+**	**101 J+**	**188 J+**	**207 J+**	**299 J+**	**159 J+**
Thallium	--	0.091 U	0.081 U	0.082 U	0.076 U	0.19 U	0.080 U	0.081 U	0.095 U	0.082 U	0.082 U	0.22 U
Tin	--	**0.79**	**0.39**	**0.35**	**0.27**	**0.58**	**0.40**	**0.55**	**0.48**	**0.46**	**0.47**	**0.64**
Titanium	--	**511**	**370**	**366**	**287**	**502**	**361 J**	**616 J**	**549 J**	**463 J**	**507 J**	**530 J**
Tungsten	--	0.41 UJ	0.44 UJ	0.27 UJ	0.33 UJ	0.39 UJ	0.28 UJ	0.30 UJ	0.29 UJ	0.42 UJ	0.39 UJ	0.55 UJ
Uranium	--	**1.1**	**1.1**	**1.0**	**2.3**	**6.1**	**0.80**	**1.0**	**1.0**	**2.1**	**1.8**	**3.7**
Vanadium	5.70E+03	**33.2 J-**	**29.9 J-**	**26.7 J-**	**24.9 J-**	**33.3 J-**	**21.8 J-**	**30.5 J-**	**33.8 J-**	**35.2 J-**	**34.8 J-**	**32.7 J-**
Zinc	1.00E+05	**31.8 J-**	**27.8 J-**	**25.2 J-**	**18.9 J-**	**32.3 J-**	**24.1 J-**	**29.6 J-**	**24.8 J-**	**23.9 J-**	**24.9 J-**	**36.1 J-**
Mercury	3.41E+02 (t)	**0.018 J-**	0.0078 UJ	0.0079 UJ	0.0072 UJ	0.011 UJ	0.0071 UJ	**0.011 J-**	0.0072 UJ	0.0072 UJ	0.007 UJ	0.0099 UJ

LOU 60 Table 4 (continued)
Soil Characterization Data - Metals

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA7	SA7	SA7	SA7	SA7	SA7	SA8	SA8	SA8	SA8	SA8
Sample ID		SA7-0.5	SA7-10	SA7-10D	SA7-20	SA7-30	SA7-34	SA8-0.5	SA8-10	SA8-20	SA8-30	SA8-37
Sample Depth (ft)		0.5	10	10	20	30	34	0.5	10	20	30	37
Sample Date		11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
Metals	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	1.00E+05	**6400**	**5850**	**7100**	**6450**	**6390**	**7400**	**6450**	**6650**	**6270**	**6930**	**8070**
Antimony	4.50E+02	**0.36 J-**	**0.17 J-**	**0.13 J-**	**0.15 J-**	**0.15 J-**	**0.32 J-**	**0.15 J-**	**0.24 J-**	**0.13 J-**	**0.18 J-**	**0.20 J-**
Arsenic	2.80E+02	**5.5**	**2.5**	**2.3**	**3.3**	**4.8**	**24.3**	**1.8**	**2.5**	**3.4**	**3.7**	**44.3**
Barium	1.00E+05	**201 J+**	**147**	**166**	**149 J**	**73.6 J**	**158 J**	**143 J+**	**165 J**	**161 J**	**168 J**	**81.9 J**
Beryllium	2.20E+03	**0.41**	**0.42**	**0.47**	**0.46**	**0.44 J-**	**0.35 J-**	**0.40 J-**	**0.46 J-**	**0.42 J-**	**0.45 J-**	**0.47 J-**
Boron	1.00E+05	**48.6 J-**	8.7 UJ	8.2 UJ	9.3 UJ	12.3 UJ	**36.8 J-**	**2.5 J-**	**3.5 J-**	**6.5 J-**	**5.6 J-**	**28.3 J-**
Cadmium	5.60E+02	**0.24**	**0.075**	**0.084**	**0.068**	**0.065**	**0.084**	**0.085**	**0.087**	**0.090**	**0.065**	**0.058 J**
Calcium	--	**37500**	**26400**	**20500**	**25200**	**29000**	**62700 J+**	**9930 J+**	**10500 J+**	**28800 J+**	**22800 J+**	**79600 J+**
Chromium (Total)	7.10E+01	**18.5 J-**	**8.2 J-**	**7.9 J-**	**8.6 J-**	**7.4 J-**	**33.8 J-**	**10.1 J-**	**11.2 J-**	**9.3 J-**	**11.7 J-**	**40.9 J-**
Chromium-hexavalent	5.00E+02	**0.56**	0.21 U	0.22 U	0.22 U	**0.12 J**	**0.13 J**	0.21 U	0.21 U	0.21 U	0.22 U	0.27 U
Cobalt	2.10E+03	**8.6 J-**	**6.0 J-**	**6.2 J-**	**5.8 J-**	**5.2 J-**	**3.1 J-**	**7.0 J-**	**6.4 J-**	**7.6 J-**	**5.1 J-**	**3.5 J-**
Copper	4.20E+04	**16.5 J-**	**10.4 J-**	**11.3 J-**	**12.0 J-**	**11.3 J-**	**9.5 J**	**12.4 J-**	**13.5 J**	**15.6 J**	**11.7 J**	**11.7 J**
Iron	1.00E+05	**9830**	**9600**	**9830**	**10300**	**9530**	**7520**	**14000**	**13600**	**12900**	**13300**	**7600**
Lead	8.00E+02	**32.5**	**7.4**	**7.8**	**6.7**	**6.0**	**4.4**	**7.6**	**8.4**	**6.9**	**7.8**	**4.4**
Magnesium	--	**8360 J-**	**5750**	**6310**	**8920 J-**	**8250 J-**	**19000 J-**	**6390 J-**	**5350 J-**	**7920 J-**	**7520 J-**	**51900 J-**
Manganese	3.50E+04	**1290**	**278**	**262**	**250**	**159**	**171 J**	**316 J**	**349 J**	**289 J**	**214 J**	**111 J**
Molybdenum	5.70E+03	**0.92**	**0.41 J**	**0.41 J**	**0.40 J**	**0.38 J**	**0.52 J**	**0.55**	**0.54**	**0.47 J**	**0.56**	**0.51 J**
Nickel	2.30E+04	**12.9 J-**	**11.4 J-**	**12.1 J-**	**11.8 J-**	**11.6 J-**	**9.8 J-**	**12.4 J-**	**12.7 J**	**18.7 J-**	**11.5 J-**	**12.4 J-**
Platinum	--	**0.077 J**	**0.014 J**	**0.016 J**	**0.014 J**	**0.012 J**	**0.014 J**	**0.016 J**	**0.013 J**	**0.014 J**	**0.015 J**	0.014 U
Potassium	--	**1910**	**1790**	**2110**	**1280**	**1340**	**2080 J-**	**1380 J-**	**2390 J-**	**1120 J-**	**1350 J-**	**2390 J-**
Selenium	5.70E+03	0.11 U	0.11 U	0.12 U	0.12 U	0.12 U	0.14 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.12 UJ	0.15 UJ
Silver	5.70E+03	**0.16 J**	**0.11 J**	**0.13 J**	**0.12 J**	**0.11 J**	**0.12 J**	**0.12 J**	**0.12 J**	**0.12 J**	**0.12 J**	**0.10 J**
Sodium	--	**763**	**314 J-**	**361 J-**	**392 J-**	**638 J-**	**533 J-**	**689 J-**	**1410 J-**	**591 J-**	**586 J-**	**1540 J-**
Strontium	1.00E+05	**130 J+**	**133 J-**	**130 J-**	**171 J**	**219 J**	**2280 J**	**119 J+**	**141 J**	**201 J**	**206 J**	**542 J**
Thallium	--	0.38 U	0.21 U	0.20 U	0.12 U	0.10 U	0.32 U	0.087 U	0.14 U	0.080 U	0.076 U	0.16 U
Tin	--	**0.92**	**0.43**	**0.52**	**0.43**	**0.42**	**0.39**	**1.2**	**0.99**	**0.55**	**0.60**	**0.39**
Titanium	--	**364 J+**	**379 J+**	**382 J+**	**454 J+**	**368 J+**	**444**	**583**	**654**	**627**	**577 J**	**431**
Tungsten	--	**1.4 J-**	**0.41 J-**	**0.32 J-**	**0.33 J-**	**0.30 J-**	**0.87 J-**	0.37 UJ	0.36 UJ	0.28 UJ	0.25 UJ	0.41 UJ
Uranium	--	**0.96**	**0.86**	**0.87**	**1.6**	**2.1**	**4.3**	**0.75**	**0.93**	**1.3**	**2.0**	**10.2**
Vanadium	5.70E+03	**24.1**	**23.7**	**23.5**	**29.8 J-**	**24.9 J-**	**30.1 J-**	**43.1 J-**	**44.5 J-**	**41.9 J-**	**39.5 J-**	**40.3 J-**
Zinc	1.00E+05	**39.1 J-**	**21.7 J-**	**23.0 J-**	**22.3 J-**	**21.9 J-**	**20.3 J-**	**25.5 J-**	**26.9 J-**	**23.8 J-**	**25.0 J-**	**19.2 J-**
Mercury	3.41E+02 (t)	0.0071 U	**0.0074 J-**	**0.024 J-**	0.0072 UJ	0.0071 UJ	0.0087 UJ	**0.011 J-**	**0.0073 J-**	0.007 UJ	**0.010 J-**	0.0091 UJ

LOU 60 Table 4 (continued)
Soil Characterization Data - Metals

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA13	SA13	SA13	SA13	SA13	SA13
Sample ID		SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40
Sample Depth (ft)		0.5	0.5	10	20	30	40
Sample Date		11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
Metals	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	1.00E+05	**7350**	**8310**	**5630**	**7330**	**7090**	**8720**
Antimony	4.50E+02	**0.19 J-**	**0.25 J-**	**0.18 J-**	**0.19 J-**	**0.18 J-**	**0.19 J-**
Arsenic	2.80E+02	**2.1**	**2.3**	**2.1**	**3.2**	**3.1**	**36.4**
Barium	1.00E+05	**159**	**181**	**159 J**	**197 J**	**127 J**	**123 J-**
Beryllium	2.20E+03	**0.50 J-**	**0.51 J-**	**0.37 J-**	**0.46 J-**	**0.45 J-**	**0.55**
Boron	1.00E+05	**3.0 J-**	**3.8 J-**	**2.6 J-**	**3.6 J-**	**3.3 J-**	**12.9 J-**
Cadmium	5.60E+02	**0.13**	**0.12**	**0.11**	**0.080**	**0.074**	**0.11**
Calcium	--	**12600 J**	**12300 J**	**9080 J+**	**21200 J+**	**15500 J+**	**28500**
Chromium (Total)	7.10E+01	**12.8 J-**	**13.8 J-**	**10.1 J-**	**11.4 J-**	**8.8 J-**	**14.5**
Chromium-hexavalent	5.00E+02	0.23 U	**0.12 J**	0.21 U	0.21 U	0.21 U	0.25 U
Cobalt	2.10E+03	**6.9 J-**	**7.2 J-**	**6.3 J-**	**7.3 J-**	**6.2 J-**	**5.6 J-**
Copper	4.20E+04	**15.9 J-**	**14.7 J-**	**12.6 J**	**12.7 J**	**12.1 J**	**12.4 J-**
Iron	1.00E+05	**15600**	**16100**	**13200**	**13200**	**13600**	**12600**
Lead	8.00E+02	**9.0**	**9.5**	**9.4**	**10.4**	**7.4**	**8.1**
Magnesium	--	**6580 J-**	**7030 J-**	**4940 J-**	**8590 J-**	**7430 J-**	**15200**
Manganese	3.50E+04	**1680**	**2320**	**350 J**	**434 J**	**219 J**	**606**
Molybdenum	5.70E+03	**0.58 J**	**0.52 J**	**0.60**	**0.51 J**	**0.45 J**	**0.52 J**
Nickel	2.30E+04	**13.9 J-**	**14.3 J-**	**11.6 J-**	**12.5 J-**	**12.0 J-**	**14.0 J-**
Platinum	--	**0.015 J**	**0.022 J**	**0.014 J**	**0.019 J**	**0.016 J**	**0.021 J**
Potassium	--	**2190**	**2500**	**1670 J-**	**1380 J-**	**1280 J-**	**2740**
Selenium	5.70E+03	0.13 UJ	0.12 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.14 UJ
Silver	5.70E+03	**0.15 J**	**0.16 J**	**0.13 J**	**0.14 J**	**0.13 J**	**0.16 J**
Sodium	--	**447 J-**	**564 J**	**251 J-**	**593 J-**	**694 J-**	**506 J-**
Strontium	1.00E+05	**130 J-**	**162 J-**	**117 J**	**215 J**	**310 J**	**178**
Thallium	--	0.098 U	0.26 U	0.12 U	0.13 U	0.093 U	0.13 U
Tin	--	**0.73**	**0.69**	**0.59**	**0.63**	**0.57**	**0.60**
Titanium	--	**830**	**806**	**733**	**689**	**649**	**681**
Tungsten	--	0.36 UJ	0.45 UJ	0.35 UJ	0.40 UJ	0.32 UJ	0.73 UJ
Uranium	--	**0.92**	**1.0**	**0.83**	**1.4**	**1.4**	**3.2**
Vanadium	5.70E+03	**47.1 J-**	**48.9 J-**	**43.4 J-**	**44.1 J-**	**41.7 J-**	**56.3 J-**
Zinc	1.00E+05	**31.5 J-**	**29.8 J-**	**27.3 J-**	**28.2 J-**	**27.4 J-**	**30.8 J-**
Mercury	3.41E+02 (t)	**0.013 J-**	**0.017 J-**	**0.0082 J-**	**0.012 J-**	**0.011 J-**	0.0084 UJ

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(t) Value for mercury and compounds.

LOU 60 Table 4 (continued)
Soil Characterization Data - Metals

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA13	SA13	SA13	SA13	SA13	SA13
Sample ID		SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40
Sample Depth (ft)		0.5	0.5	10	20	30	40
Sample Date		11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
Metals	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminum	1.00E+05	**7350**	**8310**	**5630**	**7330**	**7090**	**8720**
Antimony	4.50E+02	**0.19 J-**	**0.25 J-**	**0.18 J-**	**0.19 J-**	**0.18 J-**	**0.19 J-**
Arsenic	2.80E+02	**2.1**	**2.3**	**2.1**	**3.2**	**3.1**	**36.4**
Barium	1.00E+05	**159**	**181**	**159 J**	**197 J**	**127 J**	**123 J-**
Beryllium	2.20E+03	**0.50 J-**	**0.51 J-**	**0.37 J-**	**0.46 J-**	**0.45 J-**	**0.55**
Boron	1.00E+05	**3.0 J-**	**3.8 J-**	**2.6 J-**	**3.6 J-**	**3.3 J-**	**12.9 J-**
Cadmium	5.60E+02	**0.13**	**0.12**	**0.11**	**0.080**	**0.074**	**0.11**
Calcium	--	**12600 J**	**12300 J**	**9080 J+**	**21200 J+**	**15500 J+**	**28500**
Chromium (Total)	7.10E+01	**12.8 J-**	**13.8 J-**	**10.1 J-**	**11.4 J-**	**8.8 J-**	**14.5**
Chromium-hexavalent	5.00E+02	0.23 U	**0.12 J**	0.21 U	0.21 U	0.21 U	0.25 U
Cobalt	2.10E+03	**6.9 J-**	**7.2 J-**	**6.3 J-**	**7.3 J-**	**6.2 J-**	**5.6 J-**
Copper	4.20E+04	**15.9 J-**	**14.7 J-**	**12.6 J**	**12.7 J**	**12.1 J**	**12.4 J-**
Iron	1.00E+05	**15600**	**16100**	**13200**	**13200**	**13600**	**12600**
Lead	8.00E+02	**9.0**	**9.5**	**9.4**	**10.4**	**7.4**	**8.1**
Magnesium	--	**6580 J-**	**7030 J-**	**4940 J-**	**8590 J-**	**7430 J-**	**15200**
Manganese	3.50E+04	**1680**	**2320**	**350 J**	**434 J**	**219 J**	**606**
Molybdenum	5.70E+03	**0.58 J**	**0.52 J**	**0.60**	**0.51 J**	**0.45 J**	**0.52 J**
Nickel	2.30E+04	**13.9 J-**	**14.3 J-**	**11.6 J-**	**12.5 J-**	**12.0 J-**	**14.0 J-**
Platinum	--	**0.015 J**	**0.022 J**	**0.014 J**	**0.019 J**	**0.016 J**	**0.021 J**
Potassium	--	**2190**	**2500**	**1670 J-**	**1380 J-**	**1280 J-**	**2740**
Selenium	5.70E+03	0.13 UJ	0.12 UJ	0.11 UJ	0.12 UJ	0.11 UJ	0.14 UJ
Silver	5.70E+03	**0.15 J**	**0.16 J**	**0.13 J**	**0.14 J**	**0.13 J**	**0.16 J**
Sodium	--	**447 J-**	**564 J**	**251 J-**	**593 J-**	**694 J-**	**506 J-**
Strontium	1.00E+05	**130 J-**	**162 J-**	**117 J**	**215 J**	**310 J**	**178**
Thallium	--	0.098 U	0.26 U	0.12 U	0.13 U	0.093 U	0.13 U
Tin	--	**0.73**	**0.69**	**0.59**	**0.63**	**0.57**	**0.60**
Titanium	--	**830**	**806**	**733**	**689**	**649**	**681**
Tungsten	--	0.36 UJ	0.45 UJ	0.35 UJ	0.40 UJ	0.32 UJ	0.73 UJ
Uranium	--	**0.92**	**1.0**	**0.83**	**1.4**	**1.4**	**3.2**
Vanadium	5.70E+03	**47.1 J-**	**48.9 J-**	**43.4 J-**	**44.1 J-**	**41.7 J-**	**56.3 J-**
Zinc	1.00E+05	**31.5 J-**	**29.8 J-**	**27.3 J-**	**28.2 J-**	**27.4 J-**	**30.8 J-**
Mercury	3.41E+02 (t)	**0.013 J-**	**0.017 J-**	**0.0082 J-**	**0.012 J-**	**0.011 J-**	0.0084 UJ

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(t) Value for mercury and compounds.

LOU 60 Table 5
Groundwater Characterization Data - Metals

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	
Well ID:		M-11	M-13	
Sample ID		M-11-Z	M-13-Z	
Sample Date		05/11/2007	05/09/2007	
Metals	**MCL[2] ug/L**			**Unit**
Aluminum	5.00E+01 j	393 U	197 U	ug/L
Antimony	6.00E+00	25.0 U	12.5 U	ug/L
Arsenic	1.00E+01	**328**	**51.6 J**	ug/L
Barium	2.00E+03	15.2 U	10.7 U	ug/L
Beryllium	4.00E+00	4.4 U	2.2 U	ug/L
Boron	7.30E+03	**10400**	**2680**	ug/L
Cadmium	5.00E+00	2.9 U	1.4 U	ug/L
Calcium	--	**50200**	**204000**	ug/L
Chromium (Total)	1.00E+02	**3130**	**292**	ug/L
Chromium-hexavalent	1.09E+02	**2510 J**	0.20 UJ	ug/L
Cobalt	7.30E+02	15.7 U	7.8 U	ug/L
Copper	1.30E+03 p	12.5 U	6.3 U	ug/L
Iron	3.00E+02 j	**6310 J-**	**4370 J-**	ug/L
Lead	1.50E+01 u	24.6 U	12.3 U	ug/L
Magnesium	1.50E+05 a	**39300**	**94700**	ug/L
Manganese	5.00E+01 j	173 U	**1580**	ug/L
Molybdenum	1.82E+02	25.0 U	**32.5 J**	ug/L
Nickel	7.30E+02	25.8 U	12.9 U	ug/L
Platinum	--	5.0 U	2.5 U	ug/L
Potassium	--	**19900**	**13500**	ug/L
Selenium	5.00E+01	50.0 U	25.0 U	ug/L
Silver	1.00E+02 j	10.1 U	5.1 U	ug/L
Sodium	--	**953000**	**613000**	ug/L
Strontium	2.19E+04	**1300**	**5000**	ug/L
Thallium	2.00E+00	16.0 U	8.0 U	ug/L
Tin	2.19E+04	10.0 U	5.0 U	ug/L
Titanium	1.46E+05	19.6 U	9.8 U	ug/L
Tungsten	--	25.0 U	12.5 U	ug/L
Uranium	3.00E+01	**15.0 J**	**23.8 J**	ug/L
Vanadium	3.65E+01	**121 J**	40.0 U	ug/L
Zinc	5.00E+03 j	50.0 U	48.1 U	ug/L
Mercury	2.00E+00	0.11 U	0.093 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results,
Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(j) Secondary Drinking Water Regulation value.
(p) The national primary drinking water regulations (b) lists a treatment technology action level of 1.3 mg/l as the MCL for Copper. Therefore, the secondary value is not used.
(u) See footnote (b). Treatment technology action level.
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.

LOU 60 Table 6
Groundwater Characterization Data - Routine Monitoring [1]

Acid Drain System
Tronox Facility - Henderson, Nevada

Well ID	Date	Depth to water (ft)	Perchlorate mg/l	Qual	MCL [2] mg/l	Total Chromium mg/l	Qual	MCL [2] mg/l	TDS mg/l	Qual	MCL [2] mg/l	Nitrate (as N) mg/l	Qual	MCL [2] mg/l	Chlorate mg/l	Qual	MCL [2] mg/l
M-11	2/2/2006	42.69	52	d	1.80E-02 a,m	2.8	d	1.00E-01	3660		5.00E+02 j			1.00E+01			--
M-11	5/3/2006	43.29	43	d	1.80E-02 a,m	2.7	d	1.00E-01	2980		5.00E+02 j	<0.1	ud	1.00E+01	460	d	--
M-11	8/2/2006	43.50	31.4	d	1.80E-02 a,m	2.8	d	1.00E-01	2700		5.00E+02 j	1.3	d	1.00E+01	230	d	--
M-11	10/31/2006	43.51	33.4	d	1.80E-02 a,m	2.7	d	1.00E-01	3260		5.00E+02 j	3.86	d	1.00E+01	487	d	--
M-11	1/31/2007	43.50	30.6		1.80E-02 a,m	3		1.00E-01	3380		5.00E+02 j			1.00E+01			--
M-11	5/2/2007	43.51	25.1		1.80E-02 a,m	2.7		1.00E-01	3180		5.00E+02 j	3.01		1.00E+01	434		--
M-11	8/2/2007	43.82	33.9		1.80E-02 a,m	2.6		1.00E-01	3400		5.00E+02 j			1.00E+01			--
M-13	5/3/2006	---	27	d	1.80E-02 a,m	1.8	d	1.00E-01	2680		5.00E+02 j	<0.1	ud	1.00E+01	390	d	--
M-13	5/3/2007	---	18.6	J	1.80E-02 a,m	0.8		1.00E-01	3310	J	5.00E+02 j	5.64	d	1.00E+01	255	d	--

Explanation
1. ENSR, 2007, Quarterly Performance Report for Remediation Systems, Tronox LLC, Henderson, Nevada, July-September 2007, November 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
< = less than the reporting limit
Blank cell or --- = no data and or no qualifier
Qual = data qualifiers applied by laboratory or during data validation
TDS = Total Dissolved Solids
mg/l = milligram per liter
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.
(m) Equal to the provisional action level derived by NDEP as referenced in "Defining a Perchlorate Drinking Water Standard". NDEP Bureau of Corrective Action. URL [http://ndep.nv.gov/bca/perchlorate02_05.htm].
(j) Secondary Drinking Water Regulation value.

Laboratory Qualifiers:
d = the sample was diluted
ud = the sample was dilluted and was not detected above the sample reporting limit

Validation Qualifiers:
J = the result is an estimated quantity

LOU 60 Table 7
Soil Characterization Data - Organochlorine Pesticides (OCP)

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA3	SA3	SA4	SA5	SA6	SA6	SA7	SA8	SA13	SA13	
Sample ID		SA3-0.5	SA3-0.5D	SA4-0.5	SA5-0.5	SA6-0.5	SA6-0.5D	SA7-0.5	SA8-0.5	SA13-0.5	SA13-0.5D	
Sample Depth (ft)		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Sample Date		11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	
Organochlorine Pesticides	**MSSL[2] mg/kg**											**Unit**
4,4'-DDD	1.10E+01	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
4,4'-DDE	7.80E+00	0.0018 U	**0.0020**	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
4,4'-DDT	7.80E+00	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Aldrin	1.10E-01	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Alpha-BHC	4.00E-01	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Alpha-chlordane	1.40E+00 (y)	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Beta-BHC	1.40E+00	0.0018 U	0.0018 U	**0.0036**	**0.0035**	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Delta-BHC	--	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Dieldrin	1.20E-01	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Endosulfan I	4.10E+03 (aa)	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Endosulfan II	4.10E+03 (aa)	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Endosulfan Sulfate	4.10E+03 (aa)	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Endrin	2.10E+02	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Endrin Aldehyde	2.10E+02 (k)	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Endrin Ketone	2.10E+02 (k)	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Gamma-BHC (Lindane)	1.90E+00	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Gamma-Chlordane	1.40E+00 (y)	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Heptachlor	4.30E-01	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	R	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Heptachlor Epoxide	2.10E-01	0.0018 U	0.0018 U	0.0019 U	0.0022 U	0.0018 U	0.0020 U	0.0018 U	0.018 U	0.0020 U	0.0019 U	mg/kg
Methoxychlor	3.40E+03	0.0035 UJ	0.0035 UJ	**0.0048**	0.0043 UJ	0.0035 UJ	0.0038 UJ	0.0035 UJ	0.035 U	0.0038 U	**0.0076**	mg/kg
Tech-Chlordane	1.40E+00	0.011 U	0.011 U	0.011 U	0.013 U	0.011 U	0.012 U	0.011 U	0.11 U	0.012 U	0.011 U	mg/kg
Toxaphene	1.70E+00	0.053 U	0.053 U	0.055 U	0.065 U	0.053 U	0.058 U	0.053 U	0.53 U	0.058 U	0.055 U	mg/kg

Notes:

1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).

(y) Value for chlordane (technical) used as surrogate for alpha-chlordane and gamma-chlordane based on structural similarities.
(aa) Value for endosulfan used as surrogate for endosulfan I, endosulfan II and endosulfan sulfate based on structural similarities.
(k) Value for endrin used as surrogate for endrin aldehyde and endrin ketone due to structural similarities.

LOU 60 Table 8
Groundwater Characterization Data - Organochlorine Pesticides (OCP)

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	
	Well ID	M-11	M-11D	M-13	
	Sample ID	M-11	M-11D	M-13	
	Sample Date	12/06/2006	12/06/2006	12/01/2006	
Organochlorine Pesticides	**MCL[2] ug/l**				**Unit**
4,4'-DDD	2.80E-01	0.050 U	0.050 U	0.050 U	ug/L
4,4'-DDE	1.98E-01	0.050 U	0.050 U	0.050 U	ug/L
4,4'-DDT	1.98E-01	0.050 U	0.050 U	0.050 U	ug/L
Aldrin	4.00E-03	0.050 U	0.050 U	0.050 U	ug/L
Alpha-BHC	1.10E-02	0.050 U	0.050 U	0.050 U	ug/L
Alpha-chlordane	2.00E+00 (l)	0.050 U	0.050 U	0.050 U	ug/L
Beta-BHC	3.74E-02	0.050 U	0.050 U	0.050 U	ug/L
Delta-BHC	1.10E-02 (z)	0.050 U	0.050 U	0.050 U	ug/L
Dieldrin	4.20E-03 (z)	0.050 U	0.050 U	0.050 U	ug/L
Endosulfan I	2.19E+02 (aa)	0.050 U	0.050 U	0.050 U	ug/L
Endosulfan II	2.19E+02 (aa)	0.050 U	0.050 U	0.050 U	ug/L
Endosulfan Sulfate	2.19E+02 (aa)	0.050 U	0.050 U	0.050 U	ug/L
Endrin	2.00E+00	0.050 U	0.050 U	0.050 U	ug/L
Endrin Aldehyde	1.09E+01 (k)	0.050 U	0.050 U	0.050 U	ug/L
Endrin Ketone	1.09E+01 (k)	0.050 U	0.050 U	0.050 U	ug/L
Gamma-BHC (Lindane)	2.00E-01	0.050 U	0.050 U	0.050 U	ug/L
Gamma-Chlordane	2.00E+00 (l)	0.050 U	0.050 U	0.050 U	ug/L
Heptachlor	4.00E-01	0.050 U	0.050 U	0.050 U	ug/L
Heptachlor Epoxide	2.00E-01	0.050 U	0.050 U	0.050 U	ug/L
Methoxychlor	4.00E+01	0.10 U	0.10 U	0.10 U	ug/L
Tech-Chlordane	2.00E+00 (l)	0.50 U	0.50 U	0.50 U	ug/L
Toxaphene	3.00E+00	2.0 U	2.0 U	2.0 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(l) Value for chlordane used as surrogate for alpha-chlordane, chlordane (technical) and gamma-chlordane due to structural similarities.
(z) Value for alpha-BHC used as surrogate for delta-BHC based on structural similarities.
(aa) Value for endosulfan used as surrogate for endosulfan I, endosulfan II and endosulfan sulfate based on structural similarities.
(k) Value for endrin used as surrogate for endrin aldehyde and endrin ketone due to structural similarities.

LOU 60 Table 9
Soil Characterization Data - Organophosphorus Pesticides (OPPs)

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA3	SA3	SA4	SA5	SA6	SA6	SA7	SA8	SA13	SA13	
Sample ID		SA3-0.5	SA3-0.5D	SA4-0.5	SA5-0.5	SA6-0.5	SA6-0.5D	SA7-0.5	SA8-0.5	SA13-0.5	SA13-0.5D	
Sample Depth (ft)		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Sample Date		11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	
OPPs	**MSSL[2] mg/kg**											**Unit**
Azinphos-methyl	--	0.014 U	0.014 U	0.014 UJ	0.017 UJ	0.014 UJ	0.015 UJ	0.014 U	0.014 U	0.015 UJ	0.014 U	mg/kg
Bolstar	--	0.014 U	0.014 U	0.014 U	0.017 U	0.014 U	0.015 U	0.014 U	0.014 U	0.015 UJ	0.014 U	mg/kg
Chlorpyrifos	2.10E+03	0.021 U	0.021 U	0.022 U	0.026 U	0.021 U	0.023 U	0.021 U	0.021 U	0.023 UJ	0.022 U	mg/kg
Coumaphos	--	0.014 U	0.014 U	0.014 UJ	0.017 UJ	0.014 UJ	0.015 UJ	0.014 UJ	0.014 UJ	0.015 UJ	0.014 UJ	mg/kg
Demeton-O	--	0.042 U	0.042 U	0.043 U	0.050 U	0.041 U	0.045 U	0.041 U	0.041 U	0.045 UJ	0.043 U	mg/kg
Demeton-S	--	0.016 U	0.016 U	0.016 U	0.019 U	0.016 U	0.017 U	0.016 U	0.016 U	0.017 UJ	0.017 U	mg/kg
Diazinon	6.20E+02	0.024 U	0.023 U	0.024 U	0.028 U	0.023 U	0.026 U	0.023 U	0.023 U	0.026 UJ	0.024 U	mg/kg
Dichlorvos	6.60E+00	0.025 U	0.025 U	0.025 U	0.030 U	0.024 U	0.027 U	0.024 U	0.024 U	0.027 UJ	0.025 U	mg/kg
Dimethoate	--	0.024 U	0.023 U	0.024 U	**0.013 J**	**0.011 J**	**0.012 J**	0.023 U	0.023 U	0.026 UJ	0.024 U	mg/kg
Disulfoton	2.70E+01	0.051 U	0.051 U	0.053 U	0.062 U	0.051 U	0.056 U	0.051 U	0.050 U	0.056 UJ	0.053 U	mg/kg
EPN	--	0.014 UJ	0.014 UJ	0.014 U	0.017 U	0.014 UJ	0.015 U	0.014 U	0.014 U	0.015 UJ	0.014 U	mg/kg
Ethoprop	--	0.016 U	0.016 U	0.016 U	0.019 U	0.016 U	0.017 U	0.016 U	0.016 U	0.017 UJ	0.017 U	mg/kg
Ethyl Parathion	4.10E+03	0.019 UJ	0.019 UJ	0.020 U	0.023 U	0.019 U	0.021 U	0.019 U	0.019 U	0.021 UJ	0.020 U	mg/kg
Famphur	--	0.014 U	0.014 U	0.014 UJ	0.017 UJ	0.014 UJ	0.015 UJ	0.014 U	0.014 U	0.015 UJ	0.014 U	mg/kg
Fensulfothion	--	0.014 U	0.014 U	0.014 U	0.017 U	0.014 U	0.015 U	0.014 U	0.014 U	0.015 UJ	0.014 U	mg/kg
Fenthion	1.70E+02 (ff)	0.035 U	0.035 U	0.036 U	0.043 U	0.035 U	0.038 U	0.035 U	0.035 U	0.038 UJ	0.037 U	mg/kg
Malathion	1.40E+04	0.016 U	0.016 U	0.016 U	0.019 U	0.016 U	0.017 U	0.016 U	0.016 U	0.017 UJ	0.017 U	mg/kg
Merphos	--	0.032 U	0.032 U	0.033 U	0.039 U	0.032 U	0.035 U	0.032 U	0.032 U	0.035 UJ	0.033 U	mg/kg
Methyl parathion	1.70E+02	0.021 U	0.021 U	0.022 U	0.026 U	0.021 U	0.023 U	0.021 U	0.021 U	0.023 UJ	0.022 U	mg/kg
Mevinphos	--	0.016 U	0.016 U	0.016 U	0.019 U	0.016 U	0.017 U	0.016 U	0.016 U	0.017 UJ	0.017 U	mg/kg
Naled	1.40E+03	0.035 UJ	0.035 UJ	0.036 UJ	0.043 UJ	0.035 UJ	0.038 UJ	0.035 UJ	0.035 UJ	0.038 UJ	0.037 UJ	mg/kg
Phorate	--	0.021 U	0.021 U	0.022 U	0.026 U	0.021 U	0.023 U	0.021 U	0.021 U	0.023 UJ	0.022 U	mg/kg
Ronnel	3.40E+04	0.019 U	0.019 U	0.020 U	0.023 U	0.019 UJ	0.021 U	0.019 U	0.019 U	0.021 UJ	0.020 U	mg/kg
Stirphos	--	0.016 U	0.016 U	0.016 UJ	0.019 UJ	0.016 UJ	0.017 UJ	0.016 U	0.016 U	0.017 UJ	0.017 U	mg/kg
Sulfotep	--	0.021 U	0.021 U	0.022 U	0.026 U	0.021 U	0.023 U	0.021 U	0.021 U	0.023 UJ	0.022 U	mg/kg
Thionazin	--	0.019 U	0.019 U	0.020 U	0.023 U	0.019 U	0.021 U	0.019 U	0.019 U	0.021 UJ	0.020 U	mg/kg
Tokuthion	--	0.021 U	0.021 U	0.022 U	0.026 U	0.021 U	0.023 U	0.021 UJ	0.021 UJ	0.023 UJ	0.022 UJ	mg/kg
Trichloronate	--	0.021 U	0.021 U	0.022 U	0.026 U	0.021 U	0.023 U	0.021 U	0.021 U	0.023 UJ	0.022 U	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004).
(ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.

LOU 60 Table 10
Groundwater Characterization Data - Organophosphorus Pesticides (OPPs)

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	
	Well ID	M-11	M-11D	M-13	
	Sample ID	M-11	M-11D	M-13	
	Sample Date	12/06/2006	12/06/2006	12/01/2006	
OPPs	**MCL[2] ug/l**				**Unit**
Azinphos-methyl	--	2.5 U	2.5 U	2.5 UJ	ug/L
Bolstar	--	1.0 U	1.0 U	1.0 U	ug/L
Chlorpyrifos	1.09E+02	1.0 U	1.0 U	1.0 U	ug/L
Coumaphos	--	1.0 U	1.0 U	1.0 U	ug/L
Demeton-O	1.46E+00 (cc)	1.0 U	1.0 U	1.0 U	ug/L
Demeton-S	1.46E+00 (cc)	1.0 U	1.0 U	1.0 U	ug/L
Diazinon	3.28E+01	1.0 U	1.0 U	1.0 U	ug/L
Dichlorvos	2.32E-01	1.0 U	1.0 U	1.0 U	ug/L
Dimethoate	7.30E+00	1.0 U	1.0 U	1.0 U	ug/L
Disulfoton	1.46E+00	0.50 U	0.50 U	0.50 U	ug/L
EPN	3.65E-01	1.2 U	1.2 U	1.2 U	ug/L
Ethoprop	--	0.50 U	0.50 U	0.50 U	ug/L
Ethyl Parathion	9.12E+00 (tt)	1.0 U	1.0 U	1.0 U	ug/L
Famphur	--	1.0 U	1.0 U	1.0 U	ug/L
Fensulfothion	--	2.5 U	2.5 U	2.5 U	ug/L
Fenthion	9.10E+00 (ff)	2.5 U	2.5 U	2.5 U	ug/L
Malathion	7.30E+02	1.2 U	1.2 U	1.2 U	ug/L
Merphos	1.09E+00	5.0 U	5.0 U	5.0 U	ug/L
Methyl parathion	9.12E+00	4.0 U	4.0 U	4.0 U	ug/L
Mevinphos	--	6.2 U	6.2 U	6.2 U	ug/L
Naled	7.30E+01	1.0 U	1.0 U	1.0 UJ	ug/L
Phorate	7.30E+00	1.2 U	1.2 U	1.2 U	ug/L
Ronnel	1.82E+03	10 U	10 U	10 U	ug/L
Stirphos	--	3.5 U	3.5 U	3.5 U	ug/L
Sulfotep	1.82E+01	1.5 U	1.5 U	1.5 U	ug/L
Thionazin	--	1.0 U	1.0 U	1.0 U	ug/L
Tokuthion	--	1.6 U	1.6 U	1.6 U	ug/L
Trichloronate	--	0.50 U	0.50 U	0.50 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(cc) Value for demeton used as surrogate for demeton-o and demeton-s based on structural similarities.
(tt) Value for parathion-methyl used as surrogate for parathion-ethyl due to structural similarities.
(ff) Value for methyl parathion used as surrogate for fenthion based on structural similarities.

LOU 60 Table 11
Soil Characterization Data - PCBs

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring ID		SA3	SA3	SA3	SA3	SA3	SA3	SA4	SA4	SA4	SA4	SA4
Sample ID		SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	SA4-0.5	SA4-10	SA4-20	SA4-30	SA4-40
Sample Depth (ft)		0.5	0.5	10	20	30	40	0.5	10	20	30	40
Sample Date		11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
PCBs	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor-1016	2.40E+01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U	0.036 U	0.035 U	0.036 U	0.038 U	0.035 U
Aroclor-1221	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U	0.036 U	0.035 U	0.036 U	0.038 U	0.035 U
Aroclor-1232	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U	0.036 U	0.035 U	0.036 U	0.038 U	0.035 U
Aroclor-1242	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U	0.036 U	0.035 U	0.036 U	0.038 U	0.035 U
Aroclor-1248	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U	0.036 U	0.035 U	0.036 U	0.038 U	0.035 U
Aroclor-1254	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U	0.036 U	0.035 U	0.036 U	0.038 U	0.035 U
Aroclor-1260	8.30E-01 (i)	0.035 U	0.035 U	0.035 U	0.036 U	0.043 U	0.049 U	0.036 U	0.035 U	0.036 U	0.038 U	0.035 U

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring ID		SA5	SA5	SA5	SA5	SA5	SA6	SA6	SA6	SA6	SA6	SA6
Sample ID		SA5-0.5	SA5-10	SA5-20	SA5-30	SA5-37	SA6-0.5	SA6-0.5D	SA6-10	SA6-20	SA6-30	SA6-35
Sample Depth (ft)		0.5	10	20	30	37	0.5	0.5	10	20	30	35
Sample Date		11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
PCBs	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor-1016	2.40E+01 (i)	0.043 U	0.038 U	0.039 U	0.036 U	0.055 U	0.035 U	0.038 U	0.036 U	0.036 U	0.035 U	0.049 U
Aroclor-1221	8.30E-01 (i)	0.043 U	0.038 U	0.039 U	0.036 U	0.055 U	0.035 U	0.038 U	0.036 U	0.036 U	0.035 U	0.049 U
Aroclor-1232	8.30E-01 (i)	0.043 U	0.038 U	0.039 U	0.036 U	0.055 U	0.035 U	0.038 U	0.036 U	0.036 U	0.035 U	0.049 U
Aroclor-1242	8.30E-01 (i)	0.043 U	0.038 U	0.039 U	0.036 U	0.055 U	0.035 U	0.038 U	0.036 U	0.036 U	0.035 U	0.049 U
Aroclor-1248	8.30E-01 (i)	0.043 U	0.038 U	0.039 U	0.036 U	0.055 U	0.035 U	0.038 U	0.036 U	0.036 U	0.035 U	0.049 U
Aroclor-1254	8.30E-01 (i)	0.043 U	0.038 U	0.039 U	0.036 U	0.055 U	0.035 U	0.038 U	0.036 U	0.036 U	0.035 U	0.049 U
Aroclor-1260	8.30E-01 (i)	0.043 U	0.038 U	0.039 U	0.036 U	0.055 U	0.035 U	0.038 U	0.036 U	0.036 U	0.035 U	0.049 U

LOU 60 Table 11 (continued)
Soil Characterization Data - PCBs

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
Boring ID		SA7	SA7	SA7	SA7	SA7	SA7	SA8	SA8	SA8	SA8	SA8
Sample ID		SA7-0.5	SA7-10	SA7-10D	SA7-20	SA7-30	SA7-34	SA8-0.5	SA8-10	SA8-20	SA8-30	SA8-37
Sample Depth (ft)		0.5	10	10	20	30	34	0.5	10	20	30	37
Sample Date		11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
PCBs	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor-1016	2.40E+01 (i)	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.043 U	0.035 U	0.035 U	0.035 U	0.036 U	0.045 U
Aroclor-1221	8.30E-01 (i)	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.043 U	0.035 U	0.035 U	0.035 U	0.036 U	0.045 U
Aroclor-1232	8.30E-01 (i)	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.043 U	0.035 U	0.035 U	0.035 U	0.036 U	0.045 U
Aroclor-1242	8.30E-01 (i)	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.043 U	0.035 U	0.035 U	0.035 U	0.036 U	0.045 U
Aroclor-1248	8.30E-01 (i)	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.043 U	0.035 U	0.035 U	0.035 U	0.036 U	0.045 U
Aroclor-1254	8.30E-01 (i)	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.043 U	0.035 U	0.035 U	0.035 U	0.036 U	0.045 U
Aroclor-1260	8.30E-01 (i)	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.043 U	0.035 U	0.035 U	0.035 U	0.036 U	0.045 U

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A
Boring ID		SA13	SA13	SA13	SA13	SA13	SA13
Sample ID		SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40
Sample Depth (ft)		0.5	0.5	10	20	30	40
Sample Date		11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
PCBs	**MSSL[2] mg/kg**	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aroclor-1016	2.40E+01 (i)	0.038 U	0.037 U	0.034 U	0.035 U	0.035 U	0.042 U
Aroclor-1221	8.30E-01 (i)	0.038 U	0.037 U	0.034 U	0.035 U	0.035 U	0.042 U
Aroclor-1232	8.30E-01 (i)	0.038 U	0.037 U	0.034 U	0.035 U	0.035 U	0.042 U
Aroclor-1242	8.30E-01 (i)	0.038 U	0.037 U	0.034 U	0.035 U	0.035 U	0.042 U
Aroclor-1248	8.30E-01 (i)	0.038 U	0.037 U	0.034 U	0.035 U	0.035 U	0.042 U
Aroclor-1254	8.30E-01 (i)	0.038 U	0.037 U	0.034 U	0.035 U	0.035 U	0.042 U
Aroclor-1260	8.30E-01 (i)	0.038 U	0.037 U	0.034 U	0.035 U	0.035 U	0.042 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008)
(i) For PCBs, the individual Aroclors were compared to the TSCA action level of 10 mg/kg, for high occupancy, restricted (non-residential) use. (40 CFR Part 761; 63 FR 35383-35474, June 29, 1998).

LOU 60 Table 12
Groundwater Characterization Data - PCBs

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	
Well ID		M-11	M-11D	M-13	
Sample ID		M-11	M-11D	M-13	
Sample Date		12/06/2006	12/06/2006	12/01/2006	
PCBs	**MCL[2] ug/l**				**Unit**
Aroclor-1016	5.00E-01 (bb)	0.10 U	0.10 U	0.10 U	ug/L
Aroclor-1221	5.00E-01 (bb)	0.10 U	0.10 U	0.10 U	ug/L
Aroclor-1232	5.00E-01 (bb)	0.10 U	0.10 U	0.10 U	ug/L
Aroclor-1242	5.00E-01 (bb)	0.10 U	0.10 U	0.10 U	ug/L
Aroclor-1248	5.00E-01 (bb)	0.10 U	0.10 U	0.10 U	ug/L
Aroclor-1254	5.00E-01 (bb)	0.10 U	0.10 U	0.10 U	ug/L
Aroclor-1260	5.00E-01 (bb)	0.10 U	0.10 U	0.10 U	ug/L

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(bb) Value for total PCBs.

LOU 60 Table 13
Soil Characterization Data - Perchlorate

Acid Drain System
Tronox Facility - Henderson, Nevada

Boring ID	Sample ID	Sample Depth (ft)	Sample Date	Perchlorate ug/kg	MSSL[1] ug/kg	Sampling Program
SA3	SA3-0.5	0.5	11/13/2006	**1880**	7.95E+05	Ph A[2]
SA3	SA3-0.5D	0.5	11/13/2006	**1540**	7.95E+05	Ph A
SA3	SA3-10	10	11/13/2006	**10200**	7.95E+05	Ph A
SA3	SA3-20	20	11/13/2006	**6100**	7.95E+05	Ph A
SA3	SA3-30	30	11/13/2006	**974**	7.95E+05	Ph A
SA3	SA3-40	40	11/13/2006	**86.7**	7.95E+05	Ph A
SA4	SA4-0.5	0.5	11/14/2006	**3140**	7.95E+05	Ph A
SA4	SA4-10	10	11/14/2006	**496**	7.95E+05	Ph A
SA4	SA4-20	20	11/14/2006	**3800**	7.95E+05	Ph A
SA4	SA4-30	30	11/14/2006	**42800**	7.95E+05	Ph A
SA4	SA4-40	40	11/14/2006	**73900**	7.95E+05	Ph A
SA5	SA5-0.5	0.5	11/14/2006	**14900**	7.95E+05	Ph A
SA5	SA5-10	10	11/14/2006	**112000**	7.95E+05	Ph A
SA5	SA5-20	20	11/14/2006	**66400**	7.95E+05	Ph A
SA5	SA5-30	30	11/14/2006	**19100**	7.95E+05	Ph A
SA5	SA5-37	37	11/14/2006	**375000**	7.95E+05	Ph A
SA6	SA6-0.5	0.5	11/14/2006	**239**	7.95E+05	Ph A
SA6	SA6-0.5D	0.5	11/14/2006	**426**	7.95E+05	Ph A
SA6	SA6-10	10	11/14/2006	**2320**	7.95E+05	Ph A
SA6	SA6-20	20	11/14/2006	**3020**	7.95E+05	Ph A
SA6	SA6-30	30	11/14/2006	**5340**	7.95E+05	Ph A
SA6	SA6-35	35	11/14/2006	**54100**	7.95E+05	Ph A
SA7	SA7-0.5	0.5	11/20/2006	**34300 J**	7.95E+05	Ph A
SA7	SA7-10	10	11/20/2006	**109000 J**	7.95E+05	Ph A
SA7	SA7-10D	10	11/20/2006	**113000 J**	7.95E+05	Ph A
SA7	SA7-20	20	11/20/2006	**12800 J**	7.95E+05	Ph A
SA7	SA7-30	30	11/20/2006	**8690 J**	7.95E+05	Ph A
SA7	SA7-34	34	11/20/2006	**31700 J**	7.95E+05	Ph A
SA8	SA8-0.5	0.5	11/17/2006	**17500**	7.95E+05	Ph A
SA8	SA8-10	10	11/17/2006	**1500**	7.95E+05	Ph A
SA8	SA8-20	20	11/17/2006	**3300**	7.95E+05	Ph A
SA8	SA8-30	30	11/17/2006	**2690**	7.95E+05	Ph A
SA8	SA8-37	37	11/17/2006	**12100**	7.95E+05	Ph A
SA13	SA13-0.5	0.5	11/17/2006	**192**	7.95E+05	Ph A
SA13	SA13-0.5D	0.5	11/17/2006	**120**	7.95E+05	Ph A
SA13	SA13-10	10	11/17/2006	**195**	7.95E+05	Ph A
SA13	SA13-20	20	11/17/2006	**184**	7.95E+05	Ph A
SA13	SA13-30	30	11/17/2006	**220**	7.95E+05	Ph A
SA13	SA13-40	40	11/17/2006	**1490**	7.95E+05	Ph A

Notes:
1. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

LOU 60 Table 14
Groundwater Characterization Data - Perchlorate

Acid Drain System
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate	Units	MCL[1] ug/l	Sampling Program
M-11	M11	12/06/2006	**32500 J+**	ug/L	1.80E+01 a,(m)	Ph A[2]
M-11D	M11D	12/06/2006	**32400 J+**	ug/L	1.80E+01 a,(m)	Ph A
M-13	M13	12/01/2006	**25300**	ug/L	1.80E+01 a,(m)	Ph A

Notes:
1. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.
(m) Equal to the provisional action level derived by NDEP as referenced in "Defining a Perchlorate Drinking Water Standard". NDEP Bureau of Corrective Action. URL [http://ndep.nv.gov/bca/perchlorate02_05.htm].

LOU 60 Table 15
Soil Characterization Data - Radionuclides

Acid Drain System
Tronox Facility - Henderson, Nevada

				Ra-226	Ra-228	Th-228	Th-230	Th-232	U-233/234	U-235/236	U-238	
				(gamma)	(gamma)	(TH MOD)	(TH MOD)	(TH MOD)	(U MOD)	(U MOD)	(U MOD)	
				pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	
Boring ID Number	**Sample ID**	**Sample Depth (ft)**	**Date**									**Sampling Program**
SA3	SA3-0.5	0.5	11/13/2006	**0.997 J**	**1.81**							Ph A[1]
SA3	SA3-0.5D	0.5	11/13/2006	**1.13 J**	2.21 U							Ph A
SA3	SA3-10	10	11/13/2006	**1.01 J**	**1.65**	**0.691 J**	**0.554 J**	**0.601 J**	**0.427 J-**	0.0123 UJ	**0.292 J-**	Ph A
SA3	SA3-20	20	11/13/2006	**1.19 J**	**1.66**							Ph A
SA3	SA3-30	30	11/13/2006	**1.59 J**	0.357 U							Ph A
SA3	SA3-40	40	11/13/2006	**2.34**	0.913 U							Ph A
SA4	SA4-0.5	0.5	11/14/2006	**1.1 J**	**1.83**							Ph A
SA4	SA4-10	10	11/14/2006	**1.13 J**	**1.81**							Ph A
SA4	SA4-20	20	11/14/2006	**1.19 J**	**1.53**	**0.511 JB**	**0.875 J**	**0.706 J**	**1.35**	**0.0181 J**	**0.833**	Ph A
SA4	SA4-30	30	11/14/2006	**1.45 J**	**1.91**							Ph A
SA4	SA4-40	40	11/14/2006	**1.6 J**	**1.9**							Ph A
SA5	SA5-0.5	0.5	11/14/2006	**1.12 J**	**1.92**							Ph A
SA5	SA5-10	10	11/14/2006	**1.07 J**	**1.66**							Ph A
SA5	SA5-20	20	11/14/2006	**1.1 J**	**1.52**							Ph A
SA5	SA5-30	30	11/14/2006	**2.29**	**1.68**	**0.481 JB**	**2.23**	**0.59 J**	**1.58**	**0.0469 J**	**1.37**	Ph A
SA5	SA5-37	37	11/14/2006	**2.46**	**0.806 J**							Ph A
SA6	SA6-0.5	0.5	11/14/2006	**1.18 J**	**1.87**							Ph A
SA6	SA6-0.5D	0.5	11/14/2006	**1.32 J**	**1.89**							Ph A
SA6	SA6-10	10	11/14/2006	**1.07 J**	**1.8**	**0.601 J**	**0.619 JB**	**0.668 J**	**0.787**	**0.0165 J**	**0.483 J**	Ph A
SA6	SA6-20	20	11/14/2006	**1.21 J**	**1.63**							Ph A
SA6	SA6-30	30	11/14/2006	**1.49 J**	**1.94**							Ph A
SA6	SA6-35	35	11/14/2006	**2.1**	1.1 U							Ph A
SA7	SA7-0.5	0.5	11/20/2006	**1.12 J-**	**1.83 J-**							Ph A
SA7	SA7-10	10	11/20/2006	**1.02 J-**	**1.9 J-**							Ph A
SA7	SA7-10D	10	11/20/2006	**0.939 J-**	**1.77 J-**							Ph A
SA7	SA7-20	20	11/20/2006	**1.28 J-**	**1.57 J-**	**0.488 J**	**0.775 J**	**0.618 J**	**0.652 J+**	0.0145 U	**0.493 J**	Ph A
SA7	SA7-30	30	11/20/2006	**1.79 J-**	**1.78 J-**							Ph A
SA7	SA7-34	34	11/20/2006	**7.49 J-**	**0.805 J-**							Ph A

LOU 60 Table 15 (continued)
Soil Characterization Data - Radionuclides

Acid Drain System
Tronox Facility - Henderson, Nevada

				Ra-226	Ra-228	Th-228	Th-230	Th-232	U-233/234	U-235/236	U-238	
				(gamma)	(gamma)	(TH MOD)	(TH MOD)	(TH MOD)	(U MOD)	(U MOD)	(U MOD)	
				pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	pCi/g	
Boring ID Number	**Sample ID**	**Sample Depth (ft)**	**Date**									**Sampling Program**
SA8	SA8-0.5	0.5	11/17/2006	**1.07 J-**	**1.76 J-**							Ph A
SA8	SA8-10	10	11/17/2006	**1.08 J-**	2.05 UJ							Ph A
SA8	SA8-20	20	11/17/2006	**1 J-**	**1.88 J-**							Ph A
SA8	SA8-30	30	11/17/2006	**1.34 J-**	**1.85 J-**							Ph A
SA8	SA8-37	37	11/17/2006	**3.16 J-**	0.771 UJ							Ph A
SA13	SA13-0.5	0.5	11/17/2006	**1.12 J-**	**1.68 J-**							Ph A
SA13	SA13-0.5D	0.5	11/17/2006	**1.06 J-**	**1.87 J-**							Ph A
SA13	SA13-10	10	11/17/2006	**1.14 J-**	**2.05 J-**							Ph A
SA13	SA13-20	20	11/17/2006	**1.27 J-**	**1.78 J-**							Ph A
SA13	SA13-30	30	11/17/2006	**1.73 J-**	**1.88 J-**							Ph A
SA13	SA13-40	40	11/17/2006	**1.79 J-**	**1.61 J-**	**0.659 J**	**0.922 J**	**0.539 J**	**1.05 J+**	0.0274 U	**0.813**	Ph A

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

LOU 60 Table 16
Groundwater Characterization Data - Radionuclides

Acid Drain System
Tronox Facility - Henderson, Nevada

			Ra-226	Ra-228	Th-228	Th-230	Th-232	U-233/234	U-235/236	U-238	
			pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L	
Well ID Number	**Sample ID**	**Date**									**Sampling Program**
M11	M11-Z	05/11/2007	0.332 U	**1.23 B**							Ph A[1]
M13	M13-Z	05/09/2007	0.0728 U	0.152 UJ							Ph A

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

LOU 60 Table 17
Soil Characterization Data - SVOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
		Boring No.	SA3	SA3	SA3	SA3	SA3	SA3	SA4	SA4	SA4	SA4	SA4
		Sample ID	SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	SA4-0.5	SA4-10	SA4-20	SA4-30	SA4-40
		Sample Depth (ft)	0.5	0.5	10	20	30	40	0.5	10	20	30	40
		Sample Date	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
SVOC	**Analytical Method**	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.70E+05	71 U	70 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
2-Methylnaphthalene	non-SIM	2.10E+05 (jj)	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
2-Methylnaphthalene	SIM	2.10E+05 (jj)	7.1 U	7.0 U					7.3 U				
Acenaphthene	non-SIM	3.30E+07	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Acenaphthene	SIM	3.30E+07	7.1 U	7.0 U					7.3 U				
Acenaphthylene	non-SIM	3.30E+07 (pp)	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Acenaphthylene	SIM	3.30E+07 (pp)	7.1 U	7.0 U					7.3 U				
Anthracene	non-SIM	1.00E+08	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Anthracene	SIM	1.00E+08	7.1 U	7.0 U					7.3 U				
Benz(a)anthracene	non-SIM	2.30E+03	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Benz(a)anthracene	SIM	2.30E+03	7.1 U	7.0 U					7.3 U				
Benzo(a)pyrene	non-SIM	2.30E+02	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Benzo(a)pyrene	SIM	2.30E+02	7.1 U	7.0 U					7.3 U				
Benzo(b)fluoranthene	non-SIM	2.30E+03	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Benzo(b)fluoranthene	SIM	2.30E+03	7.1 U	7.0 U					7.3 U				
Benzo(g,h,i)perylene	non-SIM	3.20E+07 (w)	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Benzo(g,h,i)perylene	SIM	3.20E+07 (w)	7.1 U	7.0 U					7.3 U				
Benzo(k)fluoranthene	non-SIM	2.30E+04	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Benzo(k)fluoranthene	SIM	2.30E+04	7.1 U	7.0 U					7.3 U				
bis(2-Ethylhexyl)phthalate	non-SIM	1.40E+05	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Butyl benzyl phthalate	non-SIM	2.40E+05	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Chrysene	non-SIM	2.30E+05	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Chrysene	SIM	2.30E+05	7.1 U	7.0 U					7.3 U				
Dibenz(a,h)anthracene	non-SIM	2.30E+02	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Dibenz(a,h)anthracene	SIM	2.30E+02	7.1 U	7.0 U					7.3 U				
Diethyl phthalate	non-SIM	1.00E+08	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Dimethyl phthalate	non-SIM	1.00E+08	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Di-N-Butyl phthalate	non-SIM	6.80E+07	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Di-N-Octyl phthalate	non-SIM	--	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Fluoranthene	non-SIM	2.40E+07	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Fluoranthene	SIM	2.40E+07	7.1 U	7.0 U					7.3 U				
Fluorene	non-SIM	2.60E+07	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Fluorene	SIM	2.60E+07	7.1 U	7.0 U					7.3 U				
Hexachlorobenzene	non-SIM	1.20E+03	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Hexachlorobenzene	SIM	1.20E+03	7.1 U	**10**					**8.8**				
Indeno(1,2,3-cd)pyrene	non-SIM	2.30E+03	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Indeno(1,2,3-cd)pyrene	SIM	2.30E+03	7.1 U	7.0 U					7.3 U				
Naphthalene	non-SIM	2.10E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Naphthalene	non-SIM	2.10E+05	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Naphthalene	SIM	2.10E+05	7.1 U	7.0 U					7.3 U				
Nitrobenzene	non-SIM	1.10E+05	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Octachlorostyrene	non-SIM	--	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Phenanthrene	non-SIM	1.00E+08 (n)	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Phenanthrene	SIM	1.00E+08 (n)	7.1 U	7.0 U					7.3 U				
Pyrene	non-SIM	3.20E+07	350 U	350 U	350 U	360 U	430 U	490 U	360 U	350 U	360 U	380 U	350 U
Pyrene	SIM	3.20E+07	**7.0 J**	7.0 U					7.3 U				
Pyridine	non-SIM	6.80E+05	1700 U	1700 U	1700 U	1800 U	2100 U	2400 U	1800 U	1700 U	1700 U	1800 U	1700 U

LOU 60 Table 17 (continued)
Soil Characterization Data - SVOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
		Boring No.	SA5	SA5	SA5	SA5	SA5	SA6	SA6	SA6	SA6	SA6	SA6
		Sample ID	SA5-0.5	SA5-10	SA5-20	SA5-30	SA5-37	SA6-0.5	SA6-0.5D	SA6-10	SA6-20	SA6-30	SA6-35
		Sample Depth (ft)	0.5	10	20	30	37	0.5	0.5	10	20	30	35
		Sample Date	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
SVOC	**Analytical Method**	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.70E+05	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
2-Methylnaphthalene	non-SIM	2.10E+05 (jj)	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
2-Methylnaphthalene	SIM	2.10E+05 (jj)	8.5 U					7.0 U	7.7 U				
Acenaphthene	non-SIM	3.30E+07	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Acenaphthene	SIM	3.30E+07	8.5 U					7.0 U	7.7 U				
Acenaphthylene	non-SIM	3.30E+07 (pp)	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Acenaphthylene	SIM	3.30E+07 (pp)	8.5 U					7.0 U	7.7 U				
Anthracene	non-SIM	1.00E+08	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Anthracene	SIM	1.00E+08	8.5 U					7.0 U	7.7 U				
Benz(a)anthracene	non-SIM	2.30E+03	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Benz(a)anthracene	SIM	2.30E+03	8.5 U					7.0 U	7.7 U				
Benzo(a)pyrene	non-SIM	2.30E+02	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Benzo(a)pyrene	SIM	2.30E+02	8.5 U					7.0 U	7.7 U				
Benzo(b)fluoranthene	non-SIM	2.30E+03	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Benzo(b)fluoranthene	SIM	2.30E+03	8.5 U					7.0 U	7.7 U				
Benzo(g,h,i)perylene	non-SIM	3.20E+07 (w)	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Benzo(g,h,i)perylene	SIM	3.20E+07 (w)	8.5 U					7.0 U	7.7 U				
Benzo(k)fluoranthene	non-SIM	2.30E+04	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Benzo(k)fluoranthene	SIM	2.30E+04	8.5 U					7.0 U	7.7 U				
bis(2-Ethylhexyl)phthalate	non-SIM	1.40E+05	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Butyl benzyl phthalate	non-SIM	2.40E+05	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Chrysene	non-SIM	2.30E+05	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Chrysene	SIM	2.30E+05	8.5 U					7.0 U	7.7 U				
Dibenz(a,h)anthracene	non-SIM	2.30E+02	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Dibenz(a,h)anthracene	SIM	2.30E+02	8.5 U					7.0 U	7.7 U				
Diethyl phthalate	non-SIM	1.00E+08	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Dimethyl phthalate	non-SIM	1.00E+08	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Di-N-Butyl phthalate	non-SIM	6.80E+07	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Di-N-Octyl phthalate	non-SIM	--	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Fluoranthene	non-SIM	2.40E+07	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Fluoranthene	SIM	2.40E+07	8.5 U					7.0 U	7.7 U				
Fluorene	non-SIM	2.60E+07	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Fluorene	SIM	2.60E+07	8.5 U					7.0 U	7.7 U				
Hexachlorobenzene	non-SIM	1.20E+03	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Hexachlorobenzene	SIM	1.20E+03	**21**					7.0 U	7.7 U				
Indeno(1,2,3-cd)pyrene	non-SIM	2.30E+03	430 U	380 U	390 U	360 U	550 U	350 UJ	380 UJ	360 U	360 U	350 U	490 U
Indeno(1,2,3-cd)pyrene	SIM	2.30E+03	8.5 U					7.0 U	7.7 U				
Naphthalene	non-SIM	2.10E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Naphthalene	non-SIM	2.10E+05	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Naphthalene	SIM	2.10E+05	8.5 U					7.0 U	7.7 U				
Nitrobenzene	non-SIM	1.10E+05	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Octachlorostyrene	non-SIM	--	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Phenanthrene	non-SIM	1.00E+08 (n)	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Phenanthrene	SIM	1.00E+08 (n)	8.5 U					7.0 U	7.7 U				
Pyrene	non-SIM	3.20E+07	430 U	380 U	390 U	360 U	550 U	350 U	380 U	360 U	360 U	350 U	490 U
Pyrene	SIM	3.20E+07	8.5 U					7.0 U	7.7 U				
Pyridine	non-SIM	6.80E+05	2100 U	1900 U	1900 U	1700 U	2700 U	1700 U	1900 U	1700 U	1700 U	1700 U	2400 U

LOU 60 Table 17 (continued)
Soil Characterization Data - SVOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
		Boring No.	SA7	SA7	SA7	SA7	SA7	SA7	SA8	SA8	SA8	SA8	SA8
		Sample ID	SA7-0.5	SA7-10	SA7-10D	SA7-20	SA7-30	SA7-34	SA8-0.5	SA8-10	SA8-20	SA8-30	SA8-37
		Sample Depth (ft)	0.5	10	10	20	30	34	0.5	10	20	30	37
		Sample Date	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
SVOC	**Analytical Method**	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.70E+05	70 U	350 U	360 U	360 U	350 U	430 U	69 U	350 U	350 U	360 U	450 U
2-Methylnaphthalene	non-SIM	2.10E+05 (jj)	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
2-Methylnaphthalene	SIM	2.10E+05 (jj)	7.0 U						6.9 U				
Acenaphthene	non-SIM	3.30E+07	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Acenaphthene	SIM	3.30E+07	7.0 U						6.9 U				
Acenaphthylene	non-SIM	3.30E+07 (pp)	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Acenaphthylene	SIM	3.30E+07 (pp)	7.0 U						6.9 U				
Anthracene	non-SIM	1.00E+08	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Anthracene	SIM	1.00E+08	7.0 U						6.9 U				
Benz(a)anthracene	non-SIM	2.30E+03	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Benz(a)anthracene	SIM	2.30E+03	7.0 U						6.9 U				
Benzo(a)pyrene	non-SIM	2.30E+02	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Benzo(a)pyrene	SIM	2.30E+02	7.0 U						6.9 U				
Benzo(b)fluoranthene	non-SIM	2.30E+03	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Benzo(b)fluoranthene	SIM	2.30E+03	7.0 U						6.9 U				
Benzo(g,h,i)perylene	non-SIM	3.20E+07 (w)	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Benzo(g,h,i)perylene	SIM	3.20E+07 (w)	7.0 U						6.9 U				
Benzo(k)fluoranthene	non-SIM	2.30E+04	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Benzo(k)fluoranthene	SIM	2.30E+04	7.0 U						6.9 U				
bis(2-Ethylhexyl)phthalate	non-SIM	1.40E+05	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Butyl benzyl phthalate	non-SIM	2.40E+05	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Chrysene	non-SIM	2.30E+05	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Chrysene	SIM	2.30E+05	7.0 U						**7.0**				
Dibenz(a,h)anthracene	non-SIM	2.30E+02	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Dibenz(a,h)anthracene	SIM	2.30E+02	7.0 U						6.9 U				
Diethyl phthalate	non-SIM	1.00E+08	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Dimethyl phthalate	non-SIM	1.00E+08	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Di-N-Butyl phthalate	non-SIM	6.80E+07	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Di-N-Octyl phthalate	non-SIM	--	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Fluoranthene	non-SIM	2.40E+07	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Fluoranthene	SIM	2.40E+07	7.0 U						**27**				
Fluorene	non-SIM	2.60E+07	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Fluorene	SIM	2.60E+07	7.0 U						6.9 U				
Hexachlorobenzene	non-SIM	1.20E+03	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Hexachlorobenzene	SIM	1.20E+03	7.0 U						6.9 U				
Indeno(1,2,3-cd)pyrene	non-SIM	2.30E+03	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 UJ	350 UJ	360 UJ	450 UJ
Indeno(1,2,3-cd)pyrene	SIM	2.30E+03	7.0 U						6.9 U				
Naphthalene	non-SIM	2.10E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	**0.79 J**	5.3 U	5.2 U	5.5 U	6.8 U
Naphthalene	non-SIM	2.10E+05	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Naphthalene	SIM	2.10E+05	7.0 U						6.9 U				
Nitrobenzene	non-SIM	1.10E+05	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Octachlorostyrene	non-SIM	--	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Phenanthrene	non-SIM	1.00E+08 (n)	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Phenanthrene	SIM	1.00E+08 (n)	7.0 U						6.9 U				
Pyrene	non-SIM	3.20E+07	350 U	350 U	360 U	360 U	350 U	430 U	350 U	350 U	350 U	360 U	450 U
Pyrene	SIM	3.20E+07	7.0 U						**12**				
Pyridine	non-SIM	6.80E+05	1700 U	1700 U	1700 U	1700 U	1700 U	2100 U	1700 U	1700 U	1700 U	1700 U	2200 U

LOU 60 Table 17 (continued)
Soil Characterization Data - SVOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A
		Boring No.	SA13	SA13	SA13	SA13	SA13	SA13
		Sample ID	SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40
		Sample Depth (ft)	0.5	0.5	10	20	30	40
		Sample Date	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
SVOC	**Analytical Method**	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.70E+05	77 U	73 U	340 U	350 U	350 U	420 U
2-Methylnaphthalene	non-SIM	2.10E+05 (jj)	380 U	370 U	340 U	350 U	350 U	420 U
2-Methylnaphthalene	SIM	2.10E+05 (jj)	7.7 U	7.3 U				
Acenaphthene	non-SIM	3.30E+07	380 U	370 U	340 U	350 U	350 U	420 U
Acenaphthene	SIM	3.30E+07	7.7 U	7.3 U				
Acenaphthylene	non-SIM	3.30E+07 (pp)	380 U	370 U	340 U	350 U	350 U	420 U
Acenaphthylene	SIM	3.30E+07 (pp)	7.7 U	7.3 U				
Anthracene	non-SIM	1.00E+08	380 U	370 U	340 U	350 U	350 U	420 U
Anthracene	SIM	1.00E+08	7.7 U	7.3 U				
Benz(a)anthracene	non-SIM	2.30E+03	380 U	370 U	340 U	350 U	350 U	420 U
Benz(a)anthracene	SIM	2.30E+03	7.7 U	7.3 U				
Benzo(a)pyrene	non-SIM	2.30E+02	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(a)pyrene	SIM	2.30E+02	7.7 U	7.3 U				
Benzo(b)fluoranthene	non-SIM	2.30E+03	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(b)fluoranthene	SIM	2.30E+03	7.7 U	7.3 U				
Benzo(g,h,i)perylene	non-SIM	3.20E+07 (w)	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(g,h,i)perylene	SIM	3.20E+07 (w)	7.7 U	7.3 U				
Benzo(k)fluoranthene	non-SIM	2.30E+04	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(k)fluoranthene	SIM	2.30E+04	7.7 U	7.3 U				
bis(2-Ethylhexyl)phthalate	non-SIM	1.40E+05	380 U	370 U	340 U	350 U	350 U	420 U
Butyl benzyl phthalate	non-SIM	2.40E+05	380 U	370 U	340 U	350 U	350 U	420 U
Chrysene	non-SIM	2.30E+05	380 U	370 U	340 U	350 U	350 U	420 U
Chrysene	SIM	2.30E+05	7.7 U	7.3 U				
Dibenz(a,h)anthracene	non-SIM	2.30E+02	380 U	370 U	340 U	350 U	350 U	420 U
Dibenz(a,h)anthracene	SIM	2.30E+02	7.7 U	7.3 U				
Diethyl phthalate	non-SIM	1.00E+08	380 U	370 U	340 U	350 U	350 U	420 U
Dimethyl phthalate	non-SIM	1.00E+08	380 U	370 U	340 U	350 U	350 U	420 U
Di-N-Butyl phthalate	non-SIM	6.80E+07	380 U	370 U	340 U	350 U	350 U	420 U
Di-N-Octyl phthalate	non-SIM	--	380 U	370 U	340 U	350 U	350 U	420 U
Fluoranthene	non-SIM	2.40E+07	380 U	370 U	340 U	350 U	350 U	420 U
Fluoranthene	SIM	2.40E+07	7.7 U	7.3 U				
Fluorene	non-SIM	2.60E+07	380 U	370 U	340 U	350 U	350 U	420 U
Fluorene	SIM	2.60E+07	7.7 U	7.3 U				
Hexachlorobenzene	non-SIM	1.20E+03	380 U	370 U	340 U	350 U	350 U	420 U
Hexachlorobenzene	SIM	1.20E+03	7.7 U	7.3 U				
Indeno(1,2,3-cd)pyrene	non-SIM	2.30E+03	380 UJ	370 UJ	340 UJ	350 UJ	350 UJ	420 UJ
Indeno(1,2,3-cd)pyrene	SIM	2.30E+03	7.7 U	7.3 U				
Naphthalene	non-SIM	2.10E+05	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Naphthalene	non-SIM	2.10E+05	380 U	370 U	340 U	350 U	350 U	420 U
Naphthalene	SIM	2.10E+05	7.7 U	7.3 U				
Nitrobenzene	non-SIM	1.10E+05	380 U	370 U	340 U	350 U	350 U	420 U
Octachlorostyrene	non-SIM	--	380 U	370 U	340 U	350 U	350 U	420 U
Phenanthrene	non-SIM	1.00E+08 (n)	380 U	370 U	340 U	350 U	350 U	420 U
Phenanthrene	SIM	1.00E+08 (n)	7.7 U	7.3 U				
Pyrene	non-SIM	3.20E+07	380 U	370 U	340 U	350 U	350 U	420 U
Pyrene	SIM	3.20E+07	7.7 U	7.3 U				
Pyridine	non-SIM	6.80E+05	1900 U	1800 U	1700 U	1700 U	1700 U	2000 U

LOU 60 Table 17 (continued)
Soil Characterization Data - SVOC

Acid Drain System
Tronox Facility - Henderson, Nevada

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(jj) Value for naphthalene used as surrogate for 2-methylnaphthalene based on structural similarities.
(pp) Value for acenaphthene used as surrogate for acenapthylene based on structural similarities.
(w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.
(n) Value for anthracene used as surrogate for phenanthrene due to structural similarities.

LOU 60 Table 17 (continued)
Soil Characterization Data - SVOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A
		Boring No.	SA13	SA13	SA13	SA13	SA13	SA13
		Sample ID	SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40
		Sample Depth (ft)	0.5	0.5	10	20	30	40
		Sample Date	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
SVOC	**Analytical Method**	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
1,4-Dioxane	non-SIM	1.70E-01	77 U	73 U	340 U	350 U	350 U	420 U
2-Methylnaphthalene	non-SIM	2.10E-01 (jj)	380 U	370 U	340 U	350 U	350 U	420 U
2-Methylnaphthalene	SIM	2.10E-01 (jj)	7.7 U	7.3 U				
Acenaphthene	non-SIM	3.30E+01	380 U	370 U	340 U	350 U	350 U	420 U
Acenaphthene	SIM	3.30E+01	7.7 U	7.3 U				
Acenaphthylene	non-SIM	3.30E+01 (pp)	380 U	370 U	340 U	350 U	350 U	420 U
Acenaphthylene	SIM	3.30E+01 (pp)	7.7 U	7.3 U				
Anthracene	non-SIM	1.00E+02	380 U	370 U	340 U	350 U	350 U	420 U
Anthracene	SIM	1.00E+02	7.7 U	7.3 U				
Benz(a)anthracene	non-SIM	2.30E-03	380 U	370 U	340 U	350 U	350 U	420 U
Benz(a)anthracene	SIM	2.30E-03	7.7 U	7.3 U				
Benzo(a)pyrene	non-SIM	2.30E-04	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(a)pyrene	SIM	2.30E-04	7.7 U	7.3 U				
Benzo(b)fluoranthene	non-SIM	2.30E-03	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(b)fluoranthene	SIM	2.30E-03	7.7 U	7.3 U				
Benzo(g,h,i)perylene	non-SIM	3.20E+01 (w)	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(g,h,i)perylene	SIM	3.20E+01 (w)	7.7 U	7.3 U				
Benzo(k)fluoranthene	non-SIM	2.30E-02	380 U	370 U	340 U	350 U	350 U	420 U
Benzo(k)fluoranthene	SIM	2.30E-02	7.7 U	7.3 U				
bis(2-Ethylhexyl)phthalate	non-SIM	1.40E-01	380 U	370 U	340 U	350 U	350 U	420 U
Butyl benzyl phthalate	non-SIM	2.40E-01	380 U	370 U	340 U	350 U	350 U	420 U
Chrysene	non-SIM	2.30E-01	380 U	370 U	340 U	350 U	350 U	420 U
Chrysene	SIM	2.30E-01	7.7 U	7.3 U				
Dibenz(a,h)anthracene	non-SIM	2.30E-04	380 U	370 U	340 U	350 U	350 U	420 U
Dibenz(a,h)anthracene	SIM	2.30E-04	7.7 U	7.3 U				
Diethyl phthalate	non-SIM	1.00E+02	380 U	370 U	340 U	350 U	350 U	420 U
Dimethyl phthalate	non-SIM	1.00E+02	380 U	370 U	340 U	350 U	350 U	420 U
Di-N-Butyl phthalate	non-SIM	6.80E+01	380 U	370 U	340 U	350 U	350 U	420 U
Di-N-Octyl phthalate	non-SIM	--	380 U	370 U	340 U	350 U	350 U	420 U
Fluoranthene	non-SIM	2.40E+01	380 U	370 U	340 U	350 U	350 U	420 U
Fluoranthene	SIM	2.40E+01	7.7 U	7.3 U				
Fluorene	non-SIM	2.60E+01	380 U	370 U	340 U	350 U	350 U	420 U
Fluorene	SIM	2.60E+01	7.7 U	7.3 U				
Hexachlorobenzene	non-SIM	1.20E-03	380 U	370 U	340 U	350 U	350 U	420 U
Hexachlorobenzene	SIM	1.20E-03	7.7 U	7.3 U				
Indeno(1,2,3-cd)pyrene	non-SIM	2.30E-03	380 UJ	370 UJ	340 UJ	350 UJ	350 UJ	420 UJ
Indeno(1,2,3-cd)pyrene	SIM	2.30E-03	7.7 U	7.3 U				
Naphthalene	non-SIM	2.10E-01	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Naphthalene	non-SIM	2.10E-01	380 U	370 U	340 U	350 U	350 U	420 U
Naphthalene	SIM	2.10E-01	7.7 U	7.3 U				
Nitrobenzene	non-SIM	1.10E-01	380 U	370 U	340 U	350 U	350 U	420 U
Octachlorostyrene	non-SIM	--	380 U	370 U	340 U	350 U	350 U	420 U
Phenanthrene	non-SIM	1.00E+02 (n)	380 U	370 U	340 U	350 U	350 U	420 U
Phenanthrene	SIM	1.00E+02 (n)	7.7 U	7.3 U				
Pyrene	non-SIM	3.20E+01	380 U	370 U	340 U	350 U	350 U	420 U
Pyrene	SIM	3.20E+01	7.7 U	7.3 U				
Pyridine	non-SIM	6.80E-01	1900 U	1800 U	1700 U	1700 U	1700 U	2000 U

LOU 60 Table 18
Groundwater Characterization Data - SVOC

Acid Drain System
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A
		Well No.	M-11	M-11D	M-13
		Sample ID	M-11	M-11D	M-13
		Sample Date	12/06/2006	12/06/2006	12/01/2006
SVOCs	**Analytical Method**	**MCL[2] ug/l**	ug/L	ug/L	ug/L
1,4-Dioxane	non-SIM	6.11E+00	10 U	10 U	**9.9**
2-Methylnaphthalene	non-SIM	6.20E+00 (jj)	10 U	10 U	10 U
2-Methylnaphthalene	SIM	6.20E+00 (jj)			0.20 U
Acenaphthene	non-SIM	3.65E+02	10 U	10 U	10 U
Acenaphthene	SIM	3.65E+02			0.20 U
Acenaphthylene	non-SIM	3.65E+02 (pp)	10 U	10 U	10 U
Acenaphthylene	SIM	3.65E+02 (pp)			0.20 U
Anthracene	non-SIM	1.83E+03	10 U	10 U	10 U
Anthracene	SIM	1.83E+03			0.20 U
Benz(a)anthracene	non-SIM	9.21E-02	10 U	10 U	10 U
Benz(a)anthracene	SIM	9.21E-02			0.20 U
Benzo(a)pyrene	non-SIM	2.00E-01	10 U	10 U	10 U
Benzo(a)pyrene	SIM	2.00E-01			0.20 U
Benzo(b)fluoranthene	non-SIM	9.21E-02	10 U	10 U	10 U
Benzo(b)fluoranthene	SIM	9.21E-02			0.20 U
Benzo(g,h,i)perylene	non-SIM	1.83E+02 (w)	10 U	10 U	10 U
Benzo(g,h,i)perylene	SIM	1.83E+02 (w)			0.20 U
Benzo(k)fluoranthene	non-SIM	9.21E-01	10 U	10 U	10 U
Benzo(k)fluoranthene	SIM	9.21E-01			0.20 U
bis(2-Ethylhexyl)phthalate	non-SIM	6.00E+00	10 U	10 U	10 U
Butyl benzyl phthalate	non-SIM	7.30E+03	10 U	10 U	10 U
Chrysene	non-SIM	9.21E+00	10 U	10 U	10 U
Chrysene	SIM	9.21E+00			0.20 U
Dibenz(a,h)anthracene	non-SIM	9.21E-03	10 U	10 U	10 U
Dibenz(a,h)anthracene	SIM	9.21E-03			0.20 U
Diethyl phthalate	non-SIM	2.92E+04	10 U	10 U	10 U
Dimethyl phthalate	non-SIM	3.65E+05	10 U	10 U	10 U
Di-N-Butyl phthalate	non-SIM	3.65E+03	10 U	10 U	10 U
Di-N-Octyl phthalate	non-SIM	1.46E+03	10 U	10 U	10 U
Fluoranthene	non-SIM	1.46E+03	10 U	10 U	10 U
Fluoranthene	SIM	1.46E+03			0.20 U
Fluorene	non-SIM	2.43E+02	10 U	10 U	10 U
Fluorene	SIM	2.43E+02			0.20 U
Hexachlorobenzene	non-SIM	1.00E+00	10 U	10 U	10 U
Hexachlorobenzene	SIM	1.00E+00			0.20 U
Indeno(1,2,3-cd)pyrene	non-SIM	9.21E-02	10 UJ	10 UJ	10 U
Indeno(1,2,3-cd)pyrene	SIM	9.21E-02			0.20 U
Naphthalene	non-SIM	6.20E+00	5.0 U	5.0 U	5.0 U
Naphthalene	non-SIM	6.20E+00	10 UJ	10 UJ	10 U
Naphthalene	SIM	6.20E+00			0.20 U
Nitrobenzene	non-SIM	3.40E+00	10 U	10 U	10 U
Octachlorostyrene	non-SIM	--	10 U	10 U	10 U

LOU 60 Table 18 (continued)
Groundwater Characterization Data - SVOC

Acid Drain System
Tronox Facility - Henderson, Nevada

		Sampling Program	Ph A[1]	Ph A	Ph A
		Well No.	M-11	M-11D	M-13
		Sample ID	M-11	M-11D	M-13
		Sample Date	12/06/2006	12/06/2006	12/01/2006
SVOCs	**Analytical Method**	**MCL[2] ug/l**	ug/L	ug/L	ug/L
Phenanthrene	non-SIM	1.80E+03 (n)	10 U	10 U	10 U
Phenanthrene	SIM	1.80E+03 (n)			0.20 U
Pyrene	non-SIM	1.83E+02	10 U	10 U	10 U
Pyrene	SIM	1.83E+02			0.20 U
Pyridine	non-SIM	3.65E+01	20 U	20 U	20 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(jj) Value for naphthalene used as surrogate for 2-methylnaphthalene based on structural similarities.
(pp) Value for acenaphthene used as surrogate for acenapthylene based on structural similarities.
(w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.
(n) Value for anthracene used as surrogate for phenanthrene due to structural similarities.

LOU 60 Table 19
Soil Characteristic Data - TPH and Fuel Alcohols

Acid Drain System
Tronox Facility - Henderson, Nevada

				Fuel Alcohols			Total Petroleum Hydrocarbons			
				Ethanol	Ethylene glycol	Methanol	TPH - ORO	TPH - DRO	TPH - GRO	
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
			MSSL[1] mg/kg	--	1.00E+05	1.00E+05	1.00E+02 vv	1.00E+02 vv	1.00E+02 vv	
Boring No.	**Sample ID.**	**Sample Depth (ft)**	**Sample Date**							**Sampling Program**
SA3	SA3-0.5	0.5	11/13/2006	53 UJ	92 UJ	53 UJ	27 U	27 U	0.11 U	Ph A[2]
SA3	SA3-0.5D	0.5	11/13/2006	53 UJ	87 UJ	53 UJ	27 U	27 U	0.11 U	Ph A
SA3	SA3-10	10	11/13/2006	53 UJ	79 UJ	53 UJ	27 U	27 U	0.11 U	Ph A
SA3	SA3-20	20	11/13/2006	55 UJ	89 UJ	55 UJ	27 U	27 U	0.11 U	Ph A
SA3	SA3-30	30	11/13/2006	64 UJ	118 UJ	64 UJ	32 U	32 U	0.13 U	Ph A
SA3	SA3-40	40	11/13/2006	74 UJ	115 UJ	74 UJ	37 U	37 U	0.15 U	Ph A
SA4	SA4-0.5	0.5	11/14/2006				**43**	27 U	0.11 U	Ph A
SA4	SA4-10	10	11/14/2006				27 U	27 U	0.11 U	Ph A
SA4	SA4-20	20	11/14/2006				27 U	27 U	0.11 U	Ph A
SA4	SA4-30	30	11/14/2006				29 U	29 U	0.11 U	Ph A
SA4	SA4-40	40	11/14/2006				27 U	27 U	0.11 UJ	Ph A
SA6	SA6-0.5	0.5	11/14/2006	53 UJ	69 UJ	53 UJ	27 U	27 U	0.11 U	Ph A
SA6	SA6-0.5D	0.5	11/14/2006	58 UJ	75 UJ	58 UJ	29 U	29 U	0.12 U	Ph A
SA6	SA6-10	10	11/14/2006	54 UJ	108 UJ	54 UJ	27 U	27 U	0.11 U	Ph A
SA6	SA6-20	20	11/14/2006	54 UJ	85 UJ	54 UJ	27 U	27 U	0.11 U	Ph A
SA6	SA6-30	30.0	11/14/2006	53 UJ	98 UJ	53 UJ	26 U	26 U	0.11 U	Ph A
SA6	SA6-35	35.0	11/14/2006	74 UJ	112 UJ	74 UJ	37 U	37 U	0.15 U	Ph A
SA7	SA7-0.5	0.5	11/20/2006				**26**	26 UJ	0.11 UJ	Ph A
SA7	SA7-10	10	11/20/2006				26 U	26 U	0.11 UJ	Ph A
SA7	SA7-10D	10	11/20/2006				27 U	27 U	0.11 UJ	Ph A
SA7	SA7-20	20	11/20/2006				27 U	27 U	0.11 UJ	Ph A
SA7	SA7-30	30	11/20/2006				27 U	27 U	0.11 UJ	Ph A
SA7	SA7-34	34	11/20/2006				33 U	33 U	0.13 UJ	Ph A
SA8	SA8-0.5	0.5	11/17/2006				530 U	**3600**	**0.13**	Ph A
SA8	SA8-10	10	11/17/2006				27 U	27 U	0.11 U	Ph A
SA8	SA8-20	20	11/17/2006				26 U	26 U	0.10 U	Ph A
SA8	SA8-30	30	11/17/2006				27 U	27 U	0.11 U	Ph A
SA8	SA8-37	37	11/17/2006				34 U	34 U	0.14 U	Ph A

Notes:
1. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
2. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
(w) Value for pyrene used as surrogate for benzo(g,h,i)perylene based on structural similarities.

LOU 60 Table 20a
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA3	SA3	SA3	SA3	SA3	SA3	SA4	SA4	SA4	SA4	SA4
	Sample ID	SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	SA4-0.5	SA4-10	SA4-20	SA4-30	SA4-40
	Sample Depth (ft)	0.5	0.5	10	20	30	40	0.5	10	20	30	40
	Sample Date	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Naphthalene	2.10E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,1,1,2-Tetrachloroethane	7.60E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,1,1-Trichloroethane	1.40E+06	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,1,2,2-Tetrachloroethane	9.70E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,1,2-Trichloroethane	2.10E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,1-Dichloroethane	2.30E+06	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,1-Dichloroethene	4.70E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,1-Dichloropropene	1.75E+03 (gg)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,2,3-Trichlorobenzene	2.60E+05 (hh)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	**2.2 J**
1,2,3-Trichloropropane	1.60E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,2,4-Trichlorobenzene	2.60E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,2,4-Trimethylbenzene	2.20E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,2-Dibromo-3-chloropropane	2.00E+01	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,2-Dichlorobenzene	3.70E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,2-Dichloroethane	8.40E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,2-Dichloropropane	8.50E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,3,5-Trimethylbenzene	7.80E+04	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,3-Dichlorobenzene	1.40E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,3-Dichloropropane	4.10E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
1,4-Dichlorobenzene	8.10E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
2,2-Dichloropropane	8.50E+02 (ii)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
2-Butanone	3.40E+07	11 U	11 U	11 U	11 U	13 U	15 UJ	11 U	11 U	11 U	11 U	11 U
2-Chlorotoluene	5.10E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
2-Hexanone	1.72E+07 (nn)	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	15 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ
2-Methoxy-2-methyl-butane	--	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
4-Chlorotoluene	5.10E+05 (ww)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
4-Isopropyltoluene	--	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
4-Methyl-2-pentanone	1.70E+07	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	15 UJ	11 U	11 U	11 U	11 U	11 U
Acetone	6.00E+07	11 U	11 U	11 U	11 U	13 U	15 UJ	11 U	11 U	11 U	11 U	11 U
Benzene	1.60E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Bromobenzene	1.20E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Bromochloromethane	1.75E+03 (qq)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Bromodichloromethane	2.60E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Bromoform	2.40E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Bromomethane	1.50E+04	11 U	11 U	11 U	11 U	13 U	15 UJ	11 U	11 U	11 U	11 U	11 U
Carbon tetrachloride	5.80E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Chlorobenzene	5.00E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Chloroethane	7.20E+03	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ	5.5 UJ	5.3 UJ	5.5 UJ	5.7 UJ	5.3 UJ
Chloroform	5.80E+02	5.3 U	5.3 U	5.3 U	5.5 U	**1.0 J**	**3.9 J**	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Chloromethane	1.70E+05	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ	5.5 UJ	5.3 UJ	5.5 UJ	5.7 UJ	5.3 UJ
cis-1,2-Dichloroethene	1.60E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
cis-1,3-Dichloropropene	1.75E+03 (gg)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U

LOU 60 Table 20a (continued)
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA3	SA3	SA3	SA3	SA3	SA3	SA4	SA4	SA4	SA4	SA4
	Sample ID	SA3-0.5	SA3-0.5D	SA3-10	SA3-20	SA3-30	SA3-40	SA4-0.5	SA4-10	SA4-20	SA4-30	SA4-40
	Sample Depth (ft)	0.5	0.5	10	20	30	40	0.5	10	20	30	40
	Sample Date	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/13/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dibromochloromethane	2.60E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Dibromomethane	5.90E+05 (xx)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Dichlorodifluoromethane	3.40E+05	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ	5.5 UJ	5.3 UJ	5.5 UJ	5.7 UJ	5.3 UJ
Ethyl t-butyl ether	7.90E+04 (kk)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Ethylbenzene	2.30E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Ethylene dibromide	7.00E+01	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Hexachlorobutadiene	2.50E+04	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
isopropyl ether	--	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Isopropylbenzene	5.80E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Methyl tert butyl ether	7.90E+04	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Methylene chloride	2.20E+04	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 UJ	5.3 UJ	5.5 UJ	5.7 UJ	5.3 UJ
N-Butylbenzene	2.40E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
N-Propylbenzene	2.40E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
sec-Butylbenzene	2.20E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Styrene	1.70E+06	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
t-Butyl alcohol	--	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	15 UJ	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ
tert-Butylbenzene	3.90E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Tetrachloroethene	1.70E+03	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Toluene	5.20E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
trans-1,2-Dichloroethylene	2.00E+05	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
trans-1,3-Dichloropropene	1.75E+03 (gg)	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Trichloroethene	1.00E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Trichlorofluoromethane	1.40E+06	5.3 UJ	5.3 UJ	5.3 UJ	5.5 UJ	6.4 UJ	7.4 UJ	5.5 UJ	5.3 UJ	5.5 UJ	5.7 UJ	5.3 UJ
Vinylchloride	8.60E+02	5.3 U	5.3 U	5.3 U	5.5 U	6.4 U	7.4 UJ	5.5 U	5.3 U	5.5 U	5.7 U	5.3 U
Xylene (Total)	2.10E+05	11 U	11 U	11 U	11 U	13 U	15 UJ	11 U	11 U	11 U	11 U	11 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(gg) Value for 1,3-dichloropropene used as surrogate for 1,1-dichloropropene, cis-1,3-dichloropropene and trans-1,3-dichloropropene based on structural similarities.
(hh) Value for 1,2,4-trichlorobenzene used as surrogate for 1,2,3-trichlorobenzene based on structural similarities.
(ii) Value for 1,2-dichloropropane used as surrogate for 2,2-dichloropropane based on structural similarities.
(nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
(ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
(qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
(xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
(kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.

LOU 60 Table 20b
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA5	SA5	SA5	SA5	SA5	SA6	SA6	SA6	SA6	SA6	SA6
	Sample ID	SA5-0.5	SA5-10	SA5-20	SA5-30	SA5-37	SA6-0.5	SA6-0.5D	SA6-10	SA6-20	SA6-30	SA6-35
	Sample Depth (ft)	0.5	10	20	30	37	0.5	0.5	10	20	30	35
	Sample Date	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Naphthalene	2.10E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,1,1,2-Tetrachloroethane	7.60E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,1,1-Trichloroethane	1.40E+06	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,1,2,2-Tetrachloroethane	9.70E+02	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,1,2-Trichloroethane	2.10E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,1-Dichloroethane	2.30E+06	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,1-Dichloroethene	4.70E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,1-Dichloropropene	1.75E+03 (gg)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2,3-Trichlorobenzene	2.60E+05 (hh)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2,3-Trichloropropane	1.60E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2,4-Trichlorobenzene	2.60E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2,4-Trimethylbenzene	2.20E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2-Dibromo-3-chloropropane	2.00E+01	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2-Dichlorobenzene	3.70E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2-Dichloroethane	8.40E+02	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,2-Dichloropropane	8.50E+02	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,3,5-Trimethylbenzene	7.80E+04	6.5 UJ	5.8 U	5.9 UJ	5.4 U	8.3 U	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 U
1,3-Dichlorobenzene	1.40E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,3-Dichloropropane	4.10E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
1,4-Dichlorobenzene	8.10E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
2,2-Dichloropropane	8.50E+02 (ii)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
2-Butanone	3.40E+07	13 U	12 U	12 U	11 U	17 U	11 U	12 U	11 U	11 U	11 U	15 U
2-Chlorotoluene	5.10E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
2-Hexanone	1.72E+07 (nn)	13 UJ	12 UJ	12 UJ	11 UJ	17 UJ	11 UJ	12 UJ	11 UJ	11 UJ	11 UJ	15 UJ
2-Methoxy-2-methyl-butane	--	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
4-Chlorotoluene	5.10E+05 (ww)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
4-Isopropyltoluene	--	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
4-Methyl-2-pentanone	1.70E+07	13 U	12 U	12 U	11 U	17 U	11 U	12 U	11 U	11 U	11 U	15 U
Acetone	6.00E+07	13 U	12 U	12 U	11 U	17 U	11 U	12 UJ	11 U	11 U	11 U	15 U
Benzene	1.60E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Bromobenzene	1.20E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Bromochloromethane	1.75E+03 (qq)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Bromodichloromethane	2.60E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Bromoform	2.40E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Bromomethane	1.50E+04	13 U	12 U	12 U	11 U	17 U	11 U	12 U	11 U	11 U	11 U	15 U
Carbon tetrachloride	5.80E+02	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Chlorobenzene	5.00E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Chloroethane	7.20E+03	6.5 UJ	5.8 UJ	5.9 UJ	5.4 UJ	8.3 UJ	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 UJ
Chloroform	5.80E+02	6.5 U	5.8 U	**0.79 J**	**19**	**120**	5.3 U	5.8 U	**0.50 J**	5.4 U	5.3 U	**28**
Chloromethane	1.70E+05	6.5 UJ	5.8 UJ	5.9 UJ	5.4 UJ	8.3 UJ	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 UJ
cis-1,2-Dichloroethene	1.60E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
cis-1,3-Dichloropropene	1.75E+03 (gg)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Dibromochloromethane	2.60E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Dibromomethane	5.90E+05 (xx)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U

LOU 60 Table 20b (continued)
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA5	SA5	SA5	SA5	SA5	SA6	SA6	SA6	SA6	SA6	SA6
	Sample ID	SA5-0.5	SA5-10	SA5-20	SA5-30	SA5-37	SA6-0.5	SA6-0.5D	SA6-10	SA6-20	SA6-30	SA6-35
	Sample Depth (ft)	0.5	10	20	30	37	0.5	0.5	10	20	30	35
	Sample Date	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006	11/14/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dichlorodifluoromethane	3.40E+05	6.5 UJ	5.8 UJ	5.9 UJ	5.4 UJ	8.3 UJ	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 UJ
Ethyl t-butyl ether	7.90E+04 (kk)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Ethylbenzene	2.30E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Ethylene dibromide	7.00E+01	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Hexachlorobutadiene	2.50E+04	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
isopropyl ether	--	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Isopropylbenzene	5.80E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Methyl tert butyl ether	7.90E+04	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Methylene chloride	2.20E+04	6.5 U	5.8 UJ	5.9 U	5.4 UJ	8.3 UJ	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 UJ
N-Butylbenzene	2.40E+05	6.5 UJ	5.8 U	5.9 UJ	5.4 U	8.3 U	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 U
N-Propylbenzene	2.40E+05	6.5 UJ	5.8 U	5.9 UJ	5.4 U	8.3 U	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 U
sec-Butylbenzene	2.20E+05	6.5 UJ	5.8 U	5.9 UJ	5.4 U	8.3 U	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 U
Styrene	1.70E+06	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
t-Butyl alcohol	--	13 UJ	12 UJ	12 UJ	11 UJ	17 UJ	11 UJ	12 UJ	11 UJ	11 UJ	11 UJ	15 UJ
tert-Butylbenzene	3.90E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Tetrachloroethene	1.70E+03	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Toluene	5.20E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
trans-1,2-Dichloroethylene	2.00E+05	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
trans-1,3-Dichloropropene	1.75E+03 (gg)	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Trichloroethene	1.00E+02	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Trichlorofluoromethane	1.40E+06	6.5 UJ	5.8 UJ	5.9 UJ	5.4 UJ	8.3 UJ	5.3 UJ	5.8 UJ	5.4 UJ	5.4 UJ	5.3 UJ	7.4 UJ
Vinylchloride	8.60E+02	6.5 U	5.8 U	5.9 U	5.4 U	8.3 U	5.3 U	5.8 U	5.4 U	5.4 U	5.3 U	7.4 U
Xylene (Total)	2.10E+05	13 U	12 U	12 U	11 U	17 U	11 U	12 U	11 U	11 U	11 U	15 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(gg) Value for 1,3-dichloropropene used as surrogate for 1,1-dichloropropene, cis-1,3-dichloropropene and trans-1,3-dichloropropene based on structural similarities.
(hh) Value for 1,2,4-trichlorobenzene used as surrogate for 1,2,3-trichlorobenzene based on structural similarities.
(ii) Value for 1,2-dichloropropane used as surrogate for 2,2-dichloropropane based on structural similarities.
(nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
(ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
(qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
(xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
(kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.

LOU 60 Table 20c
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA7	SA7	SA7	SA7	SA7	SA7	SA8	SA8	SA8	SA8	SA8
	Sample ID	SA7-0.5	SA7-10	SA7-10D	SA7-20	SA7-30	SA7-34	SA8-0.5	SA8-10	SA8-20	SA8-30	SA8-37
	Sample Depth (ft)	0.5	10	10	20	30	34	0.5	10	20	30	37
	Sample Date	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Naphthalene	2.10E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	**0.79 J**	5.3 U	5.2 U	5.5 U	6.8 U
1,1,1,2-Tetrachloroethane	7.60E+03	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,1,1-Trichloroethane	1.40E+06	5.3 U	**0.54 J**	5.4 U	5.4 U	**0.37 J**	6.5 U	**0.95 J**	5.3 U	5.2 U	5.5 U	6.8 U
1,1,2,2-Tetrachloroethane	9.70E+02	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,1,2-Trichloroethane	2.10E+03	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,1-Dichloroethane	2.30E+06	5.3 U	**1.9 J**	5.4 U	5.4 U	**1.4 J**	6.5 U	**3.0 J**	5.3 U	5.2 U	5.5 U	6.8 U
1,1-Dichloroethene	4.70E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,1-Dichloropropene	1.75E+03 (gg)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2,3-Trichlorobenzene	2.60E+05 (hh)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2,3-Trichloropropane	1.60E+03	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2,4-Trichlorobenzene	2.60E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2,4-Trimethylbenzene	2.20E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2-Dibromo-3-chloropropane	2.00E+01	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2-Dichlorobenzene	3.70E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2-Dichloroethane	8.40E+02	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,2-Dichloropropane	8.50E+02	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,3,5-Trimethylbenzene	7.80E+04	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ
1,3-Dichlorobenzene	1.40E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,3-Dichloropropane	4.10E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
1,4-Dichlorobenzene	8.10E+03	5.3 U	5.3 U	**0.32 J**	5.4 U	5.3 U	6.5 U	**16 J**	5.3 U	5.2 U	5.5 U	6.8 U
2,2-Dichloropropane	8.50E+02 (ii)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
2-Butanone	3.40E+07	11 U	11 U	11 U	11 U	11 U	13 U	**14 J**	11 U	**38**	**14**	14 U
2-Chlorotoluene	5.10E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
2-Hexanone	1.72E+07 (nn)	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	11 UJ	11 UJ	**3.8 J**	11 UJ	14 UJ
2-Methoxy-2-methyl-butane	--	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
4-Chlorotoluene	5.10E+05 (ww)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
4-Isopropyltoluene	--	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
4-Methyl-2-pentanone	1.70E+07	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	11 UJ	11 U	10 U	11 U	14 U
Acetone	6.00E+07	**4.5 J**	**6.1 J**	11 U	11 U	**21**	**6.6 J**	**90 J**	**24**	**250**	**100**	**45**
Benzene	1.60E+03	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	**0.62 J**	**0.72 J**	6.8 U
Bromobenzene	1.20E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Bromochloromethane	1.75E+03 (qq)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Bromodichloromethane	2.60E+03	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Bromoform	2.40E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Bromomethane	1.50E+04	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	11 UJ	11 UJ	10 UJ	11 UJ	14 UJ
Carbon tetrachloride	5.80E+02	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Chlorobenzene	5.00E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Chloroethane	7.20E+03	5.3 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	6.5 UJ	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ
Chloroform	5.80E+02	5.3 U	**0.40 J**	**0.51 J**	**1.5 J**	**1.9 J**	**20**	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Chloromethane	1.70E+05	5.3 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	6.5 UJ	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ
cis-1,2-Dichloroethene	1.60E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
cis-1,3-Dichloropropene	1.75E+03 (gg)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Dibromochloromethane	2.60E+03	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U

LOU 60 Table 20c (continued)
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.	SA7	SA7	SA7	SA7	SA7	SA7	SA8	SA8	SA8	SA8	SA8
	Sample ID	SA7-0.5	SA7-10	SA7-10D	SA7-20	SA7-30	SA7-34	SA8-0.5	SA8-10	SA8-20	SA8-30	SA8-37
	Sample Depth (ft)	0.5	10	10	20	30	34	0.5	10	20	30	37
	Sample Date	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/20/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Dibromomethane	5.90E+05 (xx)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Dichlorodifluoromethane	3.40E+05	5.3 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	6.5 UJ	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ
Ethyl t-butyl ether	7.90E+04 (kk)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Ethylbenzene	2.30E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Ethylene dibromide	7.00E+01	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Hexachlorobutadiene	2.50E+04	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	**1.4 J**	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
isopropyl ether	--	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Isopropylbenzene	5.80E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Methyl tert butyl ether	7.90E+04	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Methylene chloride	2.20E+04	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
N-Butylbenzene	2.40E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
N-Propylbenzene	2.40E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ
sec-Butylbenzene	2.20E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ
Styrene	1.70E+06	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
t-Butyl alcohol	--	11 UJ	11 UJ	11 UJ	11 UJ	11 UJ	13 UJ	11 UJ	11 UJ	10 UJ	11 UJ	14 UJ
tert-Butylbenzene	3.90E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Tetrachloroethene	1.70E+03	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	**2.1 J**	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Toluene	5.20E+05	**0.36 J**	**0.58 J**	**0.31 J**	**0.31 J**	**0.45 J**	**0.37 J**	**0.82 J**	5.3 U	5.2 U	5.5 U	6.8 U
trans-1,2-Dichloroethylene	2.00E+05	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
trans-1,3-Dichloropropene	1.75E+03 (gg)	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Trichloroethene	1.00E+02	5.3 U	5.3 U	5.4 U	5.4 U	5.3 U	6.5 U	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Trichlorofluoromethane	1.40E+06	5.3 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	6.5 UJ	5.3 UJ	5.3 UJ	5.2 UJ	5.5 UJ	6.8 UJ
Vinylchloride	8.60E+02	5.3 UJ	5.3 UJ	5.4 UJ	5.4 UJ	5.3 UJ	6.5 UJ	5.3 UJ	5.3 U	5.2 U	5.5 U	6.8 U
Xylene (Total)	2.10E+05	11 U	11 U	11 U	11 U	11 U	13 U	11 UJ	11 U	10 U	11 U	14 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(gg) Value for 1,3-dichloropropene used as surrogate for 1,1-dichloropropene, cis-1,3-dichloropropene and trans-1,3-dichloropropene based on structural similarities.
(hh) Value for 1,2,4-trichlorobenzene used as surrogate for 1,2,3-trichlorobenzene based on structural similarities.
(ii) Value for 1,2-dichloropropane used as surrogate for 2,2-dichloropropane based on structural similarities.
(nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
(ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
(qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
(xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
(kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.

LOU 60 Table 20d
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A
	Boring No.		SA13	SA13	SA13	SA13	SA13	SA13
	Sample ID		SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40
	Sample Depth (ft)		0.5	0.5	10	20	30	40
	Sample Date		11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
VOCs	**MSSL[2] ug/kg**		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Naphthalene	2.10E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,1,1,2-Tetrachloroethane	7.60E+03		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,1,1-Trichloroethane	1.40E+06		5.8 U	5.5 UJ	5.2 UJ	**0.53 J**	5.3 U	6.3 U
1,1,2,2-Tetrachloroethane	9.70E+02		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,1,2-Trichloroethane	2.10E+03		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,1-Dichloroethane	2.30E+06		5.8 U	5.5 UJ	5.2 UJ	**1.8 J**	5.3 U	6.3 U
1,1-Dichloroethene	4.70E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,1-Dichloropropene	1.75E+03	(gg)	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2,3-Trichlorobenzene	2.60E+05	(hh)	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2,3-Trichloropropane	1.60E+03		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2,4-Trichlorobenzene	2.60E+05		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2,4-Trimethylbenzene	2.20E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2-Dibromo-3-chloropropane	2.00E+01		12 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2-Dichlorobenzene	3.70E+05		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2-Dichloroethane	8.40E+02		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,2-Dichloropropane	8.50E+02		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,3,5-Trimethylbenzene	7.80E+04		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
1,3-Dichlorobenzene	1.40E+05		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,3-Dichloropropane	4.10E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
1,4-Dichlorobenzene	8.10E+03		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
2,2-Dichloropropane	8.50E+02	(ii)	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
2-Butanone	3.40E+07		12 U	11 UJ	10 UJ	**5.2 J**	11 U	13 U
2-Chlorotoluene	5.10E+05		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
2-Hexanone	1.72E+07	(nn)	12 UJ	11 UJ	10 UJ	11 UJ	11 UJ	13 UJ
2-Methoxy-2-methyl-butane	--		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
4-Chlorotoluene	5.10E+05	(ww)	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
4-Isopropyltoluene	--		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
4-Methyl-2-pentanone	1.70E+07		12 U	11 UJ	10 UJ	11 UJ	11 U	13 U
Acetone	6.00E+07		**5.1 J**	**9.8 J**	10 UJ	**34 J**	11 U	**14**
Benzene	1.60E+03		5.8 U	5.5 UJ	5.2 UJ	**0.19 J**	5.3 U	6.3 U
Bromobenzene	1.20E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Bromochloromethane	1.75E+03	(qq)	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Bromodichloromethane	2.60E+03		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Bromoform	2.40E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Bromomethane	1.50E+04		12 UJ	11 UJ	10 UJ	11 UJ	11 U	13 U
Carbon tetrachloride	5.80E+02		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Chlorobenzene	5.00E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Chloroethane	7.20E+03		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
Chloroform	5.80E+02		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	**0.32 J**	**4.2 J**
Chloromethane	1.70E+05		5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
cis-1,2-Dichloroethene	1.60E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
cis-1,3-Dichloropropene	1.75E+03	(gg)	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Dibromochloromethane	2.60E+03		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Dibromomethane	5.90E+05	(xx)	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Dichlorodifluoromethane	3.40E+05		12 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
Ethyl t-butyl ether	7.90E+04	(kk)	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Ethylbenzene	2.30E+05		5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U

LOU 60 Table 20d (continued)
Soil Characterization Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A
Boring No.		SA13	SA13	SA13	SA13	SA13	SA13
Sample ID		SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40
Sample Depth (ft)		0.5	0.5	10	20	30	40
Sample Date		11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006
VOCs	**MSSL[2] ug/kg**	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Ethylene dibromide	7.00E+01	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Hexachlorobutadiene	2.50E+04	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
isopropyl ether	--	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Isopropylbenzene	5.80E+05	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Methyl tert butyl ether	7.90E+04	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Methylene chloride	2.20E+04	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
N-Butylbenzene	2.40E+05	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
N-Propylbenzene	2.40E+05	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
sec-Butylbenzene	2.20E+05	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
Styrene	1.70E+06	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
t-Butyl alcohol	--	12 UJ	11 UJ	10 UJ	11 UJ	11 UJ	13 UJ
tert-Butylbenzene	3.90E+05	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Tetrachloroethene	1.70E+03	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Toluene	5.20E+05	5.8 U	**0.28 J**	**0.28 J**	**0.67 J**	5.3 U	6.3 U
trans-1,2-Dichloroethylene	2.00E+05	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
trans-1,3-Dichloropropene	1.75E+03 (gg)	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Trichloroethene	1.00E+02	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 U	6.3 U
Trichlorofluoromethane	1.40E+06	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ
Vinylchloride	8.60E+02	5.8 U	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 U
Xylene (Total)	2.10E+05	12 U	11 UJ	10 UJ	11 UJ	11 U	13 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA, Region 6, Medium Specific Screening Levels (MSSLs) for Industrial - Outdoor Worker (March, 2008).
(gg) Value for 1,3-dichloropropene used as surrogate for 1,1-dichloropropene, cis-1,3-dichloropropene and trans-1,3-dichloropropene based on structural similarities.
(hh) Value for 1,2,4-trichlorobenzene used as surrogate for 1,2,3-trichlorobenzene based on structural similarities.
(ii) Value for 1,2-dichloropropane used as surrogate for 2,2-dichloropropane based on structural similarities.
(nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
(ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
(qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
(xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
(kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.

LOU 60 Table 21
Groundwater Characteristic Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A
	Well ID	M11	M11D	M13
	Sample ID	M11	M11D	M13
	Sample Date	12/06/2006	12/06/2006	12/01/2006
VOCs	**MCL[2] ug/l**	ug/L	ug/L	ug/L
Naphthalene	6.20E+00	5.0 U	5.0 U	5.0 U
1,1,1,2-Tetrachloroethane	4.32E-01	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	2.00E+02	5.0 U	5.0 U	**1.6 J**
1,1,2,2-Tetrachloroethane	5.00E+00	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	5.00E+00	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	8.11E+02	5.0 U	5.0 U	**2.6 J**
1,1-Dichloroethene	7.00E+00	5.0 U	5.0 U	**2.7 J**
1,1-Dichloropropene	3.95E-01 gg	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	7.16E+00 hh	5.0 U	5.0 U	5.0 U
1,2,3-Trichloropropane	5.60E-03	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	7.00E+01	5.0 U	5.0 U	5.0 U
1,2,4-Trimethylbenzene	1.23E+01	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	2.00E-01	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	6.00E+02	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	5.00E+00	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	5.00E+00	5.0 U	5.0 U	5.0 U
1,3,5-Trimethylbenzene	1.23E+01	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	1.83E+02	5.0 U	5.0 U	5.0 U
1,3-Dichloropropane	1.22E+02	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	7.50E+01	5.0 U	5.0 U	5.0 U
2,2-Dichloropropane	1.65E-01 ii	5.0 U	5.0 U	5.0 U
2-Butanone	6.97E+03	10 U	10 U	10 U
2-Chlorotoluene	1.22E+02	5.0 U	5.0 U	5.0 U
2-Hexanone	2.00E+03 nn	10 UJ	10 UJ	10 UJ
2-Methoxy-2-methyl-butane	--	5.0 UJ	5.0 UJ	5.0 U
4-Chlorotoluene	1.22E+02 ww	5.0 U	5.0 U	5.0 U
4-Isopropyltoluene	--	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	1.99E+03	10 UJ	10 UJ	10 U
Acetone	5.48E+03	10 U	10 U	10 U
Benzene	5.00E+00	5.0 U	5.0 U	5.0 U
Bromobenzene	2.03E+01	5.0 U	5.0 U	5.0 U
Bromochloromethane	1.81E-01 qq	5.0 U	5.0 U	5.0 U
Bromodichloromethane	8.00E+01 r	5.0 U	5.0 U	5.0 U
Bromoform	8.00E+01 r	5.0 U	**4.8 J**	5.0 U
Bromomethane	8.66E+00	10 U	10 U	10 UJ
Carbon tetrachloride	5.00E+00	5.0 U	5.0 U	5.0 U
Chlorobenzene	1.00E+02 o	5.0 U	5.0 U	5.0 U
Chloroethane	4.64E+00	5.0 U	5.0 U	5.0 UJ
Chloroform	8.00E+01 r	**130**	**130**	**40**
Chloromethane	1.58E+02	5.0 U	5.0 U	5.0 UJ
cis-1,2-Dichloroethene	7.00E+01	5.0 U	5.0 U	5.0 U
cis-1,3-Dichloropropene	3.95E-01 gg	5.0 U	5.0 U	5.0 U
Dibromochloromethane	8.00E+01 r	5.0 U	5.0 U	5.0 U
Dibromomethane	6.08E+01 xx	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane	3.95E+02	5.0 UJ	5.0 UJ	5.0 UJ
Ethyl t-butyl ether	1.10E+01 kk	5.0 UJ	5.0 UJ	5.0 U
Ethylbenzene	7.00E+02	5.0 U	5.0 U	5.0 U
Ethylene dibromide	--	5.0 U	5.0 U	5.0 U
Hexachlorobutadiene	8.62E-01	5.0 U	5.0 U	5.0 U
isopropyl ether	--	5.0 UJ	5.0 UJ	5.0 U
Isopropylbenzene	6.58E+02	5.0 U	5.0 U	5.0 U
Methyl tert butyl ether	2.00E+01 a,uu	5.0 U	5.0 U	5.0 U

LOU 60 Table 21 (continued)
Groundwater Characteristic Data - VOCs

Acid Drain System
Tronox Facility - Henderson, Nevada

	Sampling Program	Ph A[1]	Ph A	Ph A
	Well ID	M11	M11D	M13
	Sample ID	M11	M11D	M13
	Sample Date	12/06/2006	12/06/2006	12/01/2006
VOCs	**MCL[2] ug/l**	ug/L	ug/L	ug/L
Methylene chloride	5.00E+00	5.0 UJ	5.0 UJ	5.0 U
N-Butylbenzene	2.43E+02	5.0 U	5.0 U	5.0 U
N-Propylbenzene	2.43E+02	5.0 U	5.0 U	5.0 U
sec-Butylbenzene	2.43E+02	5.0 U	5.0 U	5.0 U
Styrene	1.00E+02	5.0 U	5.0 U	5.0 U
t-Butyl alcohol	--	10 UJ	10 UJ	10 UJ
tert-Butylbenzene	2.43E+02	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5.00E+00	5.0 U	5.0 U	**0.44 J**
Toluene	1.00E+03	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethylene	1.00E+02	5.0 U	5.0 U	5.0 U
trans-1,3-Dichloropropene	--	5.0 U	5.0 U	5.0 U
Trichloroethene	5.00E+00	5.0 U	5.0 U	**33**
Trichlorofluoromethane	--	5.0 U	5.0 U	5.0 UJ
Vinylchloride	2.00E+00	5.0 U	5.0 U	5.0 UJ
Xylene (Total)	1.00E+04	10 UJ	10 UJ	10 U

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted.
(gg) Value for 1,3-dichloropropene used as surrogate for 1,1-dichloropropene, cis-1,3-dichloropropene and trans-1,3-dichloropropene based on structural similarities.
(hh) Value for 1,2,4-trichlorobenzene used as surrogate for 1,2,3-trichlorobenzene based on structural similarities.
(ii) Value for 1,2-dichloropropane used as surrogate for 2,2-dichloropropane based on structural similarities.
(nn) Value for methyl isobutyl ketone used as surrogate for 2-hexanone based on structural similarities.
(ww) Value for 2-chlorotoluene used as surrogate for 4-chlorotoluene based on structural similarities.
(qq) Value for bromodichloromethane used as surrogate for bromochloromethane due to structural similarities.
(o) See footnote (b). Listed under synonym monochlorobenzene.
(xx) Value for methylene bromide used as surrogate for dibromomethane based on structural similarities.
(kk) Value for methyl tertbutyl ether (MTBE) used as surrogate for ethyl-tert-butyl ether (ETBE) based on structural similarities.
(a) NAC 445A.455 Secondary standards. Certain provisions of the National Primary Drinking Water Regulations are adopted by reference (NAC 445A.4525). These values are listed in the first column of this table and are therefore not listed again here. Only NAC 445A.455 Secondary standards are listed.
(uu) NDEP, 1998. Oxygenated Fuel Corrective Action Guidance. Draft. October, 12 1998. URL [http://ndep.nv.gov/bca/mtbe_doc.htm].

LOU 60 Table 22
Soil Characterization Data - Long Asbestos Fibers in Respirable Soil Fraction

Acid Drain System
Tronox Facility - Henderson, Nevada

No.	Sample ID	Sample Date	Long Amphibole Protocol Structures	Long Amphibole Protocol Structures	Long Chrysotile Protocol Structures	Long Chrysotile Protocol Structures	Sampling Program
			s/gPM10	(structures/samples)	s/gPM10	(structures/samples)	
SA3	SA3	12/02/2006	**7970000**	**1**	**7970000**	**0**	Ph A[1]
SA4	SA4	12/07/2006	2946000 U	0	**38300000**	**13**	Ph A
SA5	SA5	12/07/2006	2980000 U	0	**35800000**	**12**	Ph A
SA6	SA6	12/07/2006	2846000 U	0	2846000 U	0	Ph A
SA7	SA7	12/07/2006	2988000 U	0	**2990000**	**1**	Ph A
SA8	SA8	12/07/2006	2997000 U	0	**5990000**	**2**	Ph A
SA13	SA13	12/08/2006	**3000000**	**1**	2996000 U	0	Ph A

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

LOU 60 Table 23
Notes for Phase A Data Tables

Acid Drain System
Tronox Facility - Henderson, Nevada

Blank	Not analyzed.
Bold	Bold values are constituents detected above the laboratory sample quantitation limit.
Gray	Grayed out values are non-detected values with the laboratory sample quantitation limits shown.
B	The result may be a false positive totally attributable to blank contamination.
D	Dissolved Metals.
DO	Dissolved Oxygen.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J-	The result is an estimated quantity and the result may be biased low.
J+	The result is an estimated quantity and the result may be biased high.
JB	The result may be biased high partially attributable to blank contamination.
JK	The result is an estimated maximum possible concentration.
R	The result was rejected and unusable due to serious data deficiencies. The presence or absence of the analyte cannot be verified.
S	Soluable metals
T	Total Metals.
U	The analyte was analyzed for, but was not detected above the laboratory sample quantitation limit.
UJ	The analyte was not detected above the laboratory sample quantitation limit and the limit is approximate
mg/kg	Milligrams per kilogram.
mg/L	Milligrams per liter.
ml/min	Milliliters per minute.
ng/kg	Nanogram per kilogram.
nm	Not measured.
NTUs	Nephelometric Turbidity Units.
ORP	Oxidation-reduction potential.
pCi/g	PicoCuries per gram.
pci/L	PicoCuries per liter.
s/gPM10	Revised protocol structures per gram PM10 fraction dust.
TEF	Toxic Equivalency Factor.
TEQ	Toxic Equivalent Concentration
ug/kg	Micrograms per kilogram.
ug/L	Micrograms per liter.
umhos/cm	MicroSiemens per centimeter.
L	Sample ID suffix indicating the sample was collected using low low-flow pumping rates (100-150 ml/min).
F	Sample ID suffix indicating the sample was collected using low-flow pumping rates (150-480 ml/min) and field filtered.
Z	Sample ID suffix indicating the sample was collected using low-flow pumping rates (150-480 ml/min).
*	No analytical data is available for this sample due to a laboratory error.
(a)	Calculated assuming 0 for non-detected congeners and 2006 toxic equivalency factors (TEFs).
(b)	Calculated assuming 1/2 detection limit as proxy for non-detected congeners and 2006 TEFs.
--	Not established

LOU 60 Table 1 (continued)
Soil Characterization Data - Wet Chemistry

Acid Drain System
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A[1]	Ph A	Ph A	Ph A	Ph A	Ph A	
Boring No.		SA13	SA13	SA13	SA13	SA13	SA13	
Sample ID		SA13-0.5	SA13-0.5D	SA13-10	SA13-20	SA13-30	SA13-40	
Sample Depth (ft)		0.5	0.5	10	20	30	40	
Sample Date		11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	11/17/2006	
Wet Chemistry Parameter	**MSSL[2] mg/kg**							**Units**
Percent moisture	--	**14.1**	**9.6**	**4.3**	**6.1**	**5.1**	**20.7**	percent
Alkalinity (as CaCO3)	--	58.2 UJ	**235 J**	**71.3 J**	53.2 UJ	**98.4 J**	**136 J**	mg/kg
Bicarbonate	--	**279 J**	**1930 J**	**523 J**	**269 J**	**246 J**	**699 J**	mg/kg
Total Alkalinity	--	**279 J**	**2170 J**	**594**	**303 J**	**344 J**	**835 J**	mg/kg
Ammonia (as N)	--	5.8 UJ	5.5 UJ	5.2 UJ	5.3 UJ	5.3 UJ	6.3 UJ	mg/kg
Cyanide	1.37E+04	R	R	R	R	R	R	mg/kg
MBAS	--	4.2 U	4.3 U	4.2 U	4.3 U	4.3 U	4.8 U	mg/kg
pH (solid)	--	**7.4**	**7.7**	**8.1**	**8.1**	**8.4**	**7.8**	none
Bromide	--	2.9 U	2.8 U	2.6 U	2.7 U	2.6 U	3.2 U	mg/kg
Chlorate	--	5.8 U	5.5 UJ	5.2 UJ	5.3 U	5.3 U	6.3 U	mg/kg
Chloride	--	**269 J**	**15.0 J**	**13.5 J**	**16.3 J**	**19.9 J**	**41.3 J**	mg/kg
Nitrate (as N)	--	0.23 U	**0.42 J+**	**0.80 J+**	**0.57 J+**	**0.17 J+**	**3.2 J+**	mg/kg
Nitrite	--	**5.7 J**	**0.10 J**	**0.55 J**	**0.11 J**	**0.74 J**	**0.13 J**	mg/kg
ortho-Phosphate	--	5.8 U	**3.2 J**	5.2 U	5.3 U	5.3 U	6.3 U	mg/kg
Sulfate	--	**13800 J**	**1080 J**	**853 J**	**294 J**	**174**	**382 J**	mg/kg
Total Organic Carbon	--	**4200 J-**	**2100 J-**	**1200 J-**	**6900 J-**	**6800 J-**	**10900 J**	mg/kg

Notes:
1. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.