



January 9, 2011

Las Vegas Paving  
4420 South Decatur Blvd.  
Las Vegas, NV 89103

**Attn:** Mr. Dan Peressini

**Ref:** Damaged HDPE Process Lines  
Tronox Inc.  
560 West Lake Mead Parkway  
Henderson, NV 89015

Dear Mr. Perisini:

Earth Resource Group (ERG) is pleased to submit this report documenting the process water release and results of the soil and water sampling conducted at the above-referenced site. The soil and water sampling was performed to determine the potential impact of the subsurface soil resulting from a front loader damaging high-density polyethylene (HDPE) process lines at the facility.

## **1.0 SITE DESCRIPTION AND BACKGROUND**

The site (Tronox) is located at 560 West Lake Mead Parkway (Figure A) in Henderson Nevada and is dedicated to the production of electrolytic chemicals. The facility produces electrolytic manganese dioxide, used in the manufacture of alkaline batteries; elemental boron, a component of automotive safety igniters; and boron trichloride, used in the pharmaceutical and semiconductor industries and in the manufacture of high-strength boron fibers for products including sporting equipment and aircraft parts. As part of an EPA mandated site cleanup several areas of the facility are undergoing demolition and contaminated soil over excavation and disposal. Earth Resource Group was retained to determine the potential impact of surrounding soil from the water that leaked from three plant process lines.

### **1.1 GENERAL SITE GEOLOGY**

The impacted and surrounding soils on the Tronox site consist primarily of transported and/or disturbed overburden ranging from silty sands to sandy gravel material. The underlying native soil consists of alluvial deposits, cemented gravels and caliche.

## 2.0 PROCESS LINES RUPTURE EVENT

On Wednesday December 8, 2010 at approximately 4:45 pm a Las Vegas Paving (LVP) front end loader damaged three HDPE process lines at the location described below. The damage occurred during the removal of the protective steel (trench) plates above the underground process lines. The site of the spill is located on the northern part of the Tronox facility with GPS coordinates of N 36 02.923 W 115 00.057 (+/- 10 feet).

- LVP immediately notified Northgate personnel of the ruptured process lines. Northgate personnel in turn notified the appropriate Tronox personnel.
- Initial response actions included notification, spill containment (i.e. placement of earthen berms), coordination with Tronox personnel, shutting off the return water pipeline, collection of pH measurements of the process water fluids (up to pH of 12.5 as measured by a Tronox employee; however, it should be noted that these were field measurements collected with an un-calibrated field meter in order to make field decisions regarding health and safety procedures), exposing the damaged pipes and mobilization of personnel and resources.
- ERG employee Steve Schafer (already working onsite at Unit 2) was requested to come directly to the location of the damaged process lines and was asked for recommendations (by site superintendent Louis Spahn) on how to proceed. ERG informed the onsite person in charge for LVP Mr. Louis Spahn that all work repairing the lines should stop immediately (since exact water chemistry was not known), the work area should be caution taped off and evacuated until properly trained personnel with the appropriate level of PPE arrived. ERG provided Mr. Spahn with the emergency number for H2O Environmental (an emergency response company) and Tap Master an HDPE line repair company.
- At approximately 7:00 pm H2O Environmental arrived onsite at LVP's request to provide assistance with properly trained workers and appropriate PPE to begin excavating the damaged lines in order to facilitate the line repairs. H2O also provided a vacuum truck to remove accumulated process water fluids to the extent practical. The accumulated process water was transferred from the vacuum truck to Tronox lined pond # MN-1. ERG handed over further project control at approximately 7:45 pm to Dave Breault the Environmental Division Manager for Las Vegas Paving. The damaged pipes were uncovered and prepared for repair by LVP personnel using HDPE fusion welding. LVP also notified NDEP of the release via the NDEP hotline since exact water chemistry was unknown at the time the release occurred.
- Northgate and LVP personnel mapped out the pathways and accumulation areas of the process water release (See Figure 2). Northgate personnel collected field pH measurements of fluid in accumulation areas.
- LVP made all HDPE fusion repairs in close coordination with Tronox personnel. Tronox's line break and lock out/tag out procedures were implemented and followed.
- The HDPE fusion repairs were completed at 1:15 am on 12/9/10.

## 3.0 Process Wastewater Spill Process & Line Descriptions

### **Line #1: (4 in. nominal diameter)**

Source/Destination: This line carries wastewater from WC-East Pond to the Wastewater Treatment Plant (WWTP).

Contents: WC-East Pond receives non-hazardous wastewater relatively high in Total Dissolved Solids (TDS), (e.g. sodium, sulfates, calcium, magnesium, chlorides, trace manganese) and has an approximate pH range of 9 – 11.

**Line #2: (3 in. nominal diameter)**

Source/Destination: This line carries wastewater from the WWTP to WC-West. The WWTP recovers distillate (distilled water) from the wastewater and concentrates the solids to reduce wastewater volume. Therefore, this stream is chemically similar to that of Line #1 but has a higher solids concentration.

Contents: This stream is chemically similar to that of Line #1 but has a higher solids concentration. The approximate pH range of this stream is 9-11.

**Line #3: (4 in . nominal diameter)**

Source/Destination: This line carries non-hazardous process wastewater from the Steam Plant and Unit 6 production building to WC-East.

Contents: Process wastewater includes the following:

- a.) Water softener purge water,
- b.) Boiler blow down,
- c.) Non-contact cooling water blow down and
- d.) Product Thickener Overflow (wash water from manganese processing, 5-6 pH).

Wastewater in this line contains (TDS) (e.g. sodium, sulfates, calcium, magnesium & chlorides), and trace manganese and has an approximate pH range of 9 – 12.

**Estimated contributions from each line to the release:**

Line #1: ~ 5-10%

Line #2: ~ 1-5%

Line #3: ~ 85%

The total volume of liquid released (per Jack Luna Production Manager – Tronox) was approximately 2,000 gallons and covered an area of approximately 28,371 square feet. Process water from the release did not extend beyond the facility property.

**3.1 SOIL AND WATER SAMPLING:** On December 9, 2010 one soil sample was obtained from the area by Dave Breault with LVP, just east of the release/line repair site (See Photo Log Photo 4 and Figure 4). The sample was collected using decontaminated soil scoops and placed in laboratory-supplied glass jars. Recovered samples were sealed, labeled, preserved on ice, and delivered to VERITAS Laboratories Inc. an NDEP-approved laboratory using chain-of-custody protocols. The soil sample was analyzed for total extractable petroleum hydrocarbons (TPH) using EPA method 8015 Modified, Volatile Organic Compounds by 8260B, RCRA 7 Metals by EPA 6010B and for pH using Method SM 4500H+B.

On December 8, 2010 one water sample (collected by Patrick Ferringer with Northgate Environmental and provided to Mike Skromyda with Tronox) was obtained from the area north of the spill and just south of the

ponds (See Figure 2). The sample was collected directly into four 500 ml plastic sterilized bottles. Recovered samples were sealed, labeled, preserved on ice, and delivered to Silver State Analytical Laboratories Inc. an NDEP-approved laboratory using chain-of-custody protocols. The water sample was analyzed for pH using Method SM 4500H+B, RCRA 8 Metals and Total Manganese by EPA Method 200.7 and for Total Dissolved Solids (TDS) by SM2540C.

#### **4.0 ANALYTICAL RESULTS**

**4.1** Soil sample analytical results from sample **S-1** indicate TPH and Volatile Organic Compounds were not detected. The analysis of soil sample **S-1** for RCRA 7 Metals by EPA 6010B indicated Arsenic at 4.8 mg/kg, Barium at 250 mg/kg, Cadmium at 0.97 mg/kg, Chromium at 35 mg/kg, Lead at 75 mg/kg, Selenium and Silver were not detected. Sample S-1 analysis indicated a pH of 11 using Method SM 4500H+B.

The laboratory analytical reports are included in Appendix C.

**4.2** Water sample analytical results from sample **TRX Process Line** indicated a pH of 11.72 and total dissolved solids were 15,940 mg/L. The analysis for RCRA 8 Metals by EPA 200.7 indicated Arsenic was not detected (ND), Barium at .05mg/L, Cadmium-ND, Chromium-ND, Lead- ND, Manganese .30 mg/L, Mercury- ND, Selenium and Silver were also not detected. The laboratory analytical reports are included in Appendix C.

#### **5.0 RECOMMENDATIONS**

Based on the review of the information listed in Section 3 above and the results of the soil and water sampling performed on December 8 and 9, 2010 ERG finds that no soil or groundwater was environmentally impacted due to the process line leak on December 8, 2010, and no further action is recommended.

#### **6.0 LIMITATIONS**

These professional services have been performed by ERG using the degree of care and skill ordinarily exercised under similar circumstances by reputable environmental consultants practicing in this or similar localities. No other warranty, expressed or implied, is made. The professional services performed do not guarantee compliance with Federal, state, or local laws. This report is not a bidding document, and any contractor or consultant reviewing this report must draw his own conclusions regarding further investigation or remediation deemed necessary for the project. The behavior of subsurface contaminants is a complex phenomenon involving geochemistry, hydrogeology, and the geotechnical sciences. ERG's conclusions regarding the potential for subsurface contamination are based solely upon information cited in this report. The analyses and conclusions in this report are based upon data obtained from this assessment. The nature and extent of variations beyond this assessment may not become evident until further exploration. If variations then appear evident, it may be necessary to re-evaluate the conclusions of this report. The professional services provided and judgment rendered on this project meet current professional standards and do not carry any other guarantee.

ERG accepts no responsibility or liability to any person or organization for any claim, for loss or damage (including attorney's fees) caused, or believed to be caused, directly or indirectly by: conditions not revealed by the laboratory analyses performed; failure to perform other chemical analyses or utilize different test methods or equipment; or failure to locate or install additional sample points, test pits, soil borings, or monitoring wells.

*"I, Steve Schafer, hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of our knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."*

If you have any questions or require additional information, please contact us at (702) 682-5329.

Respectfully Submitted,  
**EARTH RESOURCE GROUP, INC.**



Steve M. Schafer, C.E.M.

Project Manager

EM-1110 Exp. 12/2012

Att: Appendix A – Figures  
Appendix B – Project Photos  
Appendix C – Laboratory Analytical Reports

**APPENDIX A**  
**FIGURES**

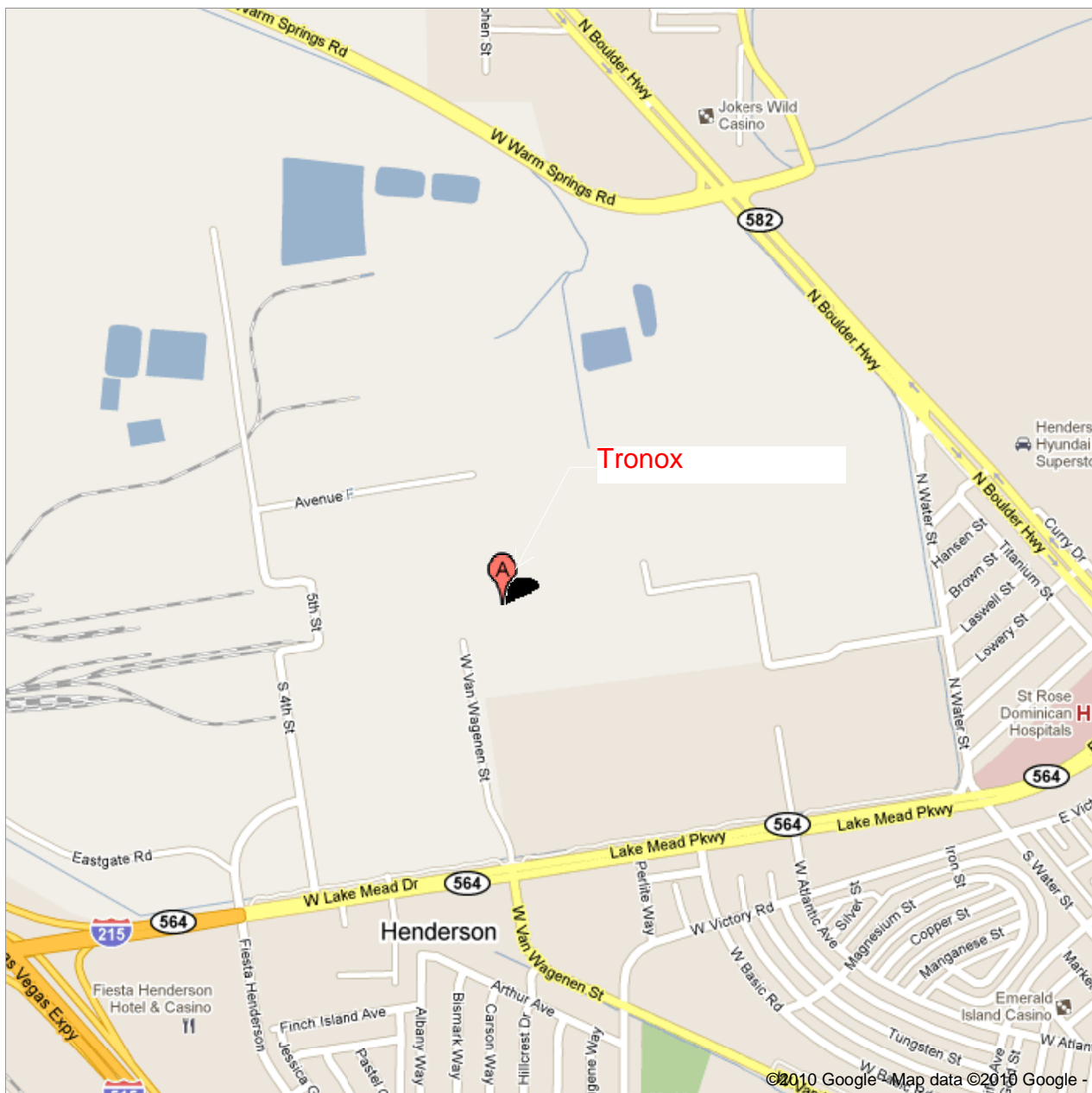


Figure A

Tronox - 560 West Lake Mead Parkway Henderson, NV 89015



**Figure 1**

## **Overall Tronox Site Map**









Figure 3 - Aerial View of Ruptured Process Line Location



Figure 4 - Aerial View of Soil and Water Sample Locations

**APPENDIX B  
PROJECT PHOTOS**



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**Photograph 1**

View of repaired process lines looking north.



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**Photograph 2** View from just north of the damaged process lines looking towards the south.



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**Photograph 3** View of process water running to north east side of trestle just south of ponds.



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**Photograph 4** View looking north just east of the damaged process lines. Soil sample S-1 was collected approximately 5 feet west of the grey well control box shown in the photo.



**APPENDIX C**  
**LABORATORY ANALYTICAL REPORTS**



6245 Harrison Drive, Suite 4, Las Vegas, NV 89120

(702) 321-8315 Phone

(702) 597-2098 Fax

E-mail: veritaslabs@msn.com

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CLIENT NAME: Las Vegas Paving  
4420 South Decatur Blvd.  
Las Vegas, NV 89103

PROJECT MGR: Dave Breault

CLIENT PROJECT NAME: NA  
CLIENT PROJECT NUMBER: NA

VERITAS LAB ORDER ID: V1012036  
DATE RECEIVED AT LAB: 12/09/10

Presented herein are the analytical results for samples received from the above referenced project.

Samples submitted for this project were not sampled by Veritas Laboratories. Unless otherwise noted, samples were received by Veritas Laboratories under a chain of custody in good condition, properly preserved, and within hold time for the requested analyses.

*All laboratory analytical data presented herein was generated by a laboratory certified by the Nevada Division of Environmental Protection for each constituent and media reported for which a certification is required and offered.*

Should you have any questions or comments, please feel free to contact me at (702) 321-8315.

**General Comments:**

None

**Some Sample and/or QA results have been flagged as follows:**

None

12/14/10

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Bruce G. Cunningham  
Veritas Laboratories  
Nevada Lab ID NV00918

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Date



CLIENT COMPANY NAME: Las Vegas Paving  
 CLIENT PROJECT NAME: NA  
 CLIENT PROJECT NUMBER: NA

**ANALYSIS: Total Extractable Petroleum Hydrocarbons Using GC/FID**  
 METHOD: TX TPH, 8015M (C<sub>6</sub>-C<sub>35</sub>)  
 MATRIX: Soil

Client Sample ID	Date/Time Sampled	Veritas Sample ID	Result mg/Kg	Carbon Range	Reporting Limit (PQL)	Dilution Factor	% Surrogate Recovery	Date Extracted/ Analyzed
S-1	12/09/10 12:00	V1012036-01	ND	GRO	10 mg/Kg	1	98 <sup>1</sup>	12/09/10
			ND	DRO	20 mg/Kg	1	110 <sup>2</sup>	12/09/10
			ND	ORO	20 mg/Kg	1		
			ND	TOTAL				
Method Blank	NA	EBLK101209	ND	GRO	10 mg/Kg	1	95 <sup>1</sup>	12/09/10
			ND	DRO	20 mg/Kg	1	96 <sup>2</sup>	12/09/10
			ND	ORO	20 mg/Kg	1		
			ND	TOTAL				

Surrogates used are: <sup>1</sup> Bromofluorobenzene and <sup>2</sup> Pentacosane. Acceptable recovery range is 70%-130%.  
 All data reported on a wet weight basis.

**Carbon Ranges**

GRO-Gasoline Range Organics (C<sub>6</sub>-C<sub>10</sub>), DRO-Diesel Range Organics (C<sub>10</sub>-C<sub>28</sub>), ORO-Oil Range Organics (C<sub>28</sub>-C<sub>35</sub>)

ND - Not Detected at indicated Reporting Limit (PQL).

CLIENT COMPANY NAME: Las Vegas Paving  
 CLIENT PROJECT NAME: NA  
 CLIENT PROJECT NUMBER: NA

CLIENT SAMPLE ID: S-2  
 DATE SAMPLED: 12/09/10  
 VERITAS SAMPLE ID: V1012036-02

**ANALYSIS: Volatile Organic Compounds by EPA 8260B, GC/MS**

MATRIX: Soil

DATE(S) ANALYZED: 12/09/10

PARAMETER	RESULT	RL (MDL)		PARAMETER	RESULT	RL (MDL)	
	µg/Kg	µg/Kg	DF		µg/Kg	µg/Kg	DF
Benzene	ND	20	20	Ethylbenzene	ND	20	20
Bromobenzene	ND	20	20	Hexachlorobutadiene	ND	20	20
Bromodichloromethane	ND	20	20	Isopropylbenzene	ND	20	20
Bromoform	ND	20	20	4-Isopropyltoluene	ND	20	20
Bromomethane	ND	20	20	Methylene chloride (DCM)	ND	20	20
n-Butylbenzene	ND	20	20	Naphthalene	ND	20	20
sec-Butylbenzene	ND	20	20	n-Propylbenzene	ND	20	20
tert-Butylbenzene	ND	20	20	Styrene	ND	20	20
Carbon tetrachloride	ND	20	20	1,1,1,2-Tetrachloroethane	ND	20	20
Chlorobenzene	ND	20	20	1,1,2,2-Tetrachloroethane	ND	20	20
Chloroethane	ND	20	20	Tetrachloroethene (PCE)	ND	20	20
Chloroform	ND	20	20	Toluene	ND	20	20
Chloromethane	ND	20	20	1,2,3-Trichlorobenzene	ND	20	20
2-Chlorotoluene	ND	20	20	1,2,4-Trichlorobenzene	ND	20	20
4-Chlorotoluene	ND	20	20	1,1,1-Trichloroethane (1,1,1-TCA)	ND	20	20
1,2-Dibromo-3-chloropropane (DBCP)	ND	20	20	1,1,2-Trichloroethane (1,1,2-TCA)	ND	20	20
Dibromochloromethane	ND	20	20	Trichloroethene (TCE)	ND	20	20
1,2-Dibromoethane (EDB)	ND	20	20	Trichlorofluoromethane (Freon11)	ND	20	20
Dibromomethane	ND	20	20	1,2,3-Trichloropropane	ND	20	20
1,2-Dichlorobenzene (o-DCB)	ND	20	20	1,2,4-Trimethylbenzene	ND	20	20
1,3-Dichlorobenzene (m-DCB)	ND	20	20	1,3,5-Trimethylbenzene	ND	20	20
1,4-Dichlorobenzene (p-DCB)	ND	20	20	Vinyl chloride	ND	20	20
Dichlorodifluoromethane (Freon 12)	ND	20	20	m,p-Xylene	ND	40	20
1,1-Dichloroethane (1,1-DCA)	ND	20	20	o-Xylene	ND	20	20
1,2-Dichloroethane (1,2-DCA)	ND	20	20	MTBE	ND	20	20
1,1-Dichloroethene (1,1-DCE)	ND	20	20				
cis-1,2-Dichloroethene	ND	20	20				
trans-1,2-Dichloroethene	ND	20	20				
1,2-Dichloropropane	ND	20	20				
1,3-Dichloropropane	ND	20	20				
2,2-Dichloropropane	ND	20	20				
1,1-Dichloropropene	ND	20	20				

**QUALITY CONTROL DATA:**

Surrogate	% Recovery	Acceptable Range
Dibromofluoromethane	82	70-130%
1,2-Dichloroethane-d4	89	70-130%
Toluene-d8	95	70-130%
4-Bromofluorobenzene	84	70-130%

RL-Reporting Limit (Method Detection Limit)

DF-Dilution Factor

ND - Not Detected at Indicated Reporting Limit (MDL).

CLIENT COMPANY NAME: Las Vegas Paving  
 CLIENT PROJECT NAME: NA  
 CLIENT PROJECT NUMBER: NA

CLIENT SAMPLE ID: **METHOD BLANK**  
 DATE SAMPLED: NA  
 VERITAS SAMPLE ID: VBLK101209-03

**ANALYSIS: Volatile Organic Compounds by EPA 8260B, GC/MS**

MATRIX: Soil

DATE(S) ANALYZED: 12/09/10

PARAMETER	RESULT	RL (MDL)	DF	PARAMETER	RESULT	RL (MDL)	DF
	µg/Kg	µg/Kg			µg/Kg	µg/Kg	
Benzene	ND	1.0	1	Ethylbenzene	ND	1.0	1
Bromobenzene	ND	1.0	1	Hexachlorobutadiene	ND	1.0	1
Bromodichloromethane	ND	1.0	1	Isopropylbenzene	ND	1.0	1
Bromoform	ND	1.0	1	4-Isopropyltoluene	ND	1.0	1
Bromomethane	ND	1.0	1	Methylene chloride (DCM)	ND	1.0	1
n-Butylbenzene	ND	1.0	1	Naphthalene	ND	1.0	1
sec-Butylbenzene	ND	1.0	1	n-Propylbenzene	ND	1.0	1
tert-Butylbenzene	ND	1.0	1	Styrene	ND	1.0	1
Carbon tetrachloride	ND	1.0	1	1,1,1,2-Tetrachloroethane	ND	1.0	1
Chlorobenzene	ND	1.0	1	1,1,2,2-Tetrachloroethane	ND	1.0	1
Chloroethane	ND	1.0	1	Tetrachloroethene (PCE)	ND	1.0	1
Chloroform	ND	1.0	1	Toluene	ND	1.0	1
Chloromethane	ND	1.0	1	1,2,3-Trichlorobenzene	ND	1.0	1
2-Chlorotoluene	ND	1.0	1	1,2,4-Trichlorobenzene	ND	1.0	1
4-Chlorotoluene	ND	1.0	1	1,1,1-Trichloroethane (1,1,1-TCA)	ND	1.0	1
1,2-Dibromo-3-chloropropane (DBCP)	ND	1.0	1	1,1,2-Trichloroethane (1,1,2-TCA)	ND	1.0	1
Dibromochloromethane	ND	1.0	1	Trichloroethene (TCE)	ND	1.0	1
1,2-Dibromoethane (EDB)	ND	1.0	1	Trichlorofluoromethane (Freon11)	ND	1.0	1
Dibromomethane	ND	1.0	1	1,2,3-Trichloropropane	ND	1.0	1
1,2-Dichlorobenzene (o-DCB)	ND	1.0	1	1,2,4-Trimethylbenzene	ND	1.0	1
1,3-Dichlorobenzene (m-DCB)	ND	1.0	1	1,3,5-Trimethylbenzene	ND	1.0	1
1,4-Dichlorobenzene (p-DCB)	ND	1.0	1	Vinyl chloride	ND	1.0	1
Dichlorodifluoromethane (Freon 12)	ND	1.0	1	m,p-Xylene	ND	2.0	1
1,1-Dichloroethane (1,1-DCA)	ND	1.0	1	o-Xylene	ND	1.0	1
1,2-Dichloroethane (1,2-DCA)	ND	1.0	1	MTBE	ND	1.0	1
1,1-Dichloroethene (1,1-DCE)	ND	1.0	1				
cis-1,2-Dichloroethene	ND	1.0	1				
trans-1,2-Dichloroethene	ND	1.0	1				
1,2-Dichloropropane	ND	1.0	1				
1,3-Dichloropropane	ND	1.0	1				
2,2-Dichloropropane	ND	1.0	1				
1,1-Dichloropropene	ND	1.0	1				

**QUALITY CONTROL DATA:**

Surrogate	% Recovery	Acceptable Range
Dibromofluoromethane	84	70-130%
1,2-Dichloroethane-d4	92	70-130%
Toluene-d8	97	70-130%
4-Bromofluorobenzene	84	70-130%

RL-Reporting Limit (Practical Quantitation Limit)

DF-Dilution Factor

ND - Not Detected at Indicated Reporting Limit (MDL).

CLIENT COMPANY NAME: Las Vegas Paving  
 CLIENT PROJECT NAME: NA  
 CLIENT PROJECT NUMBER: NA

CLIENT SAMPLE ID: S-3  
 DATE SAMPLED: 12/09/10  
 VERITAS SAMPLE ID: V1012036-03

**ANALYSIS: RCRA 7 Metals by EPA 6010B**  
 MATRIX: Soil

PARAMETER	RESULT	REPORTING LIMIT (PQL)	UNITS	DILUTION FACTOR	DATE ANALYZED
Arsenic	4.8	3.0	mg/Kg	1	12/14/10
Barium	250	1.5	mg/Kg	5	12/14/10
Cadmium	0.97	0.3	mg/Kg	1	12/14/10
Chromium	35	2.5	mg/Kg	5	12/14/10
Lead	75	7.5	mg/Kg	5	12/14/10
Selenium	ND	3.0	mg/Kg	1	12/14/10
Silver	ND	1.5	mg/Kg	1	12/14/10

CLIENT COMPANY NAME: Las Vegas Paving  
 CLIENT PROJECT NAME: NA  
 CLIENT PROJECT NUMBER: NA

CLIENT SAMPLE ID: S-4  
 DATE SAMPLED: 12/09/10  
 VERITAS SAMPLE ID: V1012036-04

**ANALYSIS: Inorganics**  
 MATRIX: Soil

PARAMETER	RESULT	REPORTING LIMIT (PQL)	UNITS	DILUTION FACTOR	METHOD	DATE ANALYZED
pH	11	NA	pH Units	1	SM 4500H+B	12/09/10

ND – Not Detected at indicated Reporting Limit (PQL).





## LABORATORY REPORT

**DATE:** December 10, 2010

**REPORT NUMBER:** 10-4739

**CLIENT:** Tronox  
P.O. Box 55  
Henderson, NV 89009

**PAGE:** 1 of 1

**CLIENT PROJECT:**

**CLIENT PO #:**

**Sampled By:** N.G.E.M.  
**Date Sampled:** 12/08/10  
**Time Sampled:** 2217


**Submitted by:** D. Lam  
**Date Received:** 12/09/10  
**Time Received:** 1305

**Report Attention:**

Sample ID	Parameter	Result	Unit	Reporting Limit	Method	Date Analyzed	Analyst
TRX Process Line	pH	11.72	--	S.U.	SM4500H <sup>+</sup> B	12/09/10	DC
	TDS	15940	mg/L	10	SM2540C	12/10/10	DC
	Arsenic	ND	mg/L	0.05	EPA200.7	12/10/10	JS
	Barium	0.05	mg/L	0.01	EPA200.7	12/10/10	JS
	Cadmium	ND	mg/L	0.01	EPA200.7	12/10/10	JS
	Chromium	ND	mg/L	0.01	EPA200.7	12/10/10	JS
	Lead	ND	mg/L	0.05	EPA200.7	12/10/10	JS
	Manganese	0.30	mg/L	0.01	EPA200.7	12/10/10	JS
	Mercury	ND	mg/L	0.001	EPA254.2	12/10/10	JS
	Selenium	ND	mg/L	0.05	EPA200.7	12/10/10	JS
	Silver	ND	mg/L	0.05	EPA200.7	12/10/10	JS

ND: non-detect  
EPA Flags: none

**REVIEWED BY:**

  
John Sloan  
Laboratory Director





3638 E. Sunset Road, Suite 100, Las Vegas, Nevada 89120  
 Phone: (702) 873-4478 Fax: (702) 873-7967 www.ssalabs.com

# CHAIN-OF-CUSTODY RECORD

Project/Job #: \_\_\_\_\_ Payment Method/PO #: \_\_\_\_\_

SEND INVOICE TO: Name: Michael Skromyda Company: IRONOX LLC

Mailing Address: P.O. Box 55 Henderson, NV 89009

City, State, Zip: \_\_\_\_\_ Mailing Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_ Name: SAMÉ

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Report Attention: **NGEM**

Turnaround Time (Specify Below with an X):  1 Day  2 Day  3 Day  Other

Standard 10 Business Days  **RUSH 24 HRS!**

NOTE: A surcharge is applied for rush samples

Date Sampled	Time Sampled	Sample Location/ Sample ID	Silver State Lab ID	Comp/ Grab	Other Pertinent Info:	Number/Type of Containers**	ANALYSES REQUESTED				Circle Applicable Program: SDWA CWA RCRA Other		
							PH	8 RCRA Metals	TDS	Total Mn			
12/8/10	22:17	TRX Process Line	4739-1	G	Need Results by Friday 12/9/10 12/10/10 PL Matrix* Preservative AQ N/A	1 Plus	X	X	X	X	Report Level: I II III IV NOTE: Surcharges apply to Level III and IV reports		
Tampering with sample name, date, time, and location may constitute fraud													
Relinquished by Signature/Print: <u>David Jam</u>							Received by Signature/Print: <u>Seaph West S. West</u>	Time/Date: <u>13:05 12/9/10</u>	Time/Date: <u>13:05 12-9-10</u>				
Relinquished by Signature/Print: <u>David Jam</u>							Received by Signature/Print: _____	Time/Date: _____	Time/Date: _____				

Method of Delivery: \_\_\_\_\_ Receiving Laboratory: \_\_\_\_\_

Special Instructions: \_\_\_\_\_

Note: Samples are discarded 30 days after results are reported. Samples deemed hazardous are returned to the client upon completion of analysis.

Authorized by: David Jam Date: 12/9/10

Authorized in required process samples. The obligator of your organization for fee pertaining to services rendered. If collections or legal services are required to recover said fees, your organization will be responsible for all fees and cost in addition to service fees.

\* Key: AQ - Aqueous S - Soil W - Waste OT - Other  
 \*\* Key: P - Plastic G - Glass V - VOA Vial OT - Other