

September 19, 2014

Mr. James W. Thorpe A&A Construction and Development 14-16 Chester Avenue Newark, NJ 07104

RE: SUMMARY REPORT OF FINDINGS – SOIL INVESTIGATION 81-89 WEST ALPINE STREET
BLOCK 2678, LOTS 18 & 20-22
CITY OF NEWARK, ESSEX COUNTY, NEW JERSEY
LCG PROJECT NO. 14-1320

Dear Mr. Thorpe,

A&A Construction and Development (A&A) contracted Lewis Consulting Group, (LCG) to conduct soil investigation activities for the subject property located at 81-89 West Alpine Street, Newark, New Jersey. LCG based our approach on the information provided by A&A and current New Jersey Department of Environmental Protection (NJDEP) regulations. The aforementioned site consists of solely vacant land and is in preparation for redevelopment. Additionally, the site consists of four (4) contiguous lots situated on approximately 0.28-acres and identified on the City of Newark tax assessor's map as Block 2678, Lots 18 and 20-22. A Site Location map is provided in Appendix I.

#### **BACKGROUND INFORMATION**

According to the property owner A&A, the subject site was previously utilized by the City of Newark as a staging area for soils originating and subsequently transported from other City owned properties.

A&A submitted an application for funding to the New Jersey Housing Mortgage and Finance Agency (NJHMFA) to redevelop the parcel for residential purposes. In accordance with NJDEP requirements, the soil pile was required to be properly removed and disposed, prior to final site inspection.

Therefore, prior to redevelopment activities the soil pile, which consisted of approximately 3,500 tons, was required to undergo investigative activities for subsequent removal and proper disposal. The soil investigation consisted of the collection and analysis of soils for the purpose of

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determining suitability for residential use and the characteristics of the staged soils, in accordance with the State of New Jersey's Technical Requirements for Site Remediation - N.J.A.C. 7:26E (Tech Regs) as well as the NJDEP'S Alternate Fill Guidance. A photographic log of pertinent photographs is provided in Appendix II.

#### SOIL INVESTIGATION & ANALYTICAL RESULTS

On February 19, 2014, LCG personnel collected four (4) soil samples (WC-1 through WC-4) for waste classification utilizing an onsite backhoe and hand auger. The samples were composited using a ten-point composite method and shipped under proper chain of custody to a New Jersey certified laboratory to be subsequently analyzed for full Target Analyte List/Target Compound List (TAL/TCL+30) and hexavalent chromium. All sampling activities were conducted in accordance with the NJDEP Field Sampling Procedures Manual dated August 2005 and the State of New Jersey's Technical Requirements for Site Remediation N.J.A.C. 7:26E (Tech Regs).

Soil analytical results from the February 19, 2014 sampling event reported concentrations of Semi-Volatile, Polycyclic Aromatic Hydrocarbons (PAH) constituents above the NJDEP's Residential Direct Contact Soil Remediation Standards (RDCSRS). The following table depicts the Semi-Volatile PAH targeted compounds detected above their respective RDCSRS:

Sample ID Date Lab Sample No.	NJDEP RDCSRS (mg/kg)	WC-1 2/19/2014 243599	WC-3 2/19/2014 243601	WC-4 2/19/2014 243602
Constituent (mg/kg)				
Benzo[a]anthracene	0.6	ND	ND	0.64
Benzo[a]pyrene	0.2	0.55	0.35	0.71
Benzo[b]fluoranthene	0.6	0.74	ND	0.97

All other targeted compounds were reported below their respective NJDEP RDCSRS and Non-Residential Direct Contact Soil Remediation Standards (NRDCSRS) for soil samples WC-1 through WC-4. The final laboratory analytical report is provided in Appendix IV.

#### SOIL REMOVAL & DISPOSAL SUMMARY

Based upon the reported analytical results from the February 19, 2014 soil investigation waste classification sampling event, the staged soils situated on the subject site reported Semi-Volatile PAH constituents above the NJDEP's RDCSRS. Therefore, LCG recommended transporting the soils off-site for proper disposal at a licensed facility.

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Prior to disposal, the soils were required to be additionally analyzed for waste class parameters to be transported off-site to Clean Earth of Carteret, a licensed soil recycling facility. Additional waste class sampling parameters identified the soil pile situated on-site as *residential*, *non-hazardous* material.

In order to remove the impacted material located on-site, soil transport and disposal activities were conducted on June 25, 2014 through July 3, 2014 and August 11, 2014 through August 15, 2014. A total of 3,509.61 tons of soil was removed from the subject site and disposed of at Clean Earth of Carteret. Disposal Documentation is provided in Appendix III.

Based upon the reported analytical results from the February 19, 2014 soil investigation sampling event, the staged soils situated on the property located at 81-89 West Alpine Street, Newark, New Jersey reported Semi-Volatile PAH constituents above the NJDEP's RDCSRS. Therefore, the soils were analyzed for additional waste classification parameters and subsequently transported off-site for proper disposal at a licensed recycling facility.

Following removal, a final site inspection was conducted by NJDEP officials on August 19, 2014 to confirm the removal of staged soils and to confirm no other environmental areas of concern were observed on the subject site. Based upon these activities, the NJDEP recommended no further action for the subject site.

Please contact me with any questions at (732) 276-2420.

Sincerely,

LEWIS CONSULTING GROUP

Alan J. Krohn, LSRP No. 591428

Project Manager

C: William Lindner, NJDEP Zachary D. Lewis, LCG

Attachments:

*Appendix I – Site Location Map* 

Appendix II – Photographic Log

Appendix III – Disposal Documentation

Appendix IV - Laboratory Analytical Report

# APPENDIX I

# PHOTOGRAPHIC LOG

PHOTOGRAPH NUMBER: 01

PROJECT NAME: 85-89 W. ALPINE ST.
LOCATION: NEWARK, NJ
DATE: MARCH 7, 2014

Northern view of staged soil pile along West

Alpine Street.



PHOTOGRAPH NUMBER: 02

PROJECT NAME: 85-89 W. ALPINE ST.
LOCATION: NEWARK, NJ
DATE: MARCH 7, 2014

Northwestern view of staged soil pile along West

Alpine Street.



PHOTOGRAPH NUMBER: 03

PROJECT NAME: 85-89 W. ALPINE ST.

LOCATION: NEWARK, NJ

DATE: MARCH 7, 2014

Northern view of staged soil pile along West

Alpine Street.



PHOTOGRAPH NUMBER: 04

PROJECT NAME: 85-89 W. ALPINE ST.

LOCATION: NEWARK, NJ
DATE: MARCH 7, 2014

Northwestern view of staged soil pile along West

Alpine Street.



PHOTOGRAPH NUMBER: 05

PROJECT NAME: 85-89 W. ALPINE ST.

LOCATION: NEWARK, NJ
DATE: MARCH 7, 2014

View of staged soil pile situated on the eastern portion of the site along West Alpine Street.



# **APPENDIX II**



	W.A.I.E.R. WORKS LABORATORY, INC.	CHAIN OF CUSTODY FORM
		360 GLENWOOD AVE. EAST ORANGE, NJ 07017
		Phone: 973 678-3787 Fax: 973 678-6779
•		NJDEP Certification # 07673
CLIENT ADDRESS:	LEWIS CONSULTING GROUP	SITE ADDRESS:
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	MANASGUAN, N. JOS736	NELLARK, N.J.
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Matrix Codes: DW=Drinking Water: WW=Wastewater: So=Soil: GW= Groundwater: SL= Sludge:

Sterile/Na2S2O3

NaOH

HCL Vials H2S04 PAGE \_\_\_OF\_\_\_

\*2/27- LONGE FOR HEX, Phromium

#### **DEFINITIONS**

#### The following terms or abbreviations are used in this report:

MPNMost probable numberPLCustomer-specific limitCFUColony forming unitDFDilution FactorPOSPositiveQQualifier

NEG Negative NTU Nephelometric turbidity units

PRES Presumptive RL Laboratory reporting limit or Limit of Quantitation (LOQ)
MF Membrane Filtration MCL EPA recommended "Maximum Contaminant Level"

TNTC Too numerous to count MDL Method Detection Limit

ND The concentration was not detected at or above RL / MDL.

J Estimated value  $\geq$  MDL but  $\leq$  RL. Applies to organics and general chemistry results (see below for metals)

DRY Indicates the result was calculated and reported on a dry weight basis.

TIC Tentatively Identified Compounds (Library Search Compounds); concentrations are estimated values only.

ppm (mg/l) Parts per million: equivalent to 1 milligram per kilogram (mg/Kg) for solids or one milligram per liter (mg/L) for aqueous

samples.

ppb (ug/L) Parts per billion: equivalent to 1 microgram per kilogram (ug/Kg) for solids or one microgram per liter (ug/L) for aqueous

samples.

Less than: In conjunction with a numerical value, indicates a concentration less than RL / MDL.

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#### **Data Qualifiers (EPA CLP Convention)**

<u>Organics</u>		Metals	
В	Analyte was detected in the method blank	В	Value is $\geq$ MDL and $\leq$ RL
Е	Concentration exceeds calibration range	E	Estimated value due to presence of interference
U	Compound not detected above MDL/RL	M	Duplicate precision for an element outside control limit
N	Presumptive evidence of compound in library search	N	Spike recovery for an element outside control limits
P1	Column precision criteria not met, report lower value	U	Element not detected above MDL/RL
P2	Column precision criteria not met, report higher value	Other	Defined in case narrative or data package
Other	Defined in case narrative or data package		

#### Warranties, Terms, and Conditions

- Unless otherwise specified in the Parameter field, analyses (excluding "Field Parameters") were performed at the QCL Southampton Division (1205 Industrial Boulevard, Southampton, PA 18966). Food, pharmaceutical, and dairy testing were performed the QCL facility in Horsham (702 Electronics Drive, Horsham, PA 19044).
- The test results meet all requirements of TNI or other regulatory agencies, including holding times and preservation, unless otherwise indicated
- The report shall not be reproduced, except in full, without the written consent of the laboratory.
- All samples are collected as "grab" samples unless otherwise identified.
- The reported results relate only to the sample as tested. QCL is not responsible for sample integrity unless sampling has been performed by a
  member of our staff.
- QCL is not responsible for sampling and/or testing omissions. Note that regulatory authorities may assess substantial fines for testing
  omissions. Please track your sample collection schedules and results on a regular basis (e.g. weekly, monthly, or quarterly) to ensure
  compliance. QCL's internet program "LIVE ACCESS" will provide you with real-time access to collection dates and testing results. Please
  contact Customer Service for further information.
- The following personnel or their deputies have approved the results of the tests performed by QCL: Nicki Smith (Environmental & Food Chemistry), Amanda Lukaszewski (Pharmaceutical), Ryan Baker (Dairy), Renata Paskevicius (Food Micro), Sue Abbott (QCL Delaware).

#### **OCL** Accreditations

Southampton Division EPA ID: PA00018

NELAP IDs: PA 09-00131; NJ PA166; NY 11223 State IDs: CT PH-0768; DE PA-018; MD 206

FDA Reg #: 2515238

Delaware Division State IDs: DE 00011; MD 138 Reading Division State ID: PA 06-03543 Wind Gap Division State IDs: PA 48-01334; NJ PA001 Vineland Division State ID: NJ 06005

East Rutherford Division State ID: NJ 02015

	NF CUSTODY	Lab LIMS No. / 4 94345	MATRIX CODES
1205 Industrial Blvd. Phone: 215-355-3900		LAB USE ONLY:	DW: DRINKING WATER
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Client/Acct. No. Water Construction			WW: WASTEWATER
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		# HNO <sub>3</sub> pH	SL: SLUDGE
City/State/Zip		# H2SO4 pH	0/1:0/1
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# OC Laboratories 1205 Industrial Highway, Southampton, PA 18966

# EAST RUTHERFORD



Inter-Laboratory Transport Form: ER0220142:

		Please Note the Foliowing:	Individual sample chains of custody must accompany this form.	Once a cooler is sealed, custody seals may not be broken until samples are	received at the designated QCL laboratory.								് Paporatory use വ	Custody Seals intact upon receipt? WW Initials	List ID of any seal found broken upon receipt below:	
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Page 1 of 1

NJ DEP LABORATORY ID # 07673

#### LABORATORY ANALYSIS REPORT-Metals

DATE: March 6, 2014

CLIENT: Lewis Consulting Group PROJECT: 85-89 West Alpine Street

DATE COLLECTED: 2/19/2014

SAMPLE #:

243599

DATE RECEIVED: 3/19/2014

CLIENT ID:

WC-1

Parameter	CAS#	Analysis Method	Analysis Date	Analysis Time	Qualifiers	Result	RL mg/kg
SILVER	7440-22-4	6010B	2/26/2014	16:51	······································	<15.306	15.306
ALUMINUM	7429-90-5	6010B	2/26/2014	16:51		6776.705	5.386
ARSENIC	7440-38-2	6010B	2/26/2014	16:51		<4.771	4.771
BARIUM	7440-39-3	6010B	3/5/2014	16:11		34.601	3.281
BERYLLIUM	7440-41-7	6010B	2/26/2014	16:51		<2.864	2.864
CALCIUM	7789-78-8	6010B	2/26/2014	16:51		1853.283	244.791
CADMIUM	7440-43-9	6010B	2/26/2014	16:51		<2.928	2.928
COBALT	7440-48-4	6010B	2/26/2014	16:51		6.037	2.173
CHROMIUM	7440-47-3	6010B	2/26/2014	16:51		13.068	2.479
COPPER	7440-50-8	6010B	2/26/2014	16:51		11.686	2.778
IRON	7439-89-6	6010B	2/26/2014	16:51		11869.930	918.695
POTASSIUM	7440-09-7	6010B	2/26/2014	16:51		641.413	144.558
MAGNESIUM	7439-95-4	6010B	2/26/2014	16:51		2101.104	207.894
MANGANESE	7439-96-5	6010B	2/26/2014	16:51		205.578	2.417
SODIUM	7440-23-5	6010B	2/26/2014	16:51		323.222	126.537
NICKEL	7440-02-0	6010B	2/26/2014	16:51		8.730	3.081
LEAD	7439-92-1	6010B	2/26/2014	16:51		18.802	12.168
SELENIUM	7782-49-2	6010B	2/26/2014	16:51		<8.752	8.752
VA <b>N</b> ADIUM	7440-62-2	6010B	2/26/2014	16:51		18.892	2.521
ZINC	7440-66-6	6010B	2/26/2014	16:51		27.341	8.925
MERCURY	7439-97-6	7471A	2/26/2014	16:03		0.050	0.026
% SOLIDS		2540G	2/20/2014			91.04	

Qualifiers:

D = Result is reported from a dilution

All Results Reported as mg/kg

RL = Reporting Limit

Analysis Methods USEPA SW846 3rd Ed. &

NJ DEP LABORATORY ID # 07673

#### LABORATORY ANALYSIS REPORT-Metals

DATE: March 6, 2014

CLIENT: Lewis Consulting Group PROJECT: 85-89 West Alpine Street

DATE COLLECTED: 2/19/2014 DATE RECEIVED: 3/19/2014 SAMPLE #: CLIENT ID: 243600 WC-2

Parameter	CAS#	Analysis Method	Analysis Date	Analysis Time	Qualifiers	Result	RL mg/kg
SILVER	7440-22-4	6010B	2/26/2014	16:57		<12.138	12.138
ALUMINUM	7429-90-5	6010B	2/26/2014	16:57		10782.538	4.271
ARSENIC	7440-38-2	6010B	2/26/2014	16:57		<3.784	3.784
BARIUM	7440-39-3	6010B	3/5/2014	16:16		50.128	2.602
BERYLLIUM	7440-41-7	6010B	2/26/2014	16:57		<2.271	2.271
CALCIUM	7789-78-8	6010B	2/26/2014	16:57		2865.131	194.129
CADMIUM	7440-43-9	6010B	2/26/2014	16:57		<2.322	2.322
COBALT	7440-48-4	6010B	2/26/2014	16:57		6.703	1.724
CHROMIUM	7440-47-3	6010B	2/26/2014	16:57		14.101	1.966
COPPER	7440-50-8	6010B	2/26/2014	16:57		20.679	2.203
IRON	7439-89-6	6010B	2/26/2014	16:57		14842.414	728.563
POTASSIUM	7440-09-7	6010B	2/26/2014	16:57		1069.917	114.641
MAGNESIUM	7439-95-4	6010B	2/26/2014	16:57		2343.568	164.868
MANGANESE	7439-96-5	6010B	2/26/2014	16:57		390.461	1.917
SODIUM	7440-23-5	6010B	2/26/2014	16:57		140.189	100.349
NICKEL	7440-02-0	6010B	2/26/2014	16:57		10.547	2.444
LEAD	7439-92-1	6010B	2/26/2014	16:57		31.453	9.650
SELENIUM	7782-49-2	6010B	2/26/2014	16:57		<6.941	6.941
VANADIUM	7440-62-2	6010B	2/26/2014	16:57		23.909	2.000
ZINC	7440-66-6	6010B	2/26/2014	16:57		49.317	7.078
MERCURY	7439-97-6	7471A	2/26/2014	16:04		0.090	0.0222
% SOLIDS		2540G	2/20/2014			82.88	

Qualifiers:

D = Result is reported from a dilution

All Results Reported as mg/kg RL = Reporting Limit

Analysis Methods USEPA SW846 3rd Ed. &

NJ DEP LABORATORY ID # 07673

#### LABORATORY ANALYSIS REPORT-Metals

DATE: March 6, 2014

CLIENT: Lewis Consulting Group PROJECT: 85-89 West Alpine Street

DATE COLLECTED: 2/19/2014

SAMPLE #: CLIENT ID: 243601 WC-3

DATE RECEIVED: 3/19/2014

Parameter	CAS#	Analysis Method	Analysis Date	Analysis Time	Qualifiers	Result	RL mg/kg
SILVER	7440-22-4	6010B	2/26/2014	17:04		<14.605	14.605
ALUMINUM	7429-90-5	6010B	2/26/2014	17:04		7880.712	5.140
ARSENIC	7440-38-2	6010B	2/26/2014	17:04		<4.553	4.553
BARIUM	7440-39-3	6010B	3/5/2014	16:24		38.737	3.131
BERYLLIUM	7440-41-7	6010B	2/26/2014	17:04		<2.733	2.733
CALCIUM	7789-78-8	6010B	2/26/2014	17:04		1985.740	233.586
CADMIUM	7440-43-9	6010B	2/26/2014	17:04		<2.794	2.794
COBALT	7440-48-4	6010B	2/26/2014	17:04		5.331	2.074
CHROMIUM	7440-47-3	6010B	2/26/2014	17:04		20.542	2.366
COPPER	7440-50-8	6010B	2/26/2014	17:04		21.017	2.651
IRON	7439-89-6	6010B	2/26/2014	17:04		13742.777	876.643
POTASSIUM	7440-09-7	6010B	2/26/2014	17:04		908.142	137.941
MAGNESIUM	7439-95-4	6010B	2/26/2014	17:04		2385.370	198.378
MANGANESE	7439-96-5	6010B	2/26/2014	17:04		291.803	2.307
SODIUM	7440-23-5	6010B	2/26/2014	17:04		189.232	120.745
NICKEL	7440-02-0	6010B	2/26/2014	17:04		9.968	2.940
LEAD	7439-92-1	6010B	2/26/2014	17:04		31.980	11.611
SELENIUM	7782-49-2	6010B	2/26/2014	17:04		<8.352	8.352
VANADIUM	7440-62-2	6010B	2/26/2014	17:04		22.590	2.406
ZINC	7440-66-6	6010B	2/26/2014	17:04		55.568	8.517
MERCURY	7439-97-6	7471A	2/26/2014	16:06		0.139	0.0258
% SOLIDS		2540G	2/20/2014			87.06	

Qualifiers:

D = Result is reported from a dilution

All Results Reported as mg/kg

RL = Reporting Limit

Analysis Methods USEPA SW846 3rd Ed. &

NJ DEP LABORATORY ID # 07673

#### LABORATORY ANALYSIS REPORT-Metals

DATE: March 6, 2014

CLIENT: Lewis Consulting Group PROJECT: 85-89 West Alpine Street

SAMPLE #:

DATE COLLECTED: 2/19/2014 243602 DATE RECEIVED: 3/19/2014 CLIENT ID: WC-4

Parameter	CAS#	Analysis	Analysis	Analysis	Ouglifiana	Result	RL
rarameter	CAS#	Method	Date	Time	Qualifiers	Result	mg/kg
SILVER	7440-22-4	6010B	2/26/2014	17:12		<14.267	14.267
ALUMINUM	7429-90-5	6010B	2/26/2014	17:12		8641.612	5.020
ARSENIC	7440-38-2	6010B	2/26/2014	17:12		<4.447	4.447
BARIUM	7440-39-3	6010B	3/5/2014	16:32		54.641	3.058
BERYLLIUM	7440-41-7	6010B	2/26/2014	17:12		<2.67	2.670
CALCIUM	7789-78-8	6010B	2/26/2014	17:12		2348.789	228.170
CADMIUM	7440-43-9	6010B	2/26/2014	17:12		<2.729	2.729
COBALT	7440-48-4	6010B	2/26/2014	17:12		4.939	2.026
CHROMIUM	7440-47-3	6010B	2/26/2014	17:12		12.426	2.311
COPPER	7440-50-8	6010B	2/26/2014	17:12		16.946	2.589
IRON	7439-89-6	6010B	2/26/2014	17:12		13456.202	856.318
POTASSIUM	7440-09-7	6010B	2/26/2014	17:12		908.069	134.743
MAGNESIUM	7439-95-4	6010B	2/26/2014	17:12		2281.687	193.778
MANGANESE	7439-96-5	6010B	2/26/2014	17:12		245.407	2.253
SODIUM	7440-23-5	6010B	2/26/2014	17:12		213.904	117.946
NICKEL	7440-02-0	6010B	2/26/2014	17:12		10.200	2.872
LEAD	7439-92-1	6010B	2/26/2014	17:12		52.675	11.342
SELENIUM	7782-49-2	6010B	2/26/2014	17:12		<8.158	8.158
VANADIUM	7440-62-2	6010B	2/26/2014	17:12		19.612	2.350
ZINC	7440-66-6	6010B	2/26/2014	17:12		41.672	8.319
MERCURY	7439-97-6	7471A	2/26/2014	16:08		<0.0216	0.0216
% SOLIDS		2540G	2/20/2014			88.68	

Qualifiers:

D = Result is reported from a dilution

All Results Reported as mg/kg RL = Reporting Limit

Analysis Methods USEPA SW846 3rd Ed. &

# Analytical Report Printed 02/27/14 17:31

PETER BISCHOF WATER WORKS LABORATORY, INC. 360 GLENWOOD AVENUE EAST ORANGE, NJ 07017

Regarding: PETER BISCHOF WATER WORKS LABORATORY, INC. **360 GLENWOOD AVENUE** EAST ORANGE, NJ 07017

Account No: G00167, WATER WORKS LABORATORY, INC.

P.O. No:

Inv. No:

1587597 PAPERLESS

PWSID No:

Project No: G00167, WATER WORKS LABORATORY, INC.

Sample ID

L4948458-1

Sample Description Samp. Date/Time/Temp

243599 SOIL COMPOSITE 02/19/14 08:00am NA C

Customer

Sampled by Received Date/Time/Temp 02/20/14 08:10pm 3.8 C | Iced (Y/N): Y

Parameter Method Result RL Test Date, Time, Analyst GENERAL CHEMISTRY Cyanide, total EPA 9010/9014 ND mg/kg DRY 0.426 mg/kg\* 02/24/14 12:30PM JG **Total Solids Percent** SM 2540G 92.21 % 0.01000 % 02/24/14 10:20PM FXT

**METALS** 

Antimony

EPA 6010C

ND mg/kg DRY

1.01 mg/kg\*

02/27/14 12:12PM PG

Pursuant to NJAC 7:26, Appendix A 1(E), unless otherwise noted, all sample holding times and preservation requirements were met.

PP 66889

# Analytical Report Printed 02/27/14 17:31

Account No: G00167, WATER WORKS LABORATORY, INC.

Project No: G00167, WATER WORKS LABORATORY, INC.

P.O. No:

Inv. No:

1587597 PAPERLESS

PWSID No:

Sample ID

Sample Description
Samp. Date/Time/Temp

243600 SOIL COMPOSITE 02/19/14 08:15am NA C

L4948458-2

Sampled by Customer

Received Date/Time/Temp 02/20/14 08:10pm 3.8 C | Iced (Y/N): Y

Parameter

Method

Result

Test Date, Time, Analyst

GENERAL CHEMISTRY

Cyanide, total

Total Solids Percent

EPA 9010/9014 SM 2540G

ND mg/kg DRY 87.56 %

0.449 mg/kg\* 0.01000 %

02/24/14 12:30PM JG

02/24/14 10:20PM FXT

**METALS** 

Antimony

EPA 6010C

ND mg/kg DRY

1.07 mg/kg\*

02/27/14 12:15PM PG

Pursuant to NJAC 7:26, Appendix A 1(E), unless otherwise noted, all sample holding times and preservation requirements were met.

PP 66889

# Analytical Report Printed 02/27/14 17:31

Account No: G00167, WATER WORKS LABORATORY, INC.

Project No: G00167, WATER WORKS LABORATORY, INC.

P.O. No: Inv. No: 1587597 PAPERLESS

PWSID No:

Sample Description
Samp. Date/Time/Temp

243601 SOIL COMPOSITE 02/19/14 08:25am NA C

Sampled by

Customer

L4948458-3

Received Date/Time/Temp 02/20/14 08:10pm 3.8 C

Iced (Y/N): Y

Parameter

Method

Result

Test Date, Time, Analyst

GENERAL CHEMISTRY

Cyanide, total Total Solids Percent EPA 9010/9014 SM 2540G

ND mg/kg DRY

87.87 %

0.447 mg/kg\* 0.01000 %

02/24/14 12:30PM JG 02/24/14 10:20PM FXT

**METALS** 

Antimony

EPA 6010C

ND mg/kg DRY

1.06 mg/kg\*

02/27/14 12:18PM PG

Pursuant to NJAC 7:26, Appendix A 1(E), unless otherwise noted, all sample holding times and preservation requirements were met.

PP 66889

# **Analytical Report**

Printed 02/27/14 17:31

Account No:G00167, WATER WORKS LABORATORY, INC.

Project No: G00167, WATER WORKS LABORATORY, INC.

P.O. No:

Inv. No:

1587597 PAPERLESS

PWSID No:

Sample ID

Sample Description Samp. Date/Time/Temp

243602 SOIL COMPOSITE 02/19/14 08:45am NA C

Sampled by

Customer

L4948458-4

Received Date/Time/Temp 02/20/14 08:10pm 3.8 C

Iced (Y/N): Y

Parameter

Method

Result

RI

Test Date, Time, Analyst

GENERAL CHEMISTRY

Cyanide, total

Total Solids Percent

EPA 9010/9014

ND mg/kg DRY 89.96 % 0.437 mg/kg\* 0.01000 % 02/24/14 12:30PM JG

02/24/14 10:20PM FXT

**METALS** 

Antimony

EPA 6010C

SM 2540G

ND mg/kg DRY

1.04 mg/kg\*

02/27/14 12:21PM PG

Pursuant to NJAC 7:26, Appendix A 1(E), unless otherwise noted, all sample holding times and preservation requirements were met.



PP 66889



# PCB Analysis Report (EPA Method 8082A)

Sample # : 243599

Client : LEWIS CONSULTING

Client ID : WC-1

Project : 85-89 WEST ALPINE ST.

*Date Sampled* : 02/19/14

Date Received : 02/19/14

Date Extracted : 02/21/14

Data File

: gcb\_022614\_014.rst

Analysis Date : 02/26/14 at 05:05 PM

Instrument : GCB

Column : RTX-5, 30m, 0.53mm I.D., .0.5um film

Matrix : SOIL

Dilution Factor : 1

Sample Volume : 15.00 g 91.04% solid

Analyst : AAA

#### 243599 Report

Compound	CAS#	MDL (ppb)	RL (ppb)	Result (ppb)	
Aroclor 1016	12674-11-2	36.25	183.07	ND	
Aroclor 1221	11104-28-2	83.48	183.07	ND	
Aroclor 1232	11141-16-5	28.56	183.07	ND	
Aroclor 1242	53469-21-9	41.74	183.07	ND	
Aroclor 1248	12672-29-6	25.26	183.07	ND	
Aroclor 1254	11097-69-1	26.36	183.07	ND	
Aroclor 1260	11096-82-5	56.02	183.07	ND	



# Pesticide Analysis Report (EPA Method 8081B)

:RTX-35, 30m, 0.53mm I.D., 0.5um film Column

Instrument : GCD

Sample #	: 243599		Date Analyzed	: 03/03/14	06:17 PM		
Client	: LEWIS CONSULT	ING	Dilution Factor	: 1			
Client ID	: WC-1		Rtx-35 Sequence	: C:\Totalc	hrom\Sequences\0303	314-GCD-PES	T.sec
Project	: 85-89 WEST ALPII	JF ST	Rtx-35 Method		rom\methods\030314-		
Project Date Sampled	: 02/19/14	VL SI.	Rtx-35 data file		rom\data\gcd_030314		
Date Received	: 02/19/14						
Date Extracted	: 02/19/14 : 02/21/14		Column	:RTX-5, 30	0.53mm I.D., 0.5ui	m film	
	: 02/21/14 : SOIL		Instrument	:GCB			
Matrix		1 · 1	Date Analyzed	:03/03/14	10:33 PM		
Sample Volume	: 15.00g 91.04% so	ua	Dilution Factor	:1			
Analyst	: AAA		Rtx-5 Sequence	:C:\Totalch	nrom\Sequences\0303	14-GCB-PEST	.seq
			Rtx-5 Method	:c:\totalchr	om\methods\030314-g	gcb-pest-rtx5.m	nth
			Rtx-5 data file	:c:\totalchr	om\data\gcb_030314_	_012.rst	
<u>Column</u>	Compound	CAS#		MDL_	RL	Result	
RTX-5	a-BHC	319-84-	6	0.32	1.83	ND	
RTX-35	a-BHC	319-84-		0.32	1.83	1.05	J
Confirmed						ND	
Column	Compound	CAS#		<u>MDL</u>	<u>RL</u>	Result	
RTX-5	b-BHC	319-85-	7	0.34	1.83	ND	
RTX-35	b-BHC	319-85-	7	0.43	1.83	1.10	J
Confirmed						ND	
<u>Column</u>	<u>Compound</u>	<u>CAS #</u>		MDL 0.70	<u>RL</u>	Result	
RTX-5	y-BHC	58-89-9		0.76	1.83	ND	
RTX-35	y-BHC	58-89-9	ð	0.36	1.83	17.93	
Confirmed				MDI		ND Posult	
Column RTX-5	Compound d-BHC	<u>CAS #</u> 319-86-	.R	MDL 0.32	<u>RL</u> 1.83	Result ND	
RTX-35	d-BHC	319-86-		0.34	1.83	1.06	J
Confirmed	d Billo	010 00		0.0.	7.00	ND	•
<u>Column</u>	Compound	CAS#		MDL	RL	Result	
RTX-5	Heptachlor	76-44-8	3	0.34	1.83	1.59	J
RTX-35	Heptachlor	76-44-8	3	0.32	1.83	0.64	J
Confirmed	•					0.64	J,
<u>Column</u>	<u>Compound</u>	CAS#		<u>MDL</u>	RL	Result	
RTX-5	Aldrin	309-00-		0.33	1.83	22.43	
RTX-35	Aldrin	309-00-	-2	0.33	1.83	5.93	
Confirmed						5.93	3
Column DTV 5	Compound	CAS #		MDL 0.24	<u>RL</u>	Result	
	eptachlor Epoxide	1024-57		0.34	1.83	12.55	
	eptachlor Epoxide	1024-57	-3	0.32	1.83	23.04	1
Column	Compound	CAC#		<u>MDL</u>	DI	12.55 Result	
Column RTX-5	<u>Compound</u> y-Chlordane	<u>CAS#</u> 5103-74	2	0.34	<u>RL</u> 1.83	11.11	
RTX-35	y-Chlordane y-Chlordane	5103-74		0.26	1.83	0.71	J
Confirmed	y Omordane	0100-14	*···	J. <u>L</u> J		0.71	J,

Analyzed by	) EPA m	ethod 8081B
All results r	eported (	as ug/kg

Pesticide Analysis Report 243599 page 2 of 2

Analysis Keport					243399 page 2 0j 2
<u>Column</u>	Compound	CAS#	<u>MDL</u>	<u>RL</u>	Result
RTX-5	Endosulfan I	959-98-8	0.36	1.83	0.59 J
RTX-35	Endosulfan I	959-98-8	0.29	1.83	ND
Confirmed					ND
Column	Compound	CAS#	<u>MDL</u>	RL	Result
RTX-5	a-Chlordane	5103-71-9	0.35	1.83	6.63
RTX-35	a-Chlordane	5103-71-9	0.30	1.83	46.59
Confirmed					6.63 *
Column	Compound	CAS#	MDL	RL	Result
RTX-5	Dieldrin	60-57-1	0.67	3.66	9.60
RTX-35	Dieldrin	60-57-1	0.57	3.66	4.09
Confirmed	Dicidiiii	00 01 1	0.01	0.00	4.09 *
	Compound	CAS#	<u>MDL</u>	RL	Result
Column RTX-5	4,4'-DDE	72-55-9	0.67	3.66	ND
	•	72-55-9	0.60	3.66	16.64
RTX-35	4,4'-DDE	12-00-9	0.00	5.00	ND
Confirmed		0.40.4	NAD1		
Column	<u>Compound</u>	<u>CAS #</u>	MDL 0.72	<u>RL</u> 3.66	Result 6.97
RTX-5	Endrin	72-20-8			16.08
RTX-35	Endrin	72-20-8	0.59	3.66	
Confirmed					0.51
Column	Compound	CAS #	<u>MDL</u>	<u>RL</u>	Result
RTX-5	Endosulfan II	33213-65-9	0.71	3.66	4.08
RTX-35	Endosulfan II	33213-65-9	0.67	3.66	4.06
Confirmed					4.06
<u>Column</u>	<u>Compound</u>	CAS#	<u>MDL</u>	<u>RL</u>	Result
RTX-5	4,4'-DDD	72-54-8	0.69	3.66	1.12 J
RTX-35	4,4'-DDD	72-54-8	0.67	3.66	4.89
Confirmed					1.12 J *
Column	Compound	CAS#	<u>MDL</u>	<u>RL</u>	Result
RTX-5	Endrin Aldehyde	7421-93-4	0.79	3.66	ND
RTX-35	Endrin Aldehyde	7421-93-4	1.15	3.66	5.89
Confirmed					ND
Column	Compound	CAS#	MDL	<u>RL</u>	Result
RTX-5	Endosulfan Sulfate	1031-07-8	0.70	3.66	ND
RTX-35	Endosulfan Sulfate	1031-07-8	0.58	3.66	17.53
Confirmed					ND
<u>Column</u>	Compound	CAS#	<u>MDL</u>	<u>RL</u>	Result
RTX-5	4,4'-DDT	50-29-3	0.71	3.66	10.83
RTX-35	4,4'-DDT	50-29-3	0.51	3.66	12.63
Confirmed	,	•			10.83
Column	Compound	CAS#	MDL	RL	Result
RTX-5	Endrin Ketone	53494-70-5	0.75	3.66	11.14
RTX-35	Endrin Ketone	53494-70-5	0.64	3.66	28.03
Confirmed	Engin Rotono	30,0,,,0		<del>-</del>	11.14 *
Column	Compound	CAS#	MDL	RL	Result
RTX-5	Methoxychlor	72-43-5	3.70	18.31	95.03
RTX-35	Methoxychlor	72-43-5	2.54	18.31	ND
Confirmed	Methoxychiol	72-40-0	2.04	10.01	ND
	Compound	CAS#	MDL	<u>RL</u>	Result
Column RTX-5	Toxaphene	8001-35-2	2.68	87.87	ND
	·		2.68	87.87	ND
RTX-35	Toxaphene	8001-35-2	2.00	01.01	ND
Confirmed					ואר



# PCB Analysis Report (EPA Method 8082A)

Sample #

: 243600

Client

: LEWIS CONSULTING

Client ID

: WC-2

Project

: 85-89 WEST ALPINE ST.

Date Sampled

: 02/19/14

Date Received

: 02/19/14 Date Extracted : 02/21/14

Data File

: gcb\_022614\_015.rst

Analysis Date

: 02/26/14 at 05:47 PM

Instrument

: GCB

: 1

Column : RTX-5, 30m, 0.53mm I.D., .0.5um film

Matrix : SOIL

Dilution Factor

Sample Volume

: 15.10 g 82.88% solid

Analyst : AAA

#### 243600 Report

Compound	CAS#	MDL (ppb)	RL (ppb)	Result (ppb)
Aroclor 1016	12674-11-2	39.55	199.76	ND
Aroclor 1221	11104-28-2	91.09	199.76	ND
Aroclor 1232	11141-16-5	31.16	199.76	ND
Aroclor 1242	53469-21-9	45.55	199.76	ND
Aroclor 1248	12672-29-6	27.57	199.76	ND
Aroclor 1254	11097-69-1	28.77	199.76	ND
Aroclor 1260	11096-82-5	61.13	199.76	ND

Pesticide Analysis Report 243600 page 1 of 2



Sample #

# Pesticide Analysis Report (EPA Method 8081B)

Column :RTX-35, 30m, 0.53mm I.D., 0.5um film

Instrument : GCD

: 243600 Date Analyzed : 03/03/14 06:55 PM

Client : LEWIS CONSULTING Dilution Factor : 1

Date Sampled : 02/19/14 Rtx-35 data file : c:\totalchrom\data\gcd\_030314\_013.rst

 Date Received
 : 02/19/14
 Column
 :RTX-5, 30m, 0.53mm I.D., 0.5um film

 Date Extracted
 : 02/21/14
 Instrument
 :GCB

trix : SOIL Instrument :GCB

Matrix : SOIL Date Analyzed :03/03/14 11:15 PM

Sample Volume : 15.10g 82.88% solid Dilution Factor :

Analyst : AAA Rtx-5 Sequence :C:\Totalchrom\Sequences\030314-GCB-PEST.seq
Rtx-5 Method :c:\totalchrom\methods\030314-gcb-pest-rtx5.mth

Rtx-5 data file :c:\totalchrom\data\gcb\_030314\_013.rst

		Rtx-5 data file	:c:\totalch	irom\data\gcb_030314_013	3.rst
Column	Compound	CAS#	MDL	<u>RL</u>	Result
RTX-5	a-BHC	319-84-6	0.35	2.00	ND
RTX-35	a-BHC	319-84-6	0.35	2.00	0.68 J
Confirmed					ND
Column	Compound	CAS#	MDL	<u>RL</u>	Result
RTX-5	b-BHC	319-85-7	0.37	2.00	ND
RTX-35	b-BHC	319-85-7	0.47	2.00	ND
Confirmed					ND
<u>Column</u>	Compound	CAS#	MDL	<u>RL</u>	Result
RTX-5	у-ВНС	58-89-9	0.83	2.00	ND
RTX-35	у-ВНС	58-89-9	0.40	2.00	3.49
Confirmed					ND
<u>Column</u>	<u>Compound</u>	CAS#	MDL	<u>RL</u>	Result
RTX-5	d-BHC	319-86-8	0.35	2.00	ND
RTX-35	d-BHC	319-86-8	0.37	2.00	1.37 J
Confirmed					ND
<u>Column</u>	<u>Compound</u>	CAS#	MDL	<u>RL</u>	Result
RTX-5	Heptachlor	76-44-8	0.37	2.00	ND
RTX-35	Heptachlor	76-44-8	0.35	2.00	ND
Confirmed					ND
<u>Column</u>	<u>Compound</u>	CAS#	MDL	<u>RL</u>	Result
RTX-5	Aldrin	309-00-2	0.36	2.00	111.34
RTX-35	Aldrin	309-00-2	0.36	2.00	2.42
Confirmed					2.42 *
<u>Column</u>	<u>Compound</u>	CAS#	MDL	RL	Result
RTX-5	Heptachlor Epoxide	1024-57-3	0.37	2.00	1.07 J
RTX-35	Heptachlor Epoxide	1024-57-3	0.35	2.00	4.67
Confirmed					1.07 J *
<u>Column</u>	<u>Compound</u>	CAS#	MDL	RL	Result
RTX-5	y-Chlordane	5103-74-2	0.37	2.00	9.29
RTX-35	y-Chlordane	5103-74-2	0.29	2.00	7.36
Confirmed					7.36

Pesticide Analysis Report 243600 page 2 of 2

Analysis Kepori					2 13 000 puge 2	. 0
Column DTV 5	<u>Compound</u>	<u>CAS #</u>	<u>MDL</u> 0.40	<u>RL</u> 2.00	<u>Result</u> ND	
RTX-5	Endosulfan I	959-98-8				
RTX-35	Endosulfan I	959-98-8	0.31	2.00	ND	
Confirmed					ND	
Column	Compound	<u>CAS #</u>	MDL 0.38	<u>RL</u> 2.00	Result 8.76	
RTX-5	a-Chlordane	5103-71-9				
RTX-35	a-Chlordane	5103-71-9	0.32	2.00	18.31 8.76 *	
Confirmed					0.70	
Column	<u>Compound</u>	CAS#	<u>MDL</u>	<u>RL</u>	Result 15.26	
RTX-5	Dieldrin	60-57-1	0.73	4.00		
RTX-35	Dieldrin	60-57-1	0.62	4.00	10.41	
Confirmed	<u>.</u>				10.41	
Column	Compound	CAS#	<u>MDL</u>	<u>RL</u>	Result ND	
RTX-5	4,4'-DDE	72-55-9	0.73	4.00		
RTX-35	4,4'-DDE	72-55-9	0.66	4.00	9.05	
Confirmed					ND	
Column	Compound	CAS#	<u>MDL</u>	<u>RL</u>	Result	
RTX-5	Endrin	72-20-8	0.79	4.00	2.82 J	
RTX-35	Endrin	72-20-8	0.65	4.00	ND	
Confirmed					ND	
Column	Compound	CAS#	MDL 0.70	<u>RL</u>	Result	
RTX-5	Endosulfan II	33213-65-9	0.78	4.00	ND	
RTX-35	Endosulfan II	33213-65-9	0.73	4.00	1.83 J	
Confirmed					ND	
Column	Compound	<u>CAS #</u>	MDL 0.70	<u>RL</u>	Result	
RTX-5	4,4'-DDD	72-54-8	0.76	4.00	3.13 J	
RTX-35	4,4'-DDD	72-54-8	0.73	4.00	0.98 J	
Confirmed					0.98 J *	
Column	Compound	<u>CAS #</u>	MDL	<u>RL</u>	Result	
RTX-5	Endrin Aldehyde	7421-93-4	0.86	4.00	1.19 J	
RTX-35	Endrin Aldehyde	7421-93-4	1.26	4.00	4.46	
Confirmed					1.19 *	
Column	Compound	CAS#	MDL 0.77	<u>RL</u>	Result	
RTX-5	Endosulfan Sulfate	1031-07-8	0.77	4.00	22.34	
RTX-35	Endosulfan Sulfate	1031-07-8	0.64	4.00	1.99 J	
Confirmed					1.99 J *	
<u>Column</u>	Compound	<u>CAS #</u>	MDL 0.70	<u>RL</u>	Result	
RTX-5	4,4'-DDT	50-29-3	0.78	4.00	10.49	
RTX-35	4,4'-DDT	50-29-3	0.55	4.00	6.86	
Confirmed					6.86 *	
Column	Compound	CAS #	MDL 0.00	<u>RL</u>	Result	
RTX-5	Endrin Ketone	53494-70-5	0.82	4.00	ND	
RTX-35	Endrin Ketone	53494-70-5	0.70	4.00	6.98	
Confirmed			<u> </u>		ND	
Column	<u>Compound</u>	CAS#	MDL 4 O 4	<u>RL</u>	Result	
RTX-5	Methoxychlor	72-43-5	4.04	19.98	34.94	
RTX-35	Methoxychlor	72-43-5	2.77	19.98	ND	
Confirmed					ND	
Column	Compound	CAS#	MDL	<u>RL</u>	Result	
RTX-5	Toxaphene	8001-35-2	2.94	96.53	ND	
RTX-35	Toxaphene	8001-35-2	2.94	96.53	ND	
Confirmed					ND	



# PCB Analysis Report (EPA Method 8082A)

Sample # : 243601

Client : LEWIS CONSULTING

Client ID : WC-3

Project : 85-89 WEST ALPINE ST.

Date Sampled : 02/19/14

Date Received : 02/19/14

Date Extracted : 02/21/14

Data File

: gcb\_022614\_016.rst

Analysis Date : 02/26/14 at 06:29 PM

Instrument : GCB

Column : RTX-5, 30m, 0.53mm I.D., .0.5um film

Matrix : SOIL

Dilution Factor : 1

Sample Volume : 15.10 g 87.06% solid

Analyst : AAA

## 243601 Report

Compound	CAS#	MDL (ppb)	RL (ppb)	Result (ppb)
Aroclor 1016	12674-11-2	37.65	190.17	ND
Aroclor 1221	11104-28-2	86.72	190.17	ND
Aroclor 1232	11141-16-5	29.67	190.17	ND
Aroclor 1242	53469-21-9	43.36	190.17	ND
Aroclor 1248	12672-29-6	26.24	190.17	ND
Aroclor 1254	11097-69-1	27.38	190.17	ND
Aroclor 1260	11096-82-5	58.19	190.17	ND

243601 page 1 of 2 Pesticide Analysis Report



: 243601

Sample #

# Pesticide Analysis Report (EPA Method 8081B)

:RTX-35, 30m, 0.53mm I.D., 0.5um film Column

Instrument

: 03/03/14 07:33 PM Date Analyzed

1						
Client	: LEWIS CONSULT	ING	Dilution Factor	: 1		
Client ID	: WC-3		Rtx-35 Sequence	: C:\Totalch	nrom\Sequences\030	314-GCD-PEST.seq
Project	: 85-89 WEST ALPI	NE ST.	Rtx-35 Method	: c:\totalchr	om\methods\030314	-gcd-pest-rtx35.mth
Date Sampled	: 02/19/14		Rtx-35 data file	: c:\totalchr	om\data\gcd_030314	_014.rst
Date Received	: 02/19/14			DTV E 20	0.52	en film
Date Extracted			Column		m, 0.53mm I.D., 0.5u	m iiim
Matrix	: SOIL		Instrument	:GCB		
		1: .1	Date Analyzed	:03/03/14 1	1:57 PM	
Sample Volume	-	ua	Dilution Factor	:1		
Analyst	: AAA		Rtx-5 Sequence	:C:\Totalch	rom\Sequences\0303	314-GCB-PEST.seq
			Rtx-5 Method	:c:\totalchro	om\methods\030314-	gcb-pest-rtx5.mth
			Rtx-5 data file	:c:\totalchro	om\data\gcb_030314	014.rst
<u>Column</u>	<u>Compound</u>	<u>CAS #</u>		<u>MDL</u>	RL	<u>Result</u>
RTX-5	a-BHC	319-84-		0.33	1.90	ND
RTX-35	a-BHC	319-84-	5	0.33	1.90	0.42 J
Confirmed						ND
<u>Column</u>	<u>Compound</u>	<u>CAS #</u>		<u>MDL</u>	<u>RL</u>	Result
RTX-5	b-BHC	319-85-	7	0.35	1.90	ND
RTX-35	b-BHC	319-85-	7	0.45	1.90	ND
Confirmed						ND
<u>Column</u>	Compound	CAS#		<u>MDL</u>	<u>RL</u>	Result
RTX-5	у-ВНС	58-89-9		0.79	1.90	ND
RTX-35	y-BHC	58-89-9	1	0.38	1.90	3.49
Confirmed	•					ND
<u>Column</u>	Compound	CAS#		<u>MDL</u>	RL	Result
RTX-5	d-BHC	319-86-	8	0.33	1.90	ND
RTX-35	d-BHC	319-86-	3	0.35	1.90	0.76 J
Confirmed						ND
Column	Compound	<u>CAS #</u>		MDL	<u>RL</u>	Result
RTX-5	Heptachlor	76-44-8	}	0.35	1.90	ND
RTX-35	Heptachlor	76-44-8	}	0.33	1.90	ND
Confirmed	·					ND
Column	Compound	<u>CAS #</u>		<u>MDL</u>	RL	Result
RTX-5	Aldrin	309-00-	2	0.34	1.90	20.63
RTX-35	Aldrin	309-00-	2	0.34	1.90	6.69
Confirmed						6.69
Column	Compound	<u>CAS #</u>		<u>MDL</u>	<u>RL</u>	Result
	Heptachlor Epoxide	1024-57	-3	0.35	1.90	0.63 J
	Heptachlor Epoxide	1024-57		0.33	1.90	2.33
Confirmed	, , ,					<b>0.63</b> J <sup>3</sup>
Column	Compound	CAS#		<u>MDL</u>	<u>RL</u>	Result
RTX-5	y-Chlordane	5103-74	-2	0.35	1.90	2.85
RTX-35	y-Chlordane	5103-74	-2	0.27	1.90	0.39 J
Confirmed	•					<b>0.39</b> J

Ana	alyzed	by $E$ .	PAm	etho	rd 80	81B
AII	results	s repo	orted	as u	g/kg	

e Analysis Keport					245001 page 2	-,, -
Column	<u>Compound</u>	CAS#	MDL	RL	Result	
RTX-5	Endosulfan I	959-98-8	0.38	1.90	ND	
RTX-35	Endosulfan I	959-98-8	0.30	1.90	10.64	
Confirmed					ND	
Column	Compound	CAS#	<u>MDL</u>	<u>RL</u>	Result	
RTX-5	a-Chlordane	5103-71-9	0.37	1.90	2.31	
RTX-35	a-Chlordane	5103-71-9	0.31	1.90	ND	
Confirmed					ND	
Column	Compound	CAS#	MDL	RL	Result	
RTX-5	Dieldrin	60-57-1	0.70	3.80	21.38	
RTX-35	Dieldrin	60-57-1	0.59	3.80	16.76	
Confirmed	2.0.0				16.76	
Column	Compound	CAS#	MDL	RL	Result	
RTX-5	4,4'-DDE	72-55-9	0.70	3.80	ND	
RTX-35	4,4'-DDE	72-55-9	0.63	3.80	8.89	
Confirmed	4,4 "00"	72 00 0	0,00		ND	
Column	Compound	CAS#	<u>MDL</u>	RL	Result	
RTX-5	Endrin	72-20-8	0.75	3.80	ND	
RTX-35	Endrin	72-20-8	0.62	3.80	4.19	
	LIMI	12-20-0	0.02	0.00	ND	
Confirmed	Compand	CAS#	MDL	RL	Result	
<u>Column</u> RTX-5	<u>Compound</u> Endosulfan II	33213-65-9	0.74	3.80	0.88 J	
	Endosulfan II	33213-65-9	0.70	3.80	1.03 J	
RTX-35	Elluosullali ii	33213-03-8	0.70	0.00	<b>0.88</b> J	
Confirmed		CAC #	MDL	<u>RL</u>	Result	
Column DTV 5	<u>Compound</u> 4,4'-DDD	<u>CAS #</u> 72-54-8	0.72	3.80	ND	
RTX-5	•	72-54-8 72-54-8	0.70	3.80	0.78 J	
RTX-35	4,4'-DDD	12-04-0	0.70	5.00	ND	
Confirmed		CAC #	<u>MDL</u>	<u>RL</u>	Result	
Column DTV 5	<u>Compound</u> Endrin Aldehyde	<u>CAS #</u> 7421-93-4	0.82	3.80	1.16 J	
RTX-5	· · · · · · · · · · · · · · · · · · ·	7421-93-4 7421-93-4	1.20	3.80	2.64 J	
RTX-35	Endrin Aldehyde	1421-93-4	1.20	5.00	1.16 *	
Confirmed	and a second control of the second	0.4.0.44	MDI	DI	Result	
Column	Compound	<u>CAS #</u> 1031-07-8	MDL 0.73	<u>RL</u> 3.80	25.84	
RTX-5	Endosulfan Sulfate		0.60	3.80	2.11 J	
RTX-35	Endosulfan Sulfate	1031-07-8	0.00	3.00	2.11 J *	
Confirmed			NACO		Result	
Column	<u>Compound</u>	<u>CAS #</u>	<u>MDL</u> 0.74	<u>RL</u> 3.80	3.29 J	
RTX-5	4,4'-DDT	50-29-3			2.37 J	
RTX-35	4,4'-DDT	50-29-3	0.52	3.80		
Confirmed			MDI		<b>2.37</b> J Result	
Column	<u>Compound</u>	<u>CAS #</u>	<u>MDL</u> 0.78	<u>RL</u> 3.80	3.26 J	
RTX-5	Endrin Ketone	53494-70-5			5.92	
RTX-35	Endrin Ketone	53494-70-5	0.66	3.80		
Confirmed					3.26 J *	
Column	Compound	CAS #	MDL	<u>RL</u>	Result 62.65	
RTX-5	Methoxychlor	72-43-5	3.85	19.02		
RTX-35	Methoxychlor	72-43-5	2.64	19.02	ND	
Confirmed		er ering da w			ND Result	
Column	Compound	CAS #	<u>MDL</u>	<u>RL</u>	Result ND	
RTX-5	Toxaphene	8001-35-2	2.80	91.89		
RTX-35	Toxaphene	8001-35-2	2.80	91.89	ND	
Confirmed					ND	



# PCB Analysis Report (EPA Method 8082A)

Sample #

: 243602

Client

: LEWIS CONSULTING

Client ID

: WC-4

Project

: 85-89 WEST ALPINE ST.

Date Sampled

: 02/19/14

Date Received

Date Extracted

: 02/19/14 ! : 02/21/14

Data File

: gcb\_022614\_017.rst

Analysis Date

: 02/26/14 at 07:11 PM

Instrument

. 02/20/14 th 0/.11 1 W

Column

: *GCB* 

: RTX-5, 30m, 0.53mm I.D., .0.5um film

: SOIL

Dilution Factor : 1

Sample Volume

: 15.00 g 88.68% solid

Analyst

Matrix

: AAA

#### 243602 Report

Compound	CAS#	MDL (ppb)	RL (ppb)	Result (ppb)
Aroclor 1016	12674-11-2	37.21	187.94	ND
Aroclor 1221	11104-28-2	85.70	187.94	ND
Aroclor 1232	11141-16-5	29.32	187.94	ND
Aroclor 1242	53469-21-9	42.85	187.94	ND
Aroclor 1248	12672-29-6	25.94	187.94	ND
Aroclor 1254	11097-69-1	27.06	187.94	ND
Aroclor 1260	11096-82-5	57.51	187.94	ND

Pesticide Analysis Report 243602 page 1 of 2



: 243602

Sample #

# Pesticide Analysis Report (EPA Method 8081B)

Column :RTX-35, 30m, 0.53mm I.D., 0.5um film

Instrument

: 03/03/14 08:11 PM Date Analyzed

затріе #	. 243002						
Client	: LEWIS CONSULT	ING	Dilution Factor	: 1			
Client ID	: WC-4		Rtx-35 Sequence	: C:\Totalch	rom\Sequences\030	314-GCD-PES	T.sed
Project	: 85-89 WEST ALPI	NE ST.	Rtx-35 Method	: c:\totalchro	om\methods\030314	gcd-pest-rtx35	.mth
Date Sampled	: 02/19/14		Rtx-35 data file	: c:\totalchro	om\data\gcd_030314	_015.rst	
Date Received	: 02/19/14						
Date Extracted	: 02/21/14		Column		m, 0.53mm I.D., 0.5u	m film	
	: SOIL		Instrument	:GCB			
Matrix		.1: 1	Date Analyzed	:03/04/14 1	2:39 AM		
Sample Volume	-	ша	Dilution Factor	:1			
Analyst	: AAA		Rtx-5 Sequence	:C:\Totalchr	om\Sequences\0303	14-GCB-PEST	.seq
			Rtx-5 Method	:c:\totalchro	m\methods\030314-	gcb-pest-rtx5.m	nth
			Rtx-5 data file	:c:\totalchro	m\data\gcb_030314	_015.rst	
<u>Column</u>	Compound	CAS#		MDL	RL	Result	
RTX-5	a-BHC	319-84-	6	0.33	1.88	ND	
RTX-35	a-BHC	319-84-	6	0.33	1.88	0.43	J
Confirmed						ND	
<u>Column</u>	Compound	CAS#		<u>MDL</u>	<u>RL</u>	Result	
RTX-5	b-BHC	319-85-	7	0.35	1.88	ND	
RTX-35	b-BHC	319-85-	7	0.44	1.88	ND	
Confirmed						ND	
<u>Column</u>	Compound	CAS#		<u>MDL</u>	<u>RL</u>	Result	
RTX-5	y-BHC	58-89-9		0.78	1.88	ND	
RTX-35	y-BHC	58-89-9	9	0.37	1.88	3.82	
Confirmed						ND	
Column	<u>Compound</u>	<u>CAS#</u>		MDL 0.33	<u>RL</u>	Result	
RTX-5	d-BHC	319-86-		0.33	1.88	ND 1.04	1
RTX-35	d-BHC	319-86-	8	0.35	1.88	1.04 <b>ND</b>	J
Confirmed	Compound	CAC#		MDL	<u>RL</u>	Result	
Column RTX-5	<u>Compound</u> Heptachlor	<u>CAS #</u> 76-44-8	3	0.35	1.88	2.17	
RTX-35	Heptachlor	76-44-8		0.33	1.88	ND	
Confirmed	Поршотог	70 110	,	0.00	1.00	ND	
Column	Compound	CAS#		MDL	RL	Result	
RTX-5	Aldrin	309-00-	2	0.34	1.88	31.25	
RTX-35	Aldrin	309-00-		0.34	1.88	0.94	J
Confirmed						0.94	J
Column	Compound	<u>CAS #</u>		MDL	<u>RL</u>	Result	
RTX-5	Heptachlor Epoxide	1024-57	-3	0.35	1.88	2.09	
RTX-35	Heptachlor Epoxide	1024-57	-3	0.33	1.88	5.54	
Confirmed						2.09	
<u>Column</u>	<u>Compound</u>	CAS#	_	MDL	RL	Result	
RTX-5	y-Chlordane	5103-74		0.35	1.88	21.98	
RTX-35	y-Chlordane	5103-74	-2	0.27	1.88	13.18	
Confirmed						13.18	

Pesticide Analysis Report 243602 page 2 of 2

e Analysis Report					243002 page 2	: 0j 2
<u>Column</u>	<u>Compound</u>	CAS#	MDL	<u>RL</u>	Result	
RTX-5	Endosulfan I	959-98-8	0.37	1.88	ND	
RTX-35	Endosulfan I	959-98-8	0.29	1.88	ND	
Confirmed					ND	
<u>Column</u>	Compound	CAS#	<u>MDL</u>	<u>RL</u>	Result	
RTX-5	a-Chlordane	5103-71-9	0.36	1.88	20.40	
RTX-35	a-Chlordane	5103-71-9	0.30	1.88	22.26	
Confirmed					20.40	
Column	Compound	CAS#	MDL	<u>RL</u>	Result	
RTX-5	Dieldrin	60-57-1	0.69	3.76	1.41 J	
RTX-35	Dieldrin	60-57-1	0.59	3.76	2.59 J	
Confirmed					<b>1.41</b> J *	
Column	Compound	CAS#	MDL	<u>RL</u>	Result	
RTX-5	4,4'-DDE	72-55-9	0.69	3.76	ND	
RTX-35	4,4'-DDE	72-55-9	0.62	3.76	8.36	
Confirmed	T,T DDL	12 00 0	0.02	0.7 0	ND	
	Compound	CAS#	<u>MDL</u>	RL	Result	
Column RTX-5	Endrin	72-20-8	0.74	3.76	2.42 J	
		72-20-8 72-20-8	0.61	3.76	ND	
RTX-35	Endrin	12-20-0	0.01	3.70		
Confirmed		0.00 #	MDI		ND Popult	
Column DTV 5	<u>Compound</u>	<u>CAS #</u>	MDL 0.73	<u>RL</u> 3.76	Result ND	
RTX-5	Endosulfan II	33213-65-9	0.73			
RTX-35	Endosulfan II	33213-65-9	0.69	3.76	1.16 J	
Confirmed					ND	
<u>Column</u>	<u>Compound</u>	CAS#	MDL	<u>RL</u>	Result	
RTX-5	4,4'-DDD	72-54-8	0.71	3.76	4.24	
RTX-35	4,4'-DDD	72-54-8	0.69	3.76	3.53 J	
Confirmed					<b>3.53</b> J	
<u>Column</u>	<u>Compound</u>	CAS#	MDL	<u>RL</u>	Result	
RTX-5	Endrin Aldehyde	7421-93-4	0.81	3.76	4.96	
RTX-35	Endrin Aldehyde	7421-93-4	1.18	3.76	2.65 J	
Confirmed					2.65 J *	
<u>Column</u>	Compound	CAS#	<u>MDL</u>	<u>RL</u>	<u>Result</u>	
RTX-5	Endosulfan Sulfate	1031-07-8	0.72	3.76	ND	
RTX-35	Endosulfan Sulfate	1031-07-8	0.60	3.76	2.03 J	
Confirmed					ND	
Column	Compound	CAS#	MDL	<u>RL</u>	<u>Result</u>	
RTX-5	4,4'-DDT	50-29-3	0.73	3.76	8.25	
RTX-35	4,4'-DDT	50-29-3	0.52	3.76	6.55	
Confirmed	.,				6.55	
Column	Compound	CAS#	MDL	<u>RL</u>	Result	
RTX-5	Endrin Ketone	53494-70-5	0.77	3.76	1.45 J	
RTX-35	Endrin Ketone	53494-70-5	0.65	3.76	3.72 J	
Confirmed	Endin Rotono	00101100	0.00		<b>1.45</b> J *	
Column	Compound	CAS#	<u>MDL</u>	RL	Result	
RTX-5	Methoxychlor	72-43-5	3.80	18.79	45.43	
RTX-35	· ·	72-43-5	2.60	18.79	ND	
	Methoxychlor	12-43-5	2.00	10.73	ND	
Confirmed		CAC #	MEN	Di	Result	
Column DTV 5	<u>Compound</u>	CAS#	MDL 2.75	<u>RL</u> 90.21	ND	
RTX-5	Toxaphene	8001-35-2				
RTX-35	Toxaphene	8001-35-2	2.75	90.21	ND	
Confirmed					ND	

# METHOD 8260 W.A.T.E.R. WORKS LABORATORY VOA REPORT

Sample Number: 243599

Client Id: WC-1

Data File: K4993

Matrix: Soil

Initial Volume: 5g

Final Volume: NA

Date Analyzed: 27 Feb 2014 8:19 p Dilution Factor: 1
Date Received/Extracted: 2/19/14-NA Percent Solids: 91

Client Name: LEWIS CONS. Project: WEST ALPINE

Column: DB-624,75m, 0.53mm ID, 3um Film

CAS#	Compound	R.L.	Concentration (Units: ug/Kg )
630206	1,1,1,2-Tetrachloroethane	2.7	U
71556	1,1,1-Trichloroethane	2.7	U
79345	1,1,2,2-Tetrachloroethane	2.7	U
79005	1,1,2-Trichloroethane	2.7	U
75343	1,1-Dichloroethane	2.7	U
75354	1,1-Dichloroethene	2.7	U
106934	1,2-Dibromoethane	2.7	U
95501	1,2-dichlorobenzene	2.7	U
107062	1,2-Dichloroethane	2.7	U
78875	1,2-Dichloropropane	2.7	U
541731	1,3-Dichlorobenzene	2.7	U
106467	1,4-Dichlorobenzene	2.7	U
78933	2-Butanone	2.7	U
110758	2-Chloroethylvinyl ether	2.7	U
591786	2-Hexanone	2.7	U
108101	4-Methyl-2-Pentanone	2.7	U
67641	Acetone	2.7	U
71432	Benzene	2.7	U
75274	Bromodichloromethane	2.7	U
75252	Bromoform	2.7	U
74839	Bromomethane	2.7	U
75150	Carbon Disulfide	2.7	U
56235	Carbon Tetrachloride	2.7	U
108907	Chlorobenzene	2.7	U
75003	Chloroethane	2.7	U
67663	Chloroform	2.7	U
74873	Chloromethane	2.7	U
156592	cis-1,2-Dichloroethene	2.7	U
10061015	cis-1,3-Dichloropropene	2.7	U
124481	Dibromochloromethane	2.7	U
100414	Ethylbenzene	2.7	U
108383	m,p-Xylene	2.7	U
75092	Methylene Chloride	2.7	U
95476	o-Xylene	2.7	U
100425	Styrene	2.7	U
127184	Tetrachloroethene	2.7	U
08883	Toluene	2.7	U
156605	trans-1,2-Dichloroethene	2.7	U
10061026	trans-1,3-Dichloropropene	2.7	U
79016	Trichloroethene	2.7	U
75694	Trichlorofluoromethane	2.7	U
108054	Vinyl acetate	2.7	U
,	( )		

# Total Target Concentration 0

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

#### METHOD 8260 W.A.T.E.R. WORKS LABORATORY VOA REPORT

Sample Number: 243599

Client Id: WC-1 Data File: K4993

Date Analyzed: 27 Feb 2014 8:19 p

Date Received/Extracted: 2/19/14-NA

Client Name: LEWIS CONS.

Matrix: Soil

Initial Volume: 5g
Final Volume: NA
Dilution Factor: 1

Percent Solids: 91

**Project:** WEST ALPINE

Column: DB-624,75m, 0.53mm ID, 3um Film

CAS # Compound R.L. Concentration (Units: ug/Kg)

75014 Vinyl Chloride 2.7 U

# Total Target Concentration 0

 $<sup>{\</sup>it U}$  - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

#### 1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA	SAMF	PLE	NO.

		IEN	ATIVELY IDEN	HEIED COMP	OUNDS		14/0	
Lab Name:	W.A.T.E	E.R. WC	RKS LAB INC.	Contrac	t:		WC-	
Lab Code:	07673		Case No.:	SAS	No.:	SD	G No.:	
Matrix: (soil/w	ater)	SOIL		I	Lab Sample	ID: 2	43599	
Sample wt/vo	1:	10.0	(g/ml) G		Lab File ID:	ŀ	(4993.D	
Level: (low/m	ned)	LOW		i	Date Receiv	ed: 2	2/19/2014	
% Moisture: n	ot dec.	9		I	Date Analyz	ed: 2	2/27/2014	
GC Column:	RTX-V	/M ID:	0.25 (mm)	1	Dilution Fac	tor: 1	.0	
Soil Extract V	olume:	1	(uL)	;	Soil Aliquot	Volum	e: 1	(uL)
Number TICs	found:	1		CONCENTR (ug/L or ug/k				
CAS NO.	Š	COM	POUND NAME		RT	EST	CONC.	Q

1.

unknown

17.80

# METHOD 8260 W.A.T.E.R. WORKS LABORATORY VOA REPORT

Sample Number: 243600 Matrix: Soil Initial Volume: 5g Client Id: WC-2 Final Volume: NA Data File: K4994

Date Analyzed: 27 Feb 2014 8:44 p Dilution Factor: 1 Date Received/Extracted: 2/19/14-NA Percent Solids: 83

**Project: WEST ALPINE** Client Name: LEWIS CONS.

Column: DB-624,75m, 0.53mm ID, 3um Film

Commi: DB-024,75111, 0.3311111 1D, 3411 1 11111			Concentration		
CAS#	Compound	R.L.	(Units: ug/Kg )		
630206	1,1,1,2-Tetrachloroethane	3.0	U		
71556	1,1,1-Trichloroethane	3.0	U		
79345	1,1,2,2-Tetrachloroethane	3.0	U		
79005	1,1,2-Trichloroethane	3.0	U		
75343	1,1-Dichloroethane	3.0	U		
75354	1,1-Dichloroethene	3.0	U		
106934	1,2-Dibromoethane	3.0	U		
95501	1,2-dichlorobenzene	3.0	U		
107062	1,2-Dichloroethane	3.0	U		
78875	1,2-Dichloropropane	3.0	U		
541731	1,3-Dichlorobenzene	3.0	U		
106467	1,4-Dichlorobenzene	3.0	U		
78933	2-Butanone	3.0	U		
110758	2-Chloroethylvinyl ether	3.0	U		
591786	2-Hexanone	3.0	U		
108101	4-Methyl-2-Pentanone	3.0	U		
67641	Acetone	3.0	U		
71432	Benzene	3.0	U		
75274	Bromodichloromethane	3.0	U		
75252	Bromoform	3.0	U		
74839	Bromomethane	3.0	U		
75150	Carbon Disulfide	3.0	U		
56235	Carbon Tetrachloride	3.0	U		
108907	Chlorobenzene	3.0	U		
75003	Chloroethane	3.0	U		
67663	Chloroform	3.0	U		
74873	Chloromethane	3.0	U		
156592	cis-1,2-Dichloroethene	3.0	U		
10061015	cis-1,3-Dichloropropene	3.0	U		
124481	Dibromochloromethane	3.0	U		
100414	Ethylbenzene	3.0	U		
108383	m,p-Xylene	3.0	U		
75092	Methylene Chloride	3.0	U		
95476	o-Xylene	3.0	U		
100425	Styrene	3.0	U		
127184	Tetrachloroethene	3.0	U		
08883	Toluene	3.0	U		
156605	trans-1,2-Dichloroethene	3.0	U		
10061026	trans-1,3-Dichloropropene	3.0	U		
79016	Trichloroethene	3.0	U		
75694	Trichlorofluoromethane	3.0	U		
108054	Vinyl acetate	3.0	U		
	•				

#### Total Target Concentration 0

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

# *METHOD 8260* W.A.T.E.R. WORKS LABORATORY VOA REPORT

Sample Number: 243600

Client Id: WC-2 Data File: K4994

Data File: K4994

Date Analyzed: 27 Feb 2014 8:44 p

Date Received/Extracted: 2/19/14-NA

Client Name: LEWIS CONS.

Matrix: Soil

Initial Volume: 5g

Final Volume: NA Dilution Factor: 1

Percent Solids: 83

Project: WEST ALPINE

Column: DB-624,75m, 0.53mm ID, 3um Film

Concentration CAS # Compound R.L. (Units: ug/Kg)75014 Vinyl Chloride 3.0

### Total Target Concentration 0

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

#### 1E

### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA S	AMP	LE	NC
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EST. CONC.

RT

Q

WC-2 Contract: W.A.T.E.R. WORKS LAB INC. Lab Name: SAS No.: SDG No.: Lab Code: 07673 Case No.: Lab Sample ID: 243600 Matrix: (soil/water) SOIL Lab File ID: K4994.D Sample wt/vol: 10.0 (g/ml) G Date Received: 2/19/2014 Level: (low/med) LOW Date Analyzed: 2/27/2014 % Moisture: not dec. 17 Dilution Factor: 1.0 GC Column: RTX-VM ID: 0.25 (mm) (uL) Soil Aliquot Volume: 1 (uL) Soil Extract Volume: 1 **CONCENTRATION UNITS:** (ug/L or ug/Kg) UG/KG Number TICs found: 0

COMPOUND NAME

CAS NO.

Sample Number: 243601

Client Id: WC-3

Data File: K4995

Matrix: Soil

Initial Volume: 5g

Final Volume: NA

Date Analyzed: 27 Feb 2014 9:09 p Dilution Factor: 1
Date Received/Extracted: 2/19/14-NA Percent Solids: 87

Client Name: LEWIS CONS. Project: WEST ALPINE

Column: DB-624,75m, 0.53mm ID, 3um Film

CAS#	Compound	R.L.	Concentration (Units: ug/Kg )
630206	1,1,1,2-Tetrachloroethane	2.9	U
71556	1,1,1-Trichloroethane	2.9	U
79345	1,1,2,2-Tetrachloroethane	2.9	U
79005	1,1,2-Trichloroethane	2.9	U
75343	1,1-Dichloroethane	2.9	U
75354	1,1-Dichloroethene	2.9	U
106934	1,2-Dibromoethane	2.9	U
95501	1,2-dichlorobenzene	2.9	U
107062	1,2-Dichloroethane	2.9	U
78875	1,2-Dichloropropane	2.9	U
541731	1,3-Dichlorobenzene	2.9	U
106467	1,4-Dichlorobenzene	2.9	U
78933	2-Butanone	2.9	U
110758	2-Chloroethylvinyl ether	2.9	U
591786	2-Hexanone	2.9	U
108101	4-Methyl-2-Pentanone	2.9	U
67641	Acetone	2.9	U
71432	Benzene	2.9	U
75274	Bromodichloromethane	2.9	U
75252	Bromoform	2.9	U
74839	Bromomethane	2.9	U
75150	Carbon Disulfide	2.9	U
56235	Carbon Tetrachloride	2.9	U
108907	Chlorobenzene	2.9	U
75003	Chloroethane	2.9	U
67663	Chloroform	2.9	U
74873	Chloromethane	2.9	U
156592	cis-1,2-Dichloroethene	2.9	U
10061015	cis-1,3-Dichloropropene	2.9	U
124481	Dibromochloromethane	2.9	U
100414	Ethylbenzene	2.9	U
108383	m,p-Xylene	2.9	U
75092	Methylene Chloride	2.9	U
95476	o-Xylene	2.9	U
100425	Styrene	2.9	U
127184	Tetrachloroethene	2.9	U
08883	Toluene	2.9	U
156605	trans-1,2-Dichloroethene	2.9	U
10061026	trans-1,3-Dichloropropene	2.9	U
79016	Trichloroethene	2.9	U
75694	Trichlorofluoromethane	2.9	U
108054	Vinyl acetate	2.9	U

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

Sample Number: 243601

Client Id: WC-3 Data File: K4995

Date Analyzed: 27 Feb 2014 9:09 p

Date Received/Extracted: 2/19/14-NA

Client Name: LEWIS CONS.

Matrix: Soil

Initial Volume: 5g Final Volume: NA

Dilution Factor: 1 Percent Solids: 87

Project: WEST ALPINE

Column: DB-624,75m, 0.53mm ID, 3um Film

Concentration (Units: ug/Kg ) CAS# R.L.Compound U Vinyl Chloride 2.9 75014

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

#### 1E

### VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLI	E NO.
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WC-3 Contract: Lab Name: W.A.T.E.R. WORKS LAB INC. Lab Code: 07673 Case No.: SAS No.: SDG No.: Lab Sample ID: 243601 Matrix: (soil/water) SOIL Lab File ID: K4995.D Sample wt/vol: 10.0 (g/ml) G Date Received: 2/19/2014 Level: (low/med) LOW Date Analyzed: 2/27/2014 % Moisture: not dec. 13 GC Column: RTX-VM ID: 0.25 (mm) Dilution Factor: 1.0 Soil Aliquot Volume: 1 Soil Extract Volume: 1 (uL) (uL) **CONCENTRATION UNITS:** (ug/L or ug/Kg) UG/KG 0 Number TICs found:

COMPOUND NAME

CAS NO.

RT

EST. CONC.

Q

Sample Number: 243602

Client Id: WC-4 Data File: K4996

Date Analyzed: 27 Feb 2014 9:34 p

Date Received/Extracted: 2/19/14-NA

Client Name: LEWIS CONS.

Matrix: Soil
Initial Volume: 5g

Final Volume: 59
Final Volume: NA
Dilution Factor: 1

Percent Solids: 89

Project: WEST ALPINE

Column:	DB-624,75m,	0.53mm	ID,	3um	Film
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Colu	mn: DB-624,75m, 0.55mm D,	Julii Filili	Concentration
CAS#	Compound	R.L.	(Units: ug/Kg )
630206	1,1,1,2-Tetrachloroethane	2.8	U
71556	1,1,1-Trichloroethane	2.8	U
79345	1,1,2,2-Tetrachloroethane	2.8	U
79005	1,1,2-Trichloroethane	2.8	U
75343	1,1-Dichloroethane	2.8	U
75354	1,1-Dichloroethene	2.8	U
106934	1,2-Dibromoethane	2.8	U
95501	1,2-dichlorobenzene	2.8	U
107062	1,2-Dichloroethane	2.8	U
78875	1,2-Dichloropropane	2.8	U
541731	1,3-Dichlorobenzene	2.8	U
106467	1,4-Dichlorobenzene	2.8	U
78933	2-Butanone	2.8	U
110758	2-Chloroethylvinyl ether	2.8	U
591786	2-Hexanone	2.8	U
108101	4-Methyl-2-Pentanone	2.8	U
67641	Acetone	2.8	U
71432	Benzene	2.8	U
75274	Bromodichloromethane	2.8	U
75252	Bromoform	2.8	U
74839	Bromomethane	2.8	U
75150	Carbon Disulfide	2.8	U
56235	Carbon Tetrachloride	2.8	U
108907	Chlorobenzene	2.8	U
75003	Chloroethane	2.8	U
67663	Chloroform	2.8	U
74873	Chloromethane	2.8	U
156592	cis-1,2-Dichloroethene	2.8	U
10061015	cis-1,3-Dichloropropene	2.8	U
124481	Dibromochloromethane	2.8	U
100414	Ethylbenzene	2.8	U
108383	m,p-Xylene	2.8	U
75092	Methylene Chloride	2.8	U
95476	o-Xylene	2.8	U
100425	Styrene	2.8	U
127184	Tetrachloroethene	2.8	U
08883	Toluene	2.8	U
156605	trans-1,2-Dichloroethene	2.8	U
10061026	trans-1,3-Dichloropropene	2.8	U
79016	Trichloroethene	2.8	U
75694	Trichlorofluoromethane	2.8	U
108054	Vinyl acetate	2.8	U

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

 $<sup>{\</sup>it E}$  - Indicates the analyte concentration exceeds the calibration range of the instrument.

Sample Number: 243602

Client Id: WC-4 Data File: K4996

Date Analyzed: 27 Feb 2014 9:34 p

Date Received/Extracted: 2/19/14-NA

Client Name: LEWIS CONS.

Matrix: Soil

Initial Volume: 5g

Final Volume: NA

Dilution Factor: 1 Percent Solids: 89

Project: WEST ALPINE

Column: DB-624,75m, 0.53mm ID, 3um Film

Concentration (Units: ug/Kg ) R.L.CAS# Compound U 2.8 75014 Vinyl Chloride

*U* - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified detection limit.

B - Indicates the analyte was found in the blank as well as in the sample. R.L.- Reporting Limit

E - Indicates the analyte concentration exceeds the calibration range of the instrument.

### 1E

## VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

		1 6 1 4	ITTIVEET IDEIT	III ILD OOM	001100		\ \v	4
Lab Name:	W.A.T.E	E.R. WC	RKS LAB INC.	Contrac	t:	nama a mandan akkanda a akandan kalambah makalam	WC-	4
Lab Code:	07673		Case No.:	SAS	No.:	SE	G No.:	
Matrix: (soil/v	vater)	SOIL		1	Lab Sample	D:	243602	
Sample wt/vo	ol:	10.0	(g/ml) G	1	Lab File ID:		K4996.D	
Level: (low/n	ned)	LOW		Ī	Date Recei	ved:	2/19/2014	
% Moisture:	not dec.	11		Ī	Date Analy:	zed:	2/27/2014	
GC Column:	RTX-\	/M ID:	0.25 (mm)	[	Dilution Fac	ctor:	1.0	
Soil Extract \	/olume:	1	(uL)	;	Soil Aliquot	Volun	ne: 1	(uL)
Number TICs	s found:	0		CONCENTR (ug/L or ug/K				
CAS NO.		COM	POUND NAME		RT	ES <sup>-</sup>	T. CONC.	Q

# 

Sample Number: 243599

Client Id: WC-1 Data File: B4992

Date Analyzed: 24 Feb 2014 9:46 a

Date Received/Extracted: 2/19/14-2/21/14

Client Name: LEWIS CONS.

Matrix: Soil

Initial Volume: 50g Final Volume: 1ml

Dilution Factor: 1
Percent Solids: 91

**Project:** WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

CAS#	Compound	R.L.	Concentration (Units: ug/Kg )
120821	1,2,4-Trichlorobenzene	110	U
95501	1,2-Dichlorobenzene	110	U
541731	1,3-Dichlorobenzene	110	U
106647	1,4-Dichlorobenzene	110	U
95954	2,4,5-Trichlorophenol	220	U
88062	2,4,6-Trichlorophenol	220	U
120832	2,4-Dichlorophenol	220	U
105679	2,4-Dimethylphenol	220	U
51285	2,4-Dinitrophenol	220	U
121142	2,4-Dinitrotoluene	110	U
606202	2,6-Dinitrotoluene	110	U
91587	2-Chloronaphthalene	110	U
108601	2-Chlorophenol	220	U
91576	2-Methylnaphthalene	110	U
5487	2-Methylphenol	220	U
88744	2-Nitroaniline	110	U
88755	2-Nitrophenol	220	U
91941	3,3'-Dichlorobenzidine	220	U
106445	3-Methylphenol	220	U
99092	3-Nitroaniline	110	U
121142	4,6-Dinitro-2-methylphenol	220	U
101553	4-Bromophenyl-phenylether	110	U
59507	4-Chloro-3-methylphenol	220	U
106478	4-Chloroaniline	110	U
7005723	4-Chlorophenyl-phenylether	110	U
106445	4-Methylphenol	220	U
100016	4-Nitroaniline	110	U
100027	4-Nitrophenol	220	U
83329	Acenaphthene	110	U
208968	Acenaphthylene	110	U
62533	Aniline	110	U
120127	Anthracene	110	U
103333	Azobenzene	110	U
92875	Benzidine	220	U
207089	Benzo(k)fluoranthene	110	240
56553	Benzo[a]Anthracene	110	460
50328	Benzo[a]Pyrene	110	550
205992	Benzo[b]Fluoranthene	110	740
191242	Benzo[g,h,i]Perylene	110	240
65850	Benzoic Acid	110	U
100516	Benzyl Alcohol	220	U
111911	Bis(2-Chloroethoxy)methane	110	U

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified quantitation limit.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument.

Sample Number: 243599 Client Id: WC-1

Data File: B4992

Date Analyzed: 24 Feb 2014 9:46 a

Date Received/Extracted: 2/19/14-2/21/14
Client Name: LEWIS CONS.

Matrix: Soil
Initial Volume: 50g
Final Volume: 1ml
Dilution Factor: 1
Percent Solids: 91

Project: WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

Coli	Concentration		
CAS#	Compound	R.L.	(Units: ug/Kg )
111444	bis(-2-Chloroethyl) Ether	110	U
08601	Bis(2-Chloroisopropyl)Ether	110	U
117817	Bis(2-Ethylhexyl)phthalate	110	U
85687	Butylbenzylphthalate	110	U
218019	Chrysene	110	440
53703	Dibenz[a,h]anthracene	110	U
132649	Dibenzofuran	110	U
84662	Diethylphthalate	110	U
131113	Dimethylphthalate	110	U
84742	Di-n-Butylphthalate	110	U
117840	Di-n-octylphthalate	110	U
206440	Fluoranthene	110	900
86737	Fluorene	110	U
118741	Hexachlorobenzene	110	U
87683	Hexachlorobutadiene	110	U
77474	Hexachlorocyclopentadiene	110	U
67721	Hexachloroethane	110	U
193395	Indeno[1,2,3-cd]Pyrene	110	310
78591	Isophorone	110	U
91203	Naphthalene	110	U
98953	Nitrobenzene	110	U
62759	N-Nitrosodimethylamine	110	U
621647	N-Nitroso-Di-n-propylamine	110	U
86306	N-Nitrosodiphenylamine	110	U
87865	Pentachlorophenol	220	U
85018	Phenanthrene	110	310
108952	Phenol	220	U
129000	Pyrene	110	790

 $<sup>{\</sup>it U}$  - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified quantitation limit.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument. R.L. - Reporting Limit

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WC-1

Lab Name:	W.A.T.E	R. WOR	KS LAB INC.	C	ontract:	
Lab Code:	07673	С	ase No.:		SAS No.: S	DG No.:
Matrix: (soil/v	water)	WATER			Lab Sample ID:	243599
Sample wt/vo	ol:	50	(g/ml) ML		Lab File ID:	B4992.D
Level: (low/r	ned)	LOW	MM 100 100 1		Date Received:	2/19/2014
% Moisture:		de	canted: (Y/N)	N	Date Extracted:	2/21/2014
Concentrated	d Extract	Volume:	1000 (uL)		Date Analyzed:	2/24/2014
Injection Volu	ume: 1.0	0 (uL)			Dilution Factor:	1.0
GPC Cleanu	p: (Y/N)	N	pH:			

### CONCENTRATION UNITS:

Number TICs found:	5	(ug/L or ug/Kg)	UG/L	
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown PAH	18.35	110	J
2.	unknown	24.95	170	J
3.	Unknown PAH	27.31	220	J
4.	unknown	27.51	140	J
5.	Unknown PAH	27.66	400	J

Sample Number: 243600

Client Id: WC-2 Data File: B4993

Date Analyzed: 24 Feb 2014 10:31 a

Date Received/Extracted: 2/19/14-2/21/14

Client Name: LEWIS CONS.

Matrix: Soil Initial Volume: 50g Final Volume: 1ml

Dilution Factor: 1 Percent Solids: 83

Project: WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

CAS #	Compound		Concentration (Units: ug/Kg )
		R.L.	
120821	1,2,4-Trichlorobenzene	120	U
95501	1,2-Dichlorobenzene	120	U
541731	1,3-Dichlorobenzene	120	U
106647	1,4-Dichlorobenzene	120	U
95954	2,4,5-Trichlorophenol	240	U
88062	2,4,6-Trichlorophenol	240	U
120832	2,4-Dichlorophenol	240	U
105679	2,4-Dimethylphenol	240	U
51285	2,4-Dinitrophenol	240	U
121142	2,4-Dinitrotoluene	120	U
606202	2,6-Dinitrotoluene	120	U
91587	2-Chloronaphthalene	120	U
108601	2-Chlorophenol	240	U
91576	2-Methylnaphthalene	120	U
5487	2-Methylphenol	240	U
88744	2-Nitroaniline	120	U
88755	2-Nitrophenol	240	U
91941	3,3'-Dichlorobenzidine	240	U
106445	3-Methylphenol	240	U
99092	3-Nitroaniline	120	U
121142	4,6-Dinitro-2-methylphenol	240	U
101553	4-Bromophenyl-phenylether	120	U
59507	4-Chloro-3-methylphenol	240	U
106478	4-Chloroaniline	120	U
7005723	4-Chlorophenyl-phenylether	120	U
106445	4-Methylphenol	240	U
100016	4-Nitroaniline	120	U
100073	4-Nitrophenol	240	U
83329	Acenaphthene	120	Ú
208968	Acenaphthylene	120	U
62533	Aniline	120	U
120127	Anthracene	120	U
103333	Azobenzene	120	U
92875	Benzidine	240	U
207089	Benzo(k)fluoranthene	120	U
56553	Benzo[a]Anthracene	120	U
50328	Benzo[a]Pyrene	120	130
205992	Benzo[b]Fluoranthene	120	170
191242	• •	120	U
	Benzo[g,h,i]Perylene	120	U
65850	Benzul Alcohol	240	U
100516	Benzyl Alcohol		
111911	Bis(2-Chloroethoxy)methane	120	U

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified quantitation limit.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument. R.L. - Reporting Limit

### 

Sample Number: 243600

Client Id: WC-2

Data File: B4993

Matrix: Soil

Initial Volume: 50g

Final Volume: 1ml

Data File: B4993 Final Volume: 1m
Date Analyzed: 24 Feb 2014 10:31 a Dilution Factor: 1
Date Received/Extracted: 2/19/14-2/21/14 Percent Solids: 83

Client Name: LEWIS CONS. Project: WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

Col	<i>umn:</i> RTX-5,30m, 0.25mm ID, .2	Concentration	
CAS#	Compound	R.L.	(Units: ug/Kg )
111444	bis(-2-Chloroethyl) Ether	120	U
08601	Bis(2-Chloroisopropyl)Ether	120	U
117817	Bis(2-Ethylhexyl)phthalate	120	U
85687	Butylbenzylphthalate	120	U
218019	Chrysene	120	U
53703	Dibenz[a,h]anthracene	120	U
132649	Dibenzofuran	120	U
84662	Diethylphthalate	120	U
131113	Dimethylphthalate	120	U
84742	Di-n-Butylphthalate	120	U
117840	Di-n-octylphthalate	120	U
206440	Fluoranthene	120	200
86737	Fluorene	120	U
118741	Hexachlorobenzene	120	U
87683	Hexachlorobutadiene	120	U
77474	Hexachlorocyclopentadiene	120	U
67721	Hexachloroethane	120	U
193395	Indeno[1,2,3-cd]Pyrene	120	U
78591	Isophorone	120	U
91203	Naphthalene	120	U
98953	Nitrobenzene	120	U
62759	N-Nitrosodimethylamine	120	U
621647	N-Nitroso-Di-n-propylamine	120	U
86306	N-Nitrosodiphenylamine	120	U
87865	Pentachlorophenol	240	U
85018	Phenanthrene	120	U
108952	Phenol	240	U
129000	Pyrene	120	200

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified quantitation limit.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument. R.L. - Reporting Limit

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WC-2

Lab Name:	W.A.T.E	.R. WOF	RKS LAB INC.	Contr	act:	
Lab Code:	07673		Case No.:	SA	S No.:	SDG No.:
Matrix: (soil/w	vater)	SOIL			Lab Sample ID	243600
Sample wt/vo	ol:	50	(g/ml) G		Lab File ID:	B4993.D
Level: (low/m	ned)	LOW			Date Received:	2/19/2014
% Moisture:	17	C	lecanted: (Y/N)	N	Date Extracted	2/21/2014
Concentrated	I Extract '	Volume:	1000 (uL)		Date Analyzed:	2/24/2014
Injection Volu	ıme: 1.0	) (uL	)		Dilution Factor:	1.0
GPC Cleanup	o: (Y/N)	N	pH:			

### CONCENTRATION UNITS:

Number TICs found:	7	(ug/L or ug/Kg)	UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1	unknown	5.25	120	J
2.	unknown	21.33	310	J
3.	unknown	24.14	250	J
4.	unknown	25.01	230	J
5.	Alkane: Straight-Chain	28.07	160	J
6.	Alkane: Straight-Chain	29.42	160	J
7	unknown	30.82	120	J

Sample Number: 243601

Client Id: WC-3

Data File: B4994

Matrix: Soil

Initial Volume: 50g

Final Volume: 1ml

Date Analyzed: 24 Feb 2014 11:14 a Dilution Factor: 1
Date Received/Extracted: 2/19/14-2/21/14 Percent Solids: 87

Client Name: LEWIS CONS. Project: WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

CAS#	Compound	R.L.	Concentration (Units: ug/Kg )
120821	1,2,4-Trichlorobenzene	110	U
95501	1,2-Dichlorobenzene	110	U
541731	1,3-Dichlorobenzene	110	U
106647	1,4-Dichlorobenzene	110	U
95954	2,4,5-Trichlorophenol	230	U
88062	2,4,6-Trichlorophenol	230	U
120832	2,4-Dichlorophenol	230	U
105679	2,4-Dimethylphenol	230	U
51285	2,4-Dinitrophenol	230	U
121142	2,4-Dinitrotoluene	110	U
606202	2,6-Dinitrotoluene	110	U
91587	2-Chloronaphthalene	110	U
108601	2-Chlorophenol	230	U
91576	2-Methylnaphthalene	110	U
5487	2-Methylphenol	230	U
88744	2-Nitroaniline	110	U
88755	2-Nitrophenol	230	U
91941	3,3'-Dichlorobenzidine	230	U
106445	3-Methylphenol	230	U
99092	3-Nitroaniline	110	U
121142	4,6-Dinitro-2-methylphenol	230	U
101553	4-Bromophenyl-phenylether	110	U
59507	4-Chloro-3-methylphenol	230	U
106478	4-Chloroaniline	110	U
7005723	4-Chlorophenyl-phenylether	110	U
106445	4-Methylphenol	230	U
100016	4-Nitroaniline	110	U
100027	4-Nitrophenol	230	U
83329	Acenaphthene	110	U
208968	Acenaphthylene	110	U
62533	Aniline	110	U
120127	Anthracene	110	U
103333	Azobenzene	110	U
92875	Benzidine	230	U
207089	Benzo(k)fluoranthene	110	170
56553	Benzo[a]Anthracene	110	320
50328	Benzo[a]Pyrene	110	350
205992	Benzo[b]Fluoranthene	110	450
191242	Benzo[g,h,i]Perylene	110	230
65850	Benzoic Acid	110	U
100516	Benzyl Alcohol	230	U
111911	Bis(2-Chloroethoxy)methane	110	U

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified quantitation limit.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument. R.L. - Reporting Limit

Sample Number: 243601

Client Id: WC-3

Data File: B4994

Matrix: Soil

Initial Volume: 50g

Final Volume: 1ml

Date Analyzed: 24 Feb 2014 11:14 a Dilution Factor: 1
Date Received/Extracted: 2/19/14-2/21/14 Percent Solids: 87

Client Name: LEWIS CONS. Project: WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

CAS#	Compound	R.L.	Concentration (Units: ug/Kg )
111444	bis(-2-Chloroethyl) Ether	110	U
08601	Bis(2-Chloroisopropyl)Ether	110	U
117817	Bis(2-Ethylhexyl)phthalate	110	U
85687	Butylbenzylphthalate	110	U
218019	Chrysene	110	300
53703	Dibenz[a,h]anthracene	110	U
132649	Dibenzofuran	110	U
84662	Diethylphthalate	110	U
131113	Dimethylphthalate	110	U
84742	Di-n-Butylphthalate	110	U
117840	Di-n-octylphthalate	110	U
206440	Fluoranthene	110	650
86737	Fluorene	110	U
118741	Hexachlorobenzene	110	U
87683	Hexachlorobutadiene	110	U
77474	Hexachlorocyclopentadiene	110	U
67721	Hexachloroethane	110	U
193395	Indeno[1,2,3-cd]Pyrene	110	260
78591	Isophorone	110	U
91203	Naphthalene	110	U
98953	Nitrobenzene	110	U
62759	N-Nitrosodimethylamine	110	U
621647	N-Nitroso-Di-n-propylamine	110	U
86306	N-Nitrosodiphenylamine	110	U
87865	Pentachlorophenol	230	U
85018	Phenanthrene	110	290
108952	Phenol	230	U
129000	Pyrene	110	570

 $<sup>{\</sup>it U}$  - Indicates the compound was analyzed but not detected.

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B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument. R.L. - Repo

## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

WC-3

Lab Name:	W.A.T.E	.R. WOI	RKS LAB INC.	C	ontract:	_
Lab Code:	07673		Case No.:		SAS No.: SI	DG No.:
Matrix: (soil/w	vater)	SOIL			Lab Sample ID:	243601
Sample wt/vc	ol:	50	(g/ml) G		Lab File ID:	B4994.D
Level: (low/m	ned)	LOW			Date Received:	2/19/2014
% Moisture:	13		decanted: (Y/N)	Ν	Date Extracted:	2/21/2014
Concentrated	l Extract '	Volume:	1000 (uL)		Date Analyzed:	2/24/2014
Injection Volu	ıme: 1.0	) (uL	)		Dilution Factor:	1.0
GPC Cleanup	o: (Y/N)	N	pH:			

### CONCENTRATION UNITS:

25.00

27.35

27.70

(ug/L or ug/Kg)

UG/KG

170

130

270

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	unknown	14.75	200	J
2	Unknown PAH	18.40	120	J

Number TICs found:

3.

4.

5.

5

unknown

unknown

Unknown PAH

Sample Number: 243602

Client Id: WC-4

Data File: B4995

Matrix: Soil

Initial Volume: 50g

Final Volume: 1ml

Date Analyzed: 24 Feb 2014 11:57 a Dilution Factor: 1
Date Received/Extracted: 2/19/14-2/21/14 Percent Solids: 89

Client Name: LEWIS CONS. Project: WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

CAS#	Compound	R.L.	Concentration (Units: ug/Kg )
120821	1,2,4-Trichlorobenzene	110	U
95501	1,2-Dichlorobenzene	110	U
541731	1,3-Dichlorobenzene	110	U
106647	1,4-Dichlorobenzene	110	U
95954	2,4,5-Trichlorophenol	220	U
88062	2,4,6-Trichlorophenol	220	U
120832	2,4-Dichlorophenol	220	U
105679	2,4-Dimethylphenol	220	U
51285	2,4-Dinitrophenol	220	U
121142	2,4-Dinitrotoluene	110	U
606202	2,6-Dinitrotoluene	110	U
91587	2-Chloronaphthalene	110	U
108601	2-Chlorophenol	220	U
91576	2-Methylnaphthalene	110	U
5487	2-Methylphenol	220	U
88744	2-Nitroaniline	110	U
88755	2-Nitrophenol	220	U
91941	3,3'-Dichlorobenzidine	220	U
106445	3-Methylphenol	220	U
99092	3-Nitroaniline	110	U
121142	4,6-Dinitro-2-methylphenol	220	U
101553	4-Bromophenyl-phenylether	110	U
59507	4-Chloro-3-methylphenol	220	U
106478	4-Chloroaniline	110	U
7005723	4-Chlorophenyl-phenylether	110	U
106445	4-Methylphenol	220	U
100016	4-Nitroaniline	110	U
100027	4-Nitrophenol	220	U
83329	Acenaphthene	110	U
208968	Acenaphthylene	110	U
62533	Aniline	110	· · · · U
120127	Anthracene	110	150
103333	Azobenzene	110	U
92875	Benzidine	220	U
207089	Benzo(k)fluoranthene	110	320
56553	Benzo[a]Anthracene	110	640
50328	Benzo[a]Pyrene	110	710
205992	Benzo[b]Fluoranthene	110	970
191242	Benzo[g,h,i]Perylene	110	360
65850	Benzoic Acid	110	U
100516	Benzyl Alcohol	220	U
111911	Bis(2-Chloroethoxy)methane	110	U

U - Indicates the compound was analyzed but not detected.

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B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument. R.L. - Reporting Limit

# 

Sample Number: 243602

Client Id: WC-4

Data File: B4995

Matrix: Soil

Initial Volume: 50g

Final Volume: 1ml

Date Analyzed: 24 Feb 2014 11:57 a Dilution Factor: 1
Date Received/Extracted: 2/19/14-2/21/14 Percent Solids: 89

Client Name: LEWIS CONS. Project: WEST ALPINE

Column: RTX-5,30m, 0.25mm ID, .25um Film

001.			Concentration
CAS#	Compound	R.L.	(Units: ug/Kg )
111444	bis(-2-Chloroethyl) Ether	110	U
08601	Bis(2-Chloroisopropyl)Ether	110	U
117817	Bis(2-Ethylhexyl)phthalate	110	U
85687	Butylbenzylphthalate	110	U
218019	Chrysene	110	620
53703	Dibenz[a,h]anthracene	110	U
132649	Dibenzofuran	110	U
84662	Diethylphthalate	110	U
131113	Dimethylphthalate	110	U
84742	Di-n-Butylphthalate	110	U
117840	Di-n-octylphthalate	110	U
206440	Fluoranthene	110	1200
86737	Fluorene	110	U
118741	Hexachlorobenzene	110	U
87683	Hexachlorobutadiene	110	U
77474	Hexachlorocyclopentadiene	110	U
67721	Hexachloroethane	110	U
193395	Indeno[1,2,3-cd]Pyrene	110	410
78591	Isophorone	110	U
91203	Naphthalene	110	U
98953	Nitrobenzene	110	U
62759	N-Nitrosodimethylamine	110	U
621647	N-Nitroso-Di-n-propylamine	110	U
86306	N-Nitrosodiphenylamine	110	U
87865	Pentachlorophenol	220	U
85018	Phenanthrene	110	530
108952	Phenol	220	U
129000	Pyrene	110	1100

U - Indicates the compound was analyzed but not detected.

J - Indicates an estimated value when a compound is detected at less than the specified quantitation limit.

B - Indicates the analyte was found in the blank as well as in the sample.

E - Indicates the analyte exceeds the calibration range of the instrument. R.L. - Reporting Limit

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

WC-4

Lab Name:	W.A.T.E	.R. WO	RKS LAB INC.	Cont	tract:			
Lab Code:	07673		Case No.:	SA	AS No.:	SE	DG No.:	
Matrix: (soil/v	vater)	SOIL			Lab Sam	ple ID:	243602	
Sample wt/vo	ol:	50	(g/ml) G	THE STREET STREET	Lab File	ID:	B4995.D	
Level: (low/n	ned)	LOW			Date Red	ceived:	2/19/2014	
% Moisture:	11		decanted: (Y/N)	N	Date Ext	racted:	2/21/2014	
Concentrated	d Extract	Volume	1000 (uL)		Date Ana	alyzed:	2/24/2014	
Injection Volu	ıme: 1.0	) (uL	-)		Dilution F	actor:	1.0	
GPC Cleanup	p: (Y/N)	Ν	pH:					

### CONCENTRATION UNITS:

Number TICs found:	12	(ug/L or ug/Kg)	UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown PAH	19.74	140	J
2.	unknown	20.31	110	J
3.	unknown	24.15	110	J
4.	unknown	25.02	130	J
5.	unknown	26.61	140	J
6.	Unknown PAH	27.38	270	J
7.	Unknown PAH	27.73	560	J
8.	Alkane: Straight-Chain	28.75	150	J
9.	Alkane: Straight-Chain	29.41	130	J
10.	Unknown PAH	29.82	160	J
11.	Unknown PAH	30.05	250	J
12.	unknown	30.82	110	J