

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
Tronox Facility – Henderson, Nevada

- Name of Facility:** LOU 63 – J.B. Kelley, Inc., Trucking Site
- Goal of Closure:**
- Closure for future industrial/commercial use.
 - Currently (April 2008), this LOU is part of Parcel F that will be sold for redevelopment as a lumber yard. The BRC assessment for shallow and deep soils is currently in progress. As a result, only groundwater and soil gas will be evaluated as part of ENSR's Phase B Source Area Investigation.
- Site Investigation Area:**
- Size: Approximately 300 feet by 330 feet (2.3 acres).
 - Location: North of the Unit 1 building (in Parcel F).
 - Current Status/Features: LOU 63 is no longer active. It is unpaved and the facility structures have been removed.
- Description:**
- LOU 63 was used for trucking operations for a company that hauled commodities such as lime and soda ash [Ref. 2].
 - The lease operated from 1980 to 1986 as W.S. Hatch Company, and as J.B. Kelley, Inc. from September 1986 to June 1991 [Ref. 4].
 - A 10,000-gallon fiberglass diesel underground storage tank (UST), a 600-gallon porcelain ceramic-lined waste oil UST, and open concrete vaults were used at this facility [Ref. 2, 3 and 4].
 - Operations included truck washing (tanker trucks), fueling, oil changes, and minor repair work [Ref. 4].
 - Truck wash and maintenance fluids drained to the storm sewer that conveyed water to the Beta Ditch until 1988 when these operations ceased and the storm drain was sealed [Ref. 4].
 - Rinsate (wash water) from washing of the interior of selected trucks was discharged to the storm sewer, two metal tanks, eight concrete vaults, and on various occasions to the ground surface [Ref. 4].
 - The rinsate was periodically neutralized with lime or soda ash and allowed to evaporate or it was hauled off-site for disposal. These activities continued until approximately February 1991 [Ref. 4].
 - Two 1,000-gallon metal tanks were located in the southwestern vault. The walls of the concrete vaults were eight inches thick [Ref. 4].
 - The diesel and waste oil USTs were removed in 1991. Hydrocarbon stained soil beneath the tanks was excavated, and Clark County approved the closure [Ref. 4].

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
 Tronox Facility – Henderson, Nevada

Process Waste Streams Associated with LOU 63	Known or Potential Constituents Associated with LOU 63
Fluids containing petroleum hydrocarbons released during fueling of trucks, oil change and other maintenance activities and leaking USTs containing diesel and waste oil [Ref. 4].	<ul style="list-style-type: none"> • TPH DRO/ORO • VOCs • SVOCs
Washwater from the washing of the exterior of trucks [Ref. 4].	<ul style="list-style-type: none"> • Detergent • TPH • VOCs • SVOCs
Rinsate from the washing of the interior of trucks [Ref. 4].	<ul style="list-style-type: none"> • Metals (barite, magnesium) • Lime • Soda ash • Magnesium chloride brine • Dilute concentrations of ferric chloride, hydrochloric acid, sodium hydrosulfide, sodium hydroxide, and/or titanium tetrachloride [Ref. 4].
Storm water run-on/run-off from the dumped dry residues of hauled materials.	<ul style="list-style-type: none"> • Lime • Soda ash
Process Waste Streams Associated with LOU 59 in Area IV	Known or Potential Chemicals Associated with LOU 59 in Area IV
Storm water runoff from LOUs 41, 65a and 65b, 25, 26, and 28.	<ul style="list-style-type: none"> • Pre 1976 – TPH (from vehicle operations) and chemicals from process effluent listed in this table. • Post 1976 – TPH (from vehicle operation), wet chemistry analytes, and perchlorate.
Process effluents from perchlorate production process including slurried filter cakes and cell bottoms, spent caustic scrubbing solution from chlorine gas scrubbing operations, and AP Cooling Tower overflow [Ref. 7].	<ul style="list-style-type: none"> • Perchlorate • Chlorate • Metals (Hexavalent chromium, magnesium, platinum) • Ammonia • Wet chemistry analytes • Sodium chloride and sodium hypochlorite

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
 Tronox Facility – Henderson, Nevada

Pickling process wastes from State Industries process line and surface impoundment that was periodically drained for pond maintenance [Ref. 7].	<ul style="list-style-type: none"> • Metals (iron, total chromium, barium, arsenic, cadmium, lead, selenium) • Sulfuric acid • Borax • Soda ash • Phosphates • pickle liquor (FeSO4) • TURCO II HTC Soap • Wet chemistry analytes
Neutralized and un-neutralized waste cyanide solution [Ref. 7].	<ul style="list-style-type: none"> • Cyanide

Overlapping or Adjacent or LOUs:

The following LOUs overlap or are adjacent to LOU 63:

Overlapping LOUs:

- LOU 59 (Storm Sewer System) – overlaps with the eastern boundary of LOU 63.

Adjacent LOUs:

- LOU 4 (Hardesty Chemical Site) – A portion of LOU 4 is located about 200 feet east (cross-gradient) of LOU 63.
- LOU 65c (Nevada Precast Concrete Products) – Located adjacent to (cross-gradient) of LOU 63.

LOUs 4 and 65c are cross-gradient to LOU 63; therefore these LOUs are not considered to affect LOU 63. As a result, the addition of other chemical classes to the proposed Phase B Analytical Plan for LOU 63 is not required.

For detailed information on the LOUs listed above, please refer to the specific LOU data packages.

Other LOUs Potentially Affecting Soils in LOU 63:

- LOU 59: The Storm Sewer System running along the eastern boundary of LOU 63 carried surface run-off and discharges from the southern portion of the property near LOUs 4, 25, 26, 41, and 65a. Potential releases from LOU 59 may have occurred that affected LOU 63; however, no releases have been documented. Known or potential chemical classes that are associated with all the above mentioned LOUs are consistent with those listed for LOU 63; therefore, the addition of other chemical classes to the Phase B analytical plan for LOU 63 is not required.

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
 Tronox Facility – Henderson, Nevada

For detailed information on these LOUs, please refer to the specific LOU data package.

Known or Potential Chemical Classes:

- Metals
- Wet chemistry analytes
- TPH DRO/ORO
- VOCs
- SVOCs

Known or Potential Release Mechanisms:

- Potential infiltration to subsurface soils and groundwater.
- Documented releases include the following:
 - Hydrocarbon releases from the diesel and waste oil USTs [Ref. 4].
 - Surface releases from truck washing activities [Ref. 4].
 - Minor seepage of liquid between vaults was observed in August 1991 [Ref. 4].
 - Routine sweeping or dumping of dry residues of bulk hauled materials onto the gravel-covered lease area [Ref. 4].
 - Wash water containing soap and trace amounts of oil, grease, and diesel were periodically discharged to the Storm Sewer System between March 1980 and 1988 and to the building pad between 1988 and 1991 [Ref. 4]. The discharge paths would have involved the Storm Sewer System, the Beta Ditch, and surface soils [Ref. 4].
 - Storm water run-on/run-off from the gravel-covered area would flow from the south towards a storm sewer drain located north-northeast of the former truck washing and maintenance facility.

Results of Historical Sampling:

- Several rounds of sampling were conducted:
 - In 1992, borings (at unspecified locations) were sampled to evaluate the USTs, and one groundwater well sample was tested for TPH-DRO, TPH-GRO, and TOC [Ref. 3].
 - In May 1993, wells M-92 (upgradient) and M-93 (located 100 feet downgradient) were sampled to evaluate this LOU. Samples were non-detect for TPH and BTEX [Ref. 3].
 - In April 1997, a soil boring was drilled through a concrete vault and one soil sample (SB7-1-1) was

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
 Tronox Facility – Henderson, Nevada

collected. In addition, sand from within all eight vaults was composited into one sample (S7-1-S) [Ref. 1].

- Groundwater monitoring wells M-92 and M-93, located within LOU 63, are routinely tested for total chromium, perchlorate, and TDS as part of routine groundwater monitoring program.
- Several BRC Phase II borings for Parcel F are located within and immediately surrounding this LOU to evaluate local soil conditions due to potential releases [Report in progress].

- Analytical results for the historical data are summarized in LOU 63 Tables 3, 4, and 5 [Ref. 2].

Did Historical Samples Address Potential Release?

- No. Historical borings were limited in depth and the constituents were tested and were not representative of the full extent of LOU 63; however, the soil samples collected by BRC will provided a more representative characterization of the area.

Summary of Phase A SAI:

Soil

- None specifically conducted for LOU 63. The closest boring (SA03) is approximately 200 feet south (upgradient) [Ref. 5]; therefore, this boring is not considered to be representative of soil conditions at this LOU.

Groundwater

- Well M-92 is located within LOU 63 but was not sampled specifically to evaluate this LOU [Ref. 5]. Since M-92 is located within the LOU, groundwater data for this well is presented in the data tables.

Analytical results for groundwater from the Phase A sampling event are summarized in LOU 63 Tables 1 and 2 and Tables 6 through 12 [Ref. 5] (see attached).

Are Phase A Sample Locations in “Worst Case” Areas?

- No

Is Phase B Investigation Recommended?

- Yes

Proposed Phase B Soil Investigation/Rationale:

LOU 63 is located within Parcel F which is being assessed by the BRC Phase B soil assessment. BRC is conducting shallow and deep soil sampling to assess soils at this LOU.

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
 Tronox Facility – Henderson, Nevada

Proposed Phase B Constituents List for Soils:

- Not applicable

Proposed Phase B Groundwater Investigation/Rationale:

- The Phase B groundwater investigation of LOU 63 consists of collecting groundwater samples from two locations to evaluate local groundwater conditions and as part of the Site-wide evaluation of constituent trends in groundwater.
 - Both wells (M-92 and M-93) to be sampled are located within the boundaries of LOU 63.
 - Both wells along with the analytical program to evaluate groundwater samples associated with LOU 63 are listed in **Table B – Groundwater Sampling and Analytical Plan for LOU 63.**

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
- Cyanide
- Organochlorine pesticides
- Radionuclides

Proposed Phase B Soil Gas Investigation/Rationale:

One soil gas sample will be collected to evaluate area conditions for the presence of vapor-phase VOCs in the vadose zone.

- Soil gas point SG34 is located within the boundary of LOU 63 as to investigate the system as a potential VOC source.

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 (by EPA TO-15)

References:

1. ENSR Corporation (ENSR), 1997, Phase II Environmental Conditions Assessment located at Kerr-McGee Chemical Corporation, Henderson, Nevada, August 7, 1997.

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
Tronox Facility – Henderson, Nevada

2. ENSR, 2005, Conceptual Site Model, Kerr-McGee Facility, Henderson, Nevada, ENSR, Camarillo, California, 04020-023-130, February 2005 and August 2005.
3. Kerr-McGee, 1996, Response to Letter of Understanding, Henderson, Nevada, October 1996.
4. Kleinfelder, 1993, Environmental Conditions Assessment, Kerr-McGee Chemical Corporation, Henderson, Nevada Facility, April 15, 1993 (Final).
5. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
Tronox Facility – Henderson, Nevada

LOU Figure

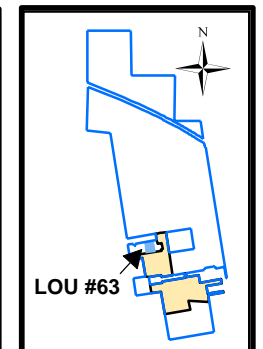
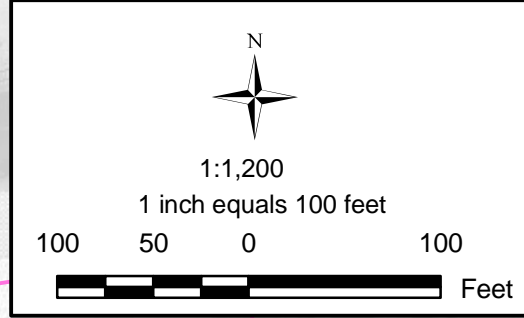


Note: LOU 63 is located within Parcel F. Shallow and deep soils are being investigated by BRC, independent of ENSR's Phase B Investigation.

LEGEND

- LOU of Interest
- LOU #59 Storm Drain System with manholes and sumps with flow direction
- LOU #60 Acid Drain System with manholes and sumps with flow direction
- Other LOU Boundary
- 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



DESIGNED BY:	G. Hels
DRAWN BY:	M. Scop
CHECKED BY:	G. Hels
APPROVED BY:	B. Ho

ENSR AECOM

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

SAMPLE LOCATIONS FOR LOU #63	
Phase B Area IV Source Area Investigation Tronox Facility Henderson, Nevada	
SCALE:	PROJECT NUMBER:
AS SHOWN	04020-023-430
DATE:	5/14/2008

FIGURE NUMBER:	1
SHEET NUMBER:	X

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
Tronox Facility – Henderson, Nevada

Sampling and Analytical Plan for LOU 63:

Note: There is no Table A for LOU 63
Table B – Groundwater Sampling and Analytical Plan for LOU 63

Grid Location	Location Area	Monitoring Well No.	Sample ID Number	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)	Total Cyanide (EPA 9012A)	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 4 (P-4) and ending with the southeastern-most grid covering Area 4 (Q-4).																
P-4	Parcel F	M-93	M-93	35.4 - 45.4	MCfg1	no	X	X	X	X	X		X	X	X	Located to serve as a downgradient stepout for LOUs 41 and 65; as an upgradient stepout for LOU 63; and for general Site coverage.
Q-4	Parcel F	M-92	M-92	34.9 - 44.9	MCfg1	yes	X	X	X	X	X		X	X	X	Located to serve as a downgradient stepout for LOUs 25, 41, 59, and 65; as an upgradient stepout for LOU 63; and for general Site coverage.
Number of Field Samples:							2	2	2	2	2	0	2	2	2	
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 isotopic Uranium and Thorium, plus Radium-226/228 (NDEP).																
(a) Complete list of wet chemistry parameters are shown on Table 1.																
TBD To be determined when well is constructed																
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 63
J.B. Kelly, Inc., Trucking Site
Tronox Facility – Henderson, Nevada

Soil and Groundwater Characterization Data

Summary of Available Data for LOU 63
J.B. Kelly, Inc., Trucking Site
Tronox Facility – Henderson, Nevada

LOU-specific analytes identified include:

- Wet chemistry analytes
- Metals (Phase A list)
- Perchlorate
- Hexavalent chromium
- Organochlorine Pesticides
- Radionuclides
- SVOCs
- VOCs
- TPH-DRO/ORO

The tables in **BOLD** below present Phase A data associated with these LOU specific analytes.

LOU 63 Table 1 – Groundwater Characterization Data – Wet Chemistry

LOU 63 Table 2 – Groundwater Characterization Data – Metals

LOU 63 Table 3 – Groundwater Characterization Data – Routine Monitoring

LOU 63 Table 4 – Groundwater Characterization Data - Historical

LOU 63 Table 5 – Groundwater Characterization Data - Historical

LOU 63 Table 6 – Groundwater Characterization Data – Organochlorine Pesticides (OCPs)

LOU 63 Table 7 – Groundwater Characterization Data – Organophosphorus Pesticides (OPPs)

LOU 63 Table 8 – Groundwater Characterization Data – PCBs

LOU 63 Table 9 – Groundwater Characterization Data- Perchlorate

LOU 63 Table 10 – Groundwater Characterization Data – Radionuclides

LOU 63 Table 11 – **Groundwater Characterization Data – SVOCs**

LOU 63 Table 12 – **Groundwater Characterization Data - VOCs**

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

**LOU 63 Table 1
Groundwater Characterization Data - Wet Chemistry**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID		M92	
Sample ID		M92	
Sample Date		11/29/2006	
Wet Chemistry Parameters	MCL² ug/L		Units
Total Dissolved Solids	5.00E+05 j	1850	mg/L
Total Suspended Solids	--	22.0 J	mg/L
Alkalinity (as CaCO3)	--	5.0 U	mg/L
Bicarbonate	--	80.0	mg/L
Total Alkalinity	--	80.0	mg/L
Ammonia (as N)	--	50.0 U	ug/L
MBAS	--	0.20 U	mg/L
Cyanide	2.00E+02	R	ug/L
pH (liquid)	--	7.4 J	none
Specific Conductance	--	1930	umhos/cm
Bromide	--	0.21 J	mg/L
Chlorate	--	3.2 J	mg/L
Chloride	2.50E+05	192	mg/L
Nitrate (as N)	1.00E+04	4.0	mg/L
Nitrite	1.00E+03	0.020 U	mg/L
ortho-Phosphate	--	5.0 U	mg/L
Sulfate	2.50E+05 j	992	mg/L
Total Organic Carbon	--	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 63 Table 2
Groundwater Characterization Data - Metals**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID:		M92	
Sample ID		M92-Z	
Sample Date		05/08/2007	
Metals	MCL ² ug/L		Unit
Aluminum	5.00E+01 j	32.6 U	ug/L
Antimony	6.00E+00	0.50 U	ug/L
Arsenic	1.00E+01	95.7	ug/L
Barium	2.00E+03	18.2 U	ug/L
Beryllium	4.00E+00	1.8 U	ug/L
Boron	7.30E+03 c	1820	ug/L
Cadmium	5.00E+00	0.057 U	ug/L
Calcium	--	155000	ug/L
Chromium (Total)	1.00E+02	15.1 J-	ug/L
Chromium-hexavalent	1.09E+02 c	15.9 J	ug/L
Cobalt	7.30E+02 c	0.32 J-	ug/L
Copper	1.30E+03 p	2.4 U	ug/L
Iron	3.00E+02 j	188 UJ	ug/L
Lead	1.50E+01 u	0.49 U	ug/L
Magnesium	1.50E+05 a	83500	ug/L
Manganese	5.00E+01 j	6.8 U	ug/L
Molybdenum	1.82E+02 c	18.7	ug/L
Nickel	7.30E+02 c	10.3 UJ	ug/L
Platinum	--	0.10 U	ug/L
Potassium	--	9650	ug/L
Selenium	5.00E+01	2.3 J	ug/L
Silver	1.00E+02 j	0.20 U	ug/L
Sodium	--	373000	ug/L
Strontium	2.19E+04 c	2760	ug/L
Thallium	2.00E+00	1.0 U	ug/L
Tin	2.19E+04 c	0.23 J	ug/L
Titanium	1.46E+05 c	4.9 U	ug/L
Tungsten	--	1.8 UJ	ug/L
Uranium	3.00E+01	8.3 J+	ug/L
Vanadium	3.65E+01 c	32.0 U	ug/L
Zinc	5.00E+03 j	2.0 UJ	ug/L
Mercury	2.00E+00	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.
 - (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
 - (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

**LOU 63 Table 3
Groundwater Characterization Data - Routine Monitoring**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Well ID	Date	Depth to water (ft)	Perchlorate mg/L	Qual	MCL ² ug/L	Total Chromium mg/L	Qual	MCL ² ug/L	TDS mg/L	Qual	MCL ² ug/L	Nitrate (as N) mg/L	Qual	MCL ² ug/L	Chlorate mg/L	Qual	MCL ² ug/L
M-92	2/3/2006	36.67	0.89	d	1.80E+01 a,m	<0.01	ud	1.00E+02			5.00E+05 j			1.00E+04			--
M-92	5/4/2006	36.65	0.62	d	1.80E+01 a,m	<0.01	ud	1.00E+02	1980		5.00E+05 j			1.00E+04			--
M-92	8/2/2006	36.95	0.567	d	1.80E+01 a,m	<0.01	ud	1.00E+02	1670		5.00E+05 j			1.00E+04			--
M-92	11/1/2006	36.96	0.676	d	1.80E+01 a,m	<0.01	ud	1.00E+02	1920		5.00E+05 j			1.00E+04			--
M-92	1/31/2007	37.21	0.674		1.80E+01 a,m	<0.02	U	1.00E+02	1990		5.00E+05 j			1.00E+04			--
M-92	5/3/2007	37.24	0.695	J	1.80E+01 a,m	<0.02	U	1.00E+02	1920	J	5.00E+05 j			1.00E+04			--
M-92	8/1/2007	37.77	0.752		1.80E+01 a,m	<0.02	U	1.00E+02	1990		5.00E+05 j			1.00E+04			--

Notes:

1. ENSR, 2007, Quarterly Performance Report for Remediation Systems, Tronox LLC, Henderson, Nevada, July, September 2007.
2. U.S. EPA Maximum Contaminant Level (MCL) values unless noted
 - (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.

< = 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

Laboratory Qualifiers:

d = the sample was diluted

u = the analyte was not detected above the sample reporting limit

ud = the sample was diluted and was not detected above the sample reporting limit

Validation Qualifiers:

J = the result is an estimated quantity

U = the analyte was analyzed for, but was not detected above the sample reporting limit

LOU 63 Table 4
Groundwater Characterization Data - Historical

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sample Analyzed for: Total Organic Carbon (TOC) & TPH					
Sample Matrix: Sample #1-groundwater from existing well H-38					
Sample Analysis by: Met-Chem West, Las Vegas, Nevada					
SAMPLE #	Date	Sample Depth (ft bgs)	TOC (mg/l) EPA 415.1	TPH (mg/l) EPA 8015-M	
				TPH-d	TPH-g
Sample #1	1/9/1992	GW Elevation	3.3	---	---
MCL¹ (ug/L)			--	--	--

Sample Analyzed for: BTEX &TPH							
Sample Matrix: Groundwater (Well Samples)							
Sample Analysis by: Met-Chem West, Las Vegas, Nevada							
SAMPLE #	Date	BTEX (mg/l) EPA Method: 602/604, 8015-M				TPH (mg/l) 8015-M	
		Benzene	Toluene	Ethyl- benzene	Total Xylene	TPH-d	TPH-g
H-38	4/21/1992	0.048	<0.005	0.114	<0.020	<5.0	<10
H-39	4/29/1992	<0.009	<0.005	<0.010	<0.020	NA	NA
Detection Limit		0.009	0.005	0.010	0.020	5.0	10.0
MCL¹ (ug/L)		5.00E+00	1.00E+03	7.00E+02	1.00E+04	--	--

Sample Analyzed for: TPH extractable as diesel & BTEX						
Sample Matrix: Groundwater						
Sample Analysis by: Alpha Analytical, Inc.						
SAMPLE #	Date	BTEX (ug/l) EPA Method: 624/8240				8015-M
		Benzene	Toluene	Ethyl- benzene	Total Xylene	TPH-d (mg/l)
M-92	5/6/1993	<1.0	<1.0	<1.0	<1.0	<0.5
M-93	5/6/1993	<1.0	<1.0	<1.0	<1.0	<0.5
Detection Limit		1.0	1.0	1.0	1.0	0.5
MCL¹ (ug/L)		5.00E+00	1.00E+03	7.00E+02	1.00E+04	--

Notes:

µg/l = micrograms per liter

mg/l = milligrams per liter

TPH-gas = Total Petroleum Hydrocarbons, gasoline range (C₁₁ -C₂₁)

TPH-d = Total Petroleum Hydrocarbons, diesel range (C₄ -C₁₀)

TPH = Total Petroleum Hydrocarbons, Modified EPA Method 8015

TOC =Total Organic Carbon, EPA Method 415.1

NA = Not Analyzed

ft bgs = feet below ground surface

BTEX = Benzene, Toluene, Ethylbenzene, Total Xylene

8015-M = Modified EPA Method 8015

< = not detected above the respective Detection Limit

--- = Either no data was obtained or was not analyzed for the respective constituent.

Source: Kerr-McGee, Response to LOU Comments, 1996.

**LOU 63 Table 5
Soil Characterization Data - Historical**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sample Analyzed for:		Total Organic Carbon (TOC) & TPH			
Sample Matrix:		Samples #2-25-soil			
Sample Analysis by:		Met-Chem West, Las Vegas, Nevada			
SAMPLE #	Date	Sample Depth (ft bgs)	TOC (mg/l) EPA 415.1	TPH (mg/l) EPA 8015-M	
				TPH-d	TPH-g
Sample #2	1/8/1992	15	---	<10	<10
Sample #3	1/8/1992	25	---	<10	<10
Sample #4	1/8/1992	35	---	<10	<10
Sample #5	1/8/1992	37	---	<10	<10
Sample #6	1/8/1992	15	---	<10	<10
Sample #7	1/9/1992	25	---	<10	<10
Sample #8	1/9/1992	35	---	<10	<10
Sample #9	1/9/1992	37	---	<10	<10
Sample #10	1/9/1992	15	---	<10	<10
Sample #11	1/9/1992	25	---	<10	<10
Sample #12	1/9/1992	35	---	<10	<10
Sample #13	1/9/1992	37	---	<10	<10
Sample #14	1/9/1992	15	---	<10	<10
Sample #15	1/9/1992	25	---	<10	<10
Sample #16	1/9/1992	35	---	<10	<10
Sample #17	1/9/1992	37	---	<10	<10
Sample #18	1/9/1992	15	---	<10	<10
Sample #19	1/10/1992	25	---	<10	<10
Sample #20	1/10/1992	35	---	<10	<10
Sample #21	1/10/1992	37	---	<10	<10
Sample #22	1/10/1992	15	---	<10	<10
Sample #23	1/10/1992	25	---	<10	<10
Sample #24	1/10/1992	35	---	<10	<10
Sample #25	1/10/1992	37	---	<10	<10
PRG ² (mg/kg)			--	1.00E+02 (wv)	1.00E+02 (wv)

**LOU 63 Table 5 (continued)
Soil Characterization Data - Historical**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sample Analyzed for:		Metals, TPH, pH and VOCs											
Sample Matrix:		Soil, one sample and one composite sample											
Sample Analysis by:		LAS Laboratories, Las Vegas, Nevada											
SAMPLE #	Date	Metals (mg/kg) EPA Method 6010						TPH-d (mg/l) EPA 8015-M	pH EPA 9045	VOCs (µg/kg) EPA 8240			
		As	Ba	Cd	Cr Total	Pb	All Others			Toluene	Acetone	1, 1, 1-TCA	All Others
S7-1-S	4/8/1997	10.5	516 ¹	0.8	42.9	257	ND	<90	9.09	1.1J	<10	<5	ND
SB7-1-1	4/8/1997	4.9 ¹	187 ¹	<0.4	19.3	9.9	ND	<30	8.5	<5	13	1.6	ND
Detection Limit		0.6	0.2	0.4	0.2	0.4	various	30	0.1	5	10	5	see below
PRG² (mg/kg)		1.59E+00	6.66E+04	4.50E+02	4.48E+02	8.00E+02	NA	1.00E+02 (w)	--	2.20E+03 (mm)	5.43E+04	6.90E+03 (mm)	NA

Notes:

mg/kg = milligrams per kilogram

µg/kg = micrograms per kilogram

--- = Either no data was obtained or was not analyzed for the respective constituent.

< = not detected above the respective PQL

1. Relative Percent Difference (RPD) for duplicate analysis exceeded acceptable quality control limits.

2. U.S. EPA, Region 9, Preliminary Remediation Goals (PRGs) for industrial soil (October, 2004)

-1 = soil sample collected at one foot below ground surface

As = Arsenic

mg/l = milligrams per liter

Ba = Barium

ND = Not determined

Cd = Cadmium

Pb = Lead

Cr = Chromium

-S = surface soil sample

ft bgs = feet below ground surface

NA = Not applicable

TOC = Total Organic Carbon, EPA Method 415.1

TPH = Total Petroleum Hydrocarbons, Modified EPA Method 8015

TPH-d = Total Petroleum Hydrocarbons, diesel range (C4 -C10), EPA 8015-M

TPH-gas = Total Petroleum Hydrocarbons, gasoline range (C₁₁ -C₂₁)

VOCs = Volatile organic compounds

Source: Kerr-McGee, Response to LOU Comments, 1996; and ENSR, 1997, Phase II ECA.

**LOU 63 Table 5 (continued)
Soil Characterization Data - Historical**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

*** Analytes and detection limits for Metals that were non-detect (mg/kg)**

Analyte	Reporting Limit (RL)	Analyte	RL	Analyte	RL	Analyte	RL
Arsenic	0.6	Cadmium	0.4	Lead	0.4	Silver	0.4
Barium	0.2	Chromium, total	0.2	Mercury (Method 7471)	0.09	Selenium	0.8

*** Analytes and detection limits for VOC's that were non-detect (µg/kg)**

Analyte	RL	Analyte	RL	Analyte	RL
Chloromethane	5	Chloroform	5	1,1,2-Trichloroethane	5
Vinyl Chloride	5	2-Hexanone	10	Tetrachloroethene (PCE)	5
Bromomethane	5	1,1,1-Trichloroethane	5	Dibromochloromethane	5
Chloroethane	5	Carbon Tetrachloride	5	Chlorobenzene	5
Trichlorofluoromethane	5	1,2-Dichloroethane	5	Ethyl benzene	5
Acetone	10	Benzene	5	m, p-Xylenes	5
1,1-Dichloroethene	5	Trichloroethene (TCE)	5	o-Xylene	5
Carbon Disulfide	5	1,2-Dichloropropane	5	Styrene	5
Methylene Chloride	5	Bromodichloromethane	5	Bromoform	5
trans-1,2-Dichloroethene	5	2-Chloroethylvinyl ethe	20	1,1,2,2-Tetrachloroethane	5
Vinyl Acetate	10	4-Methyl-2-Pentanone	10	1,3-Dichlorobenzene	5
1,1-Dichloroethane	5	cis-1,3-Dichloropropen	5	1,4-Dichlorobenzene	5
2-Butanone	10	Toluene	5	1,2-Dichlorobenzene	5
cis-1,2-Dichloroethene	5	trans-1,3-Dichloropropi	5		

**LOU 63 Table 6
Groundwater Characterization Data - Organochlorine Pesticides (OCPs)**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID		M92	
Sample ID		M92	
Sample Date		11/29/2006	
Organochlorine Pesticides	MCL ² ug/L		Unit
4,4'-DDD	2.80E-01 c	0.050 U	ug/L
4,4'-DDE	1.98E-01 c	0.050 U	ug/L
4,4'-DDT	1.98E-01 c	0.050 U	ug/L
Aldrin	4.00E-03 c	0.050 U	ug/L
Alpha-BHC	1.10E-02 c, (bbb)	0.050 U	ug/L
Alpha-chlordane	2.00E+00 (l)	0.050 U	ug/L
Beta-BHC	3.74E-02 c, (bbb)	0.050 U	ug/L
Delta-BHC	1.10E-02 c, (z)	0.050 U	ug/L
Dieldrin	4.20E-03 c, (z)	0.050 U	ug/L
Endosulfan I	2.19E+02 c, (aa)	0.050 U	ug/L
Endosulfan II	2.19E+02 c, (aa)	0.050 U	ug/L
Endosulfan Sulfate	2.19E+02 c, (aa)	0.050 U	ug/L
Endrin	2.00E+00	0.050 U	ug/L
Endrin Aldehyde	1.09E+01 c, (k)	0.050 U	ug/L
Endrin Ketone	1.09E+01 c, (k)	0.050 U	ug/L
Gamma-BHC (Lindane)	2.00E-01	0.050 U	ug/L
Gamma-Chlordane	2.00E+00 (l)	0.050 U	ug/L
Heptachlor	4.00E-01	0.050 U	ug/L
Heptachlor Epoxide	2.00E-01	0.050 U	ug/L
Methoxychlor	4.00E+01	0.10 U	ug/L
Tech-Chlordane	2.00E+00 (l)	0.50 U	ug/L
Toxaphene	3.00E+00	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 (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
(bbb) BHC listed as HCH in the PRG table.
(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 63 Table 7
Groundwater Characterization Data - Organophosphorus
Pesticides (OPPs)

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID		M92	
Sample ID		M92	
Sample Date		11/29/2006	
OPPs	MCL ² ug/L		Unit
Azinphos-methyl	--	2.5 UJ	ug/L
Bolstar	--	1.0 U	ug/L
Chlorpyrifos	1.09E+02 c	1.0 U	ug/L
Coumaphos	--	1.0 U	ug/L
Demeton-O	1.46E+00 c,(cc)	1.0 U	ug/L
Demeton-S	1.46E+00 c,(cc)	1.0 U	ug/L
Diazinon	3.28E+01	1.0 U	ug/L
Dichlorvos	2.32E-01	1.0 U	ug/L
Dimethoate	7.30E+00	1.0 U	ug/L
Disulfoton	1.46E+00	0.50 U	ug/L
EPN	3.65E-01	1.2 U	ug/L
Ethoprop	--	0.50 U	ug/L
Ethyl Parathion	9.12E+00 c,(tt)	1.0 U	ug/L
Famphur	--	1.0 U	ug/L
Fensulfothion	--	2.5 U	ug/L
Fenthion	9.10E+00 c,(ff)	2.5 U	ug/L
Malathion	7.30E+02	1.2 U	ug/L
Merphos	1.09E+00	5.0 U	ug/L
Methyl parathion	9.12E+00	4.0 U	ug/L
Mevinphos	--	6.2 U	ug/L
Naled	7.30E+01	1.0 UJ	ug/L
Phorate	7.30E+00	1.2 U	ug/L
Ronnel	1.82E+03	10 U	ug/L
Stirphos	--	3.5 U	ug/L
Sulfotep	1.82E+01	1.5 U	ug/L
Thionazin	--	1.0 U	ug/L
Tokuthion	--	1.6 U	ug/L
Trichloronate	--	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 (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
(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 63 Table 8
Groundwater Characterization Data - PCBs

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹	
Well ID		M92	
Sample ID		M92	
Sample Date		11/29/2006	
PCBs	MCL ² ug/L		Unit
Aroclor-1016	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1221	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1232	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1242	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1248	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1254	5.00E-01 (bb)	0.10 U	ug/L
Aroclor-1260	5.00E-01 (bb)	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 63 Table 9
Groundwater Characterization Data - Perchlorate**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Well ID Number	Sample ID	Sample Date	Perchlorate	Units	MCL¹ ug/L	Sampling Program
M92	M92	11/29/2006	610	ug/L	1.80E+01 a,(m)	Ph A ²

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 63 Table 10
Groundwater Characterization Data - Radionuclides**

J.B. Kelley, Inc. Trucking Site
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	
		TW PRG ^{1,2}	8.16E-04	4.58E-02	1.59E-01	5.23E-01	4.71E-01	6.74E-01	6.63E-01	5.47E-01	
Well ID Number	Sample ID	Date									Sampling Program
M92	M92-Z	05/08/2007	0.241 J	0.736 J-	0.00575 U	0.0354 B	0.0198 U	3.01	0.0466 J	1.94	Ph A ³

Notes:

1. Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
2. USEPA, 2004. Radionuclide Toxicity and Preliminary Remediation Goals (PRGs) for Superfund. <http://epa-prgs.ornl.gov/radionuclides/download.shtml>. August 4, 2004. Soil values are the outdoor worker values; water values are the tapwater values. For radionuclides with decay chains, the PRG for the decay chain was used.
3. ENSR, 2007, Phase A Source Area Investigation Results, Tronox Facility, Henderson, Nevada, September 2007.

**LOU 63 Table 11
Groundwater Characterization Data - SVOCs**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program				Ph A ¹
Well No.				M92
Sample ID				M92
Sample Date				11/29/2006
SVOCs	Analytic Method	MCL ² ug/L		ug/L
1,4-Dioxane	non-SIM	6.11E+00	c	10 U
2-Methylnaphthalene	non-SIM	6.20E+00	c,(jj)	10 U
2-Methylnaphthalene	SIM	6.20E+00	c,(jj)	
Acenaphthene	non-SIM	3.65E+02	c	10 U
Acenaphthene	SIM	3.65E+02	c	
Acenaphthylene	non-SIM	3.65E+02	c,(pp)	10 U
Acenaphthylene	SIM	3.65E+02	c,(pp)	
Anthracene	non-SIM	1.83E+03	c	10 U
Anthracene	SIM	1.83E+03	c	
Benz(a)anthracene	non-SIM	9.21E-02	c	10 U
Benz(a)anthracene	SIM	9.21E-02	c	
Benzo(a)pyrene	non-SIM	2.00E-01		10 U
Benzo(a)pyrene	SIM	2.00E-01		
Benzo(b)fluoranthene	non-SIM	9.21E-02	c	10 U
Benzo(b)fluoranthene	SIM	9.21E-02	c	
Benzo(g,h,i)perylene	non-SIM	1.83E+02	c,(w)	10 U
Benzo(g,h,i)perylene	SIM	1.83E+02	c,(w)	
Benzo(k)fluoranthene	non-SIM	9.21E-01	c	10 U
Benzo(k)fluoranthene	SIM	9.21E-01	c	
bis(2-Ethylhexyl)phthalate	non-SIM	6.00E+00		3.2 J
Butyl benzyl phthalate	non-SIM	7.30E+03	c	10 U
Chrysene	non-SIM	9.21E+00	c	10 U
Chrysene	SIM	9.21E+00	c	
Dibenz(a,h)anthracene	non-SIM	9.21E-03	c	10 U
Dibenz(a,h)anthracene	SIM	9.21E-03	c	
Diethyl phthalate	non-SIM	2.92E+04	c	10 U
Dimethyl phthalate	non-SIM	3.65E+05	c	10 U
Di-N-Butyl phthalate	non-SIM	3.65E+03	c	10 U
Di-N-Octyl phthalate	non-SIM	1.46E+03	c	10 U
Fluoranthene	non-SIM	1.46E+03	c	10 U
Fluoranthene	SIM	1.46E+03	c	
Fluorene	non-SIM	2.43E+02	c	10 U
Fluorene	SIM	2.43E+02	c	
Hexachlorobenzene	non-SIM	1.00E+00		10 U
Hexachlorobenzene	SIM	1.00E+00		
Indeno(1,2,3-cd)pyrene	non-SIM	9.21E-02	c	10 U
Indeno(1,2,3-cd)pyrene	SIM	9.21E-02	c	
Naphthalene	non-SIM	6.20E+00	c	5.0 U
Naphthalene	non-SIM	6.20E+00	c	10 U
Naphthalene	SIM	6.20E+00	c	
Nitrobenzene	non-SIM	3.40E+00	c	10 U
Octachlorostyrene	non-SIM	--	c	10 U

**LOU 63 Table 11 (continued)
Groundwater Characterization Data - SVOCs**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program			Ph A ¹
Well No.			M92
Sample ID			M92
Sample Date			11/29/2006
SVOCs	Analytic Method	MCL ² ug/L	ug/L
Phenanthrene	non-SIM	1.80E+03 (n)	10 U
Phenanthrene	SIM	1.80E+03 (n)	
Pyrene	non-SIM	1.83E+02 c	10 U
Pyrene	SIM	1.83E+02 c	
Pyridine	non-SIM	3.65E+01 c	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 (c) Equal to the USEPA Region 9 Preliminary Remediation Goals (PRGs) for tapwater (October, 2004).
 - (jj) Value for naphthalene used as surrogate for 2-methylnaphthalene based on structural similarities.
 - (pp) Value for acenaphthene used as surrogate for acenaphthylene 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 63 Table 12
Groundwater Characterization Data - VOCs**

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹
Well ID		M92
Sample ID		M92
Sample Date		11/29/2006
VOCs	MCL ² ug/L	ug/L
Naphthalene	6.20E+00 c	5.0 U
1,1,1,2-Tetrachloroethane	4.32E-01 c	5.0 U
1,1,1-Trichloroethane	2.00E+02	5.0 U
1,1,2,2-Tetrachloroethane	5.00E+00	5.0 U
1,1,2-Trichloroethane	5.00E+00	5.0 U
1,1-Dichloroethane	8.11E+02 c	5.0 U
1,1-Dichloroethene	7.00E+00	14
1,1-Dichloropropene	3.95E-01 c,gg	5.0 U
1,2,3-Trichlorobenzene	7.16E+00 c,hh	5.0 U
1,2,3-Trichloropropane	5.60E-03 c,yy	5.0 U
1,2,4-Trichlorobenzene	7.00E+01	5.0 U
1,2,4-Trimethylbenzene	1.23E+01	5.0 U
1,2-Dibromo-3-chloropropane	2.00E-01	5.0 U
1,2-Dichlorobenzene	6.00E+02	5.0 U
1,2-Dichloroethane	5.00E+00	5.0 U
1,2-Dichloropropane	5.00E+00	5.0 U
1,3,5-Trimethylbenzene	1.23E+01 c	5.0 U
1,3-Dichlorobenzene	1.83E+02 c	5.0 U
1,3-Dichloropropane	1.22E+02 c	5.0 U
1,4-Dichlorobenzene	7.50E+01	0.76 J
2,2-Dichloropropane	1.65E-01 c,ii	5.0 U
2-Butanone	6.97E+03 c	10 U
2-Chlorotoluene	1.22E+02 c	5.0 U
2-Hexanone	2.00E+03 c,nn	10 UJ
2-Methoxy-2-methyl-butane	--	5.0 U
4-Chlorotoluene	1.22E+02 c,vv	5.0 U
4-Isopropyltoluene	--	5.0 U
4-Methyl-2-pentanone	1.99E+03 c	10 U
Acetone	5.48E+03 c	10 U
Benzene	5.00E+00	5.0 U
Bromobenzene	2.03E+01 c	5.0 U
Bromochloromethane	1.81E-01 c,qq	5.0 U
Bromodichloromethane	8.00E+01 r	5.0 U
Bromoform	8.00E+01 r	5.0 U
Bromomethane	8.66E+00 c	10 UJ
Carbon tetrachloride	5.00E+00	5.0 U
Chlorobenzene	1.00E+02 c,o	5.0 U
Chloroethane	4.64E+00	5.0 UJ
Chloroform	8.00E+01 r	30
Chloromethane	1.58E+02 c	5.0 UJ
cis-1,2-Dichloroethene	7.00E+01	5.0 U
cis-1,3-Dichloropropene	3.95E-01 c,gg	5.0 U
Dibromochloromethane	8.00E+01 r	5.0 U
Dibromomethane	6.08E+01 c,xx	5.0 U
Dichlorodifluoromethane	3.95E+02 c	5.0 UJ
Ethyl t-butyl ether	1.10E+01 c,kk	5.0 U
Ethylbenzene	7.00E+02	5.0 U
Ethylene dibromide	--	5.0 U
Hexachlorobutadiene	8.62E-01 c	5.0 U

LOU 63 Table 12 (continued)
Groundwater Characterization Data - VOCs

J.B. Kelley, Inc. Trucking Site
Tronox Facility - Henderson, Nevada

Sampling Program		Ph A ¹
Well ID		M92
Sample ID		M92
Sample Date		11/29/2006
VOCs	MCL ² ug/L	ug/L
isopropyl ether	--	5.0 U
Isopropylbenzene	6.58E+02 c,zz	5.0 U
Methyl tert butyl ether	2.00E+01 a,uu	5.0 U
Methylene chloride	5.00E+00	5.0 U
N-Butylbenzene	2.43E+02 c	5.0 U
N-Propylbenzene	2.43E+02 c	5.0 U
sec-Butylbenzene	2.43E+02 c	5.0 U
Styrene	1.00E+02	5.0 U
t-Butyl alcohol	--	10 UJ
tert-Butylbenzene	2.43E+02 c	5.0 U
Tetrachloroethene	5.00E+00	5.0 U
Toluene	1.00E+03	5.0 U
trans-1,2-Dichloroethylene	1.00E+02	5.0 U
trans-1,3-Dichloropropene	--	5.0 U
Trichloroethene	5.00E+00	3.8 J
Trichlorofluoromethane	--	5.0 UJ
Vinylchloride	2.00E+00	5.0 UJ
Xylene (Total)	1.00E+04	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.
(yy) PRG table (c) lists both cancer and non-cancer endpoint-based values. The cancer endpoint-based values were selected, as the cancer endpoint-based values are lower than the noncancer endpoint-based values.
(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.
(zz) Isopropyl benzene is listed as cumene (isopropylbenzene) in the PRG table.
(uu) NDEP, 1998. Oxygenated Fuel Corrective Action Guidance. Draft. October, 12 1998. URL [http://ndep.nv.gov/bca/mtbe_doc.htm].

LOU 63 Table 13
Notes for Phase A Data Tables

J.B. Kelley, Inc. Trucking Site
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.
--	PRG not established