MSD
Metropolitan Sewer District

Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org

October 22, 2010

Mr. Femi Akindele
Remedial Project Manager
Kentucky/Tennessee Section
U.S. Environmental Protection Agency
REGION IV
61 Forsyth Street
ATLANTA, GA 30303

Re: Sampling Event # 36, Result of Groundwater Quality Monitoring - FY 11, First Quarter (FY11-1Q), Lees Lane Superfund Site, Jefferson County, Kentucky, Administrative Order on Consent, USEPA Docket No-91-32-C

Dear Mr. Akindele

In accordance with paragraph 11, under Reporting Requirements, of the subject Consent Order and Attachment 1, Operation and Maintenance Plan For Post-Removal Site Control at the Lee's Lane Landfill Site. Section 4.4, Groundwater Quality Monitoring, attached for your information files is one photocopy each of the following analyses and reports prepared by Heritage Laboratories, Inc., 7901 W. Morris Street, Indianapolis, Indiana 46231 for MSD.

The data package contains all of the analytical results and Quality Assurance reports for samples relating to the event.

Certificate of Analysis

WELL LOCATION	SAMPLE DESCRIPTION	LAB ID	REPORT LENGTH
MW-04	LL-MW-04-36	A894271	10 pages
MW-04 Duplicate	LL-MW-04-36 DUP	A894272	10 pages
MW-04 FB	LL-MW-04-35	A894273	10 pages
MW-05-36	LL-MW-05-36	A894274	10 pages

Quality Assurance Reports

DESCRIPTION	REPORT LENGTH
Quality Assurance Report	62 pages
Chain of Custody (COPY)	1 page

Please advise if you have any questions concerning the attached information.

Sincerely,

Richard H. Watkins, Sr.
I &FP Supervisor
RHW/rw
Lees-11-1Qtr

Enc.

cc: Kentucky National Resource Environment Protection Cabinet
Mr. Daniel Phelps,, Division of Waste Management
H. J. Schardein, Jr., Executive Director
Lees Lane File

HERITAGE
ENVIRONMENTAL SERVICES

Quality Assurance Report Package # 60543

LOUISVILLE AND JEFFERSON COUNTY MSD

RICHARD H. WATKIN SR.
3050 COMMERCE CENTER PLACE
LOUISVILLE, KY 40211

Project : LOUISVILLE AND JEFFERSON COUNTY MSD

Sampled : 23-SEP-10

Sample Range : A894271, A894272, A894273, A894274

Kurt J Maines

Approved by: KURT MAINES - Project Manager

Heritage Environmental Services, LLC
Commercial Laboratory Operations
7901 West Morris Street
Indianapolis, Indiana 46231
Phone: (317) 243-8304
Fax : (317) 486-5095

Package #60543

01029074

HERITAGE ENVIRONMENTAL SERVICES, LLC.

COMMERCIAL LABORATORY OPERATIONS

7901 West Morris Street Indianapolis IN 46231

www.heritage-enviro.com (800)827-4374 Fax: (317) 486-5095

I - 74720

Customer name/number: MSD

Submitter #

Project Name: Lee's Lane - Project 36

Z Quote No: Z127569 (Given to you by your contact)

PO No. or Project/Activity ID:

PRINT HERITAGE TSR NAME:

CUSTOMER STATUS: New / Existing

If no previous credit has been established with Heritage, **prepayment** (check,VISA,etc) is required at the time of sample submittal to the laboratory.

Sampled By: RF, DOL, JEBA

Analyses Requested (Note special detection limits or methods)

Send Report To:

Co: Louisville & Jeff. Co. MSD

Add:

Attn: Rick Watkins

Phone: ( ) Yes

Fax: ( )

E-mail:

Sample Turn Around Time

Standard:_____ Rush Date___/___/___ Mo Day Yr

(Accelerated TAT subject to Additional Charge)
(Date must be Accepted and Approved by Lab)

Date Sampled	Time sampled	Comp	Grab	Sample ID and/or Location where your sample was taken	Sample type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Swipe, Other	Number of Containers	PCB/Pest	Semi VOL	Metals	Cyanide	VOL	Filter Lead	Chrome Hex			Remarks:	Lab use only Sample No.
9-23-10	8:52 AM/PM			MW-04-36	WW	12	✓	✓	✓	✓	✓	✓	✓				A894271
9-23-10	8:52 AM/PM			MW-04-36 Duplicate	WW	12	✓	✓	✓	✓	✓	✓	✓				272
9-23-10	8:52 AM/PM			MW-04-36 FB	DI	~~12~~ 11	✓	✓	✓	✓	✓	✓	✓				273
9-23-10	10:27 AM/PM			MW-05-36	WW	✓	✓	✓	✓	✓	✓	✓	✓				274
~~9-23-10~~	~~9:58~~ AM/PM			~~LEE'S LANE - 36 TB~~	DI	~~2~~					✓						
	AM/PM																
	AM/PM																
	AM/PM																
	AM/PM																
	AM/PM																

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	9/23/10 2:30pm	[signature]
[signature]	9-23-10	
	/	

Received for Lab by: (Signature) [signature]

Date 9.23.10 Temp. 4.3 °C

Time 1650 ROI: Yes / No

Laboratory use only	Yes	No
Custody seals present/intact?	✓	
Broken containers?		✓
COC agree with sample labels?	✓	
Correct containers for testing?	✓	
Headspace issues acceptable?		
Holding time(s) acceptable?	✓	
Preservative pH's acceptable?	✓	
Was pH left unadjusted?	✓	

Comments:
- one amber bottle was broken
- Filtered Field Blank was NOT Filtered - poured.
- JEBA - Did not recieve T. Blank

ORIGINAL

HERITAGE ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-SEP-10	A894271
	Completed	**PO Number**
	07-OCT-10	..
	Printed	**Sampled**
	07-OCT-10	23-SEP-10 08:52

Report To	Bill To
RICHARD H. WATKIN SR. LOUISVILLE AND JEFFERSON COUNTY MSD 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211	RICK WATKINS LOUISVILLE & JEFFERSON COUNTY M.S.D. 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211

Sample Description

CLIENT ID: MW-04-36
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 4217 - LOUISVILLE AND JEFFERSON COUNTY MSD
DATA PACKAGE #: 60543
LOCATION: LEES LANE - ANNUAL EVENT
WELL NUMBER: GROUNDWATER

HEXAVALENT CHROMIUM SW846-7196A NELAC:Y

Analyst: J. SMITH Analysis Date: 24-SEP-10 08:00 Test: M110.6.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.01	mg/L

GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: R. DALAL Analysis Date: 24-SEP-10 Instrument: PREP Test: P233.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	970		mL
FINAL VOLUME	10		mL

PCB/PESTICIDE SCAN GC:ECD SW846-8081 NELAC:Y

Analyst: R. DALAL Analysis Date: 24-SEP-10 21:03 Instrument: GC/ECD Test: O305.1.0

Prep: GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.1.0

Parameter	Result	Det. Limit	Units
ALPHA-BHC	BDL	0.05	ug/L
BETA-BHC	BDL	0.05	ug/L
DELTA-BHC	BDL	0.05	ug/L
GAMMA-BHC (LINDANE)	BDL	0.05	ug/L
HEPTACHLOR	BDL	0.05	ug/L
ALDRIN	BDL	0.05	ug/L
HEPTACHLOR EPOXIDE	BDL	0.05	ug/L
ENDOSULFAN I	BDL	0.05	ug/L
DIELDRIN	BDL	0.1	ug/L
4,4'-DDE	BDL	0.1	ug/L

Sample ID: A894271 MW-04-36

ENDRIN	BDL	0.1	ug/L
ENDOSULFAN II	BDL	0.1	ug/L
4,4'-DDD	BDL	0.1	ug/L
ENDOSULFAN SULFATE	BDL	0.1	ug/L
4,4'-DDT	BDL	0.1	ug/L
METHOXYCHLOR	BDL	0.5	ug/L
ENDRIN ALDEHYDE	BDL	0.1	ug/L
ENDRIN KETONE	BDL	0.1	ug/L
ALPHA-CHLORDANE	BDL	0.5	ug/L
GAMMA-CHLORDANE	BDL	0.5	ug/L
TOXAPHENE	BDL	1	ug/L
PCB AROCLOR 1016	BDL	0.5	ug/L
PCB AROCLOR 1221	BDL	0.5	ug/L
PCB AROCLOR 1232	BDL	0.5	ug/L
PCB AROCLOR 1242	BDL	0.5	ug/L
PCB AROCLOR 1248	BDL	0.5	ug/L
PCB AROCLOR 1254	BDL	0.5	ug/L
PCB AROCLOR 1260	BDL	0.5	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	88.3		% Rec

CYANIDE DISTILLATION SW846-9012B

Analyst: E. SOTKIEWICZ — Analysis Date: 27-SEP-10 09:30 — Instrument: PREP — Test: P101.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	6		mL
FINAL VOLUME	6		mL

CYANIDE, TOTAL (AUTOMATED) SW846-9012B — NELAC:Y

Analyst: R. YOUNG — Analysis Date: 27-SEP-10 16:00 — Instrument: AUTO-ANALYZER — Test: G101.4.0

Prep: CYANIDE DISTILLATION SW846-9012B P101.4.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

FIELD FILTRATION SAS

Analysis Date: — Instrument: FIELD — Test: P110.0.0

Parameter	Result	Det. Limit	Units

LEAD TRACE ICP SW846-6010B — NELAC:Y

Analyst: J. KRAMER — Analysis Date: 30-SEP-10 04:49 — Instrument: TRACE ICP — Test: M116.0.1

Prep: FIELD FILTRATION SAS P110.0.0

Sample ID: A894271 MW-04-36

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 27-SEP-10 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

ALUMINUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M101.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ALUMINUM	BDL	0.050	mg/L

ANTIMONY ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M102.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.010	mg/L

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.17	0.010	mg/L

BERYLLIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M105.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0040	mg/L

CADMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M108.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	120	0.10	mg/L

Sample ID: A894271 MW-04-36

CHROMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M110.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	0.010	mg/L

COPPER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M112.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.010	mg/L

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	8.4	0.020	mg/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	42	0.10	mg/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.20	0.010	mg/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	0.0050	mg/L

Sample ID: A894271 MW-04-36

POTASSIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M126.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
POTASSIUM	2.6	0.10	mg/L

SILVER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M130.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	33	0.10	mg/L

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

ARSENIC TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:18 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.010	0.0050	mg/L

LEAD TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:48 Instrument: TRACE ICP Test: M116.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

Sample ID: A894271 MW-04-36

SELENIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 02-OCT-10 01:18 | Instrument: TRACE ICP | Test: M128.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

THALLIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 02-OCT-10 01:18 | Instrument: TRACE ICP | Test: M134.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	0.0050	mg/L

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL | Analysis Date: 28-SEP-10 11:00 | Instrument: PREP | Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL | Analysis Date: 28-SEP-10 15:00 | Instrument: CVAA | Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00020	mg/L

GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. WILLHITE | Analysis Date: 29-SEP-10 | Instrument: PREP | Test: P233.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C NELAC:Y

Analyst: J. MINNIEAR, II | Analysis Date: 01-OCT-10 08:41 | Instrument: GC/MS SVOA | Test: O505.3.0

Prep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.4.0

Parameter	Result	Det. Limit	Units
ACENAPHTHENE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZYL ALCOHOL	BDL	10	ug/L

Sample ID: A894271 MW-04-36

BENZYLBUTYLPHTHALATE	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
DIBENZOFURAN	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	20	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
DINITROBENZENES	BDL	50	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
FLUORANTHENE	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	50	ug/L
3-NITROANILINE	BDL	50	ug/L
4-NITROANILINE	BDL	50	ug/L
NITROBENZENE	BDL	10	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
PHENANTHRENE	BDL	10	ug/L

Sample ID: A894271 MW-04-36

2-PICOLINE	BDL	50	ug/L
PYRENE	BDL	10	ug/L
PYRIDINE	BDL	50	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
TOLUENEDIAMINE	BDL	50	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
BENZOIC ACID	BDL	50	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	50	ug/L
2,4-DINITROPHENOL	BDL	50	ug/L
2-METHYLPHENOL	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
4-NITROPHENOL	BDL	50	ug/L
PENTACHLOROPHENOL	BDL	50	ug/L
PHENOL	BDL	10	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	50	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
SURROGATE RECOVERY			
2-FLUOROPHENOL	34		% Rec
PHENOL-D5	20		% Rec
NITROBENZENE-D5	101		% Rec
2-FLUOROBIPHENYL	100		% Rec
2,4,6-TRIBROMOPHENOL	94		% Rec
TERPHENYL-D14	41		% Rec

VOLATILE ORGANICS SW846-8260B NELAC Y

Analyst: R. SHAMP Analysis Date: 29-SEP-10 15:21 Instrument: GC/MS VOA Test: O510.7.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	1.0	ug/L
BROMOBENZENE	BDL	1.0	ug/L
BROMOCHLOROMETHANE	BDL	1.0	ug/L
BROMODICHLOROMETHANE	BDL	1.0	ug/L
BROMOFORM	BDL	1.0	ug/L
BROMOMETHANE	BDL	1.0	ug/L

Sample ID: A894271 MW-04-36

N-BUTYLBENZENE	BDL	1.0	ug/L
SEC-BUTYLBENZENE	BDL	1.0	ug/L
TERT-BUTYLBENZENE	BDL	1.0	ug/L
CARBON TETRACHLORIDE	BDL	1.0	ug/L
CHLOROBENZENE	BDL	1.0	ug/L
DIBROMOCHLOROMETHANE	BDL	1.0	ug/L
CHLOROETHANE	BDL	1.0	ug/L
CHLOROFORM	BDL	1.0	ug/L
CHLOROMETHANE	BDL	1.0	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	1.0	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	1.0	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	1.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	1.0	ug/L
DIBROMOMETHANE	BDL	1.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	1.0	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	1.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	1.0	ug/L
DICHLORODIFLUOROMETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHANE	BDL	1.0	ug/L
1,2-DICHLOROETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHENE	BDL	1.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
1,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,3-DICHLOROPROPANE	BDL	1.0	ug/L
2,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,1-DICHLOROPROPENE	BDL	1.0	ug/L
ETHYL BENZENE	BDL	1.0	ug/L
HEXACHLOROBUTADIENE	BDL	1.0	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	1.0	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	1.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	1.0	ug/L
METHYL ETHYL KETONE	BDL	5.0	ug/L
NAPHTHALENE	BDL	1.0	ug/L
N-PROPYLBENZENE	BDL	1.0	ug/L
STYRENE	BDL	1.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	1.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	1.0	ug/L
TETRACHLOROETHENE	BDL	1.0	ug/L
TOLUENE	BDL	1.0	ug/L
1,2,3-TRICHLOROBENZENE	BDL	1.0	ug/L

Sample ID: A894271 MW-04-36

1,2,4-TRICHLOROBENZENE	BDL	1.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	1.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	1.0	ug/L
TRICHLOROETHENE	BDL	1.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	1.0	ug/L
1,2,3-TRICHLOROPROPANE	BDL	1.0	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	1.0	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	1.0	ug/L
VINYL CHLORIDE	BDL	1.0	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	1.0	ug/L
N-HEXANE	BDL	1.0	ug/L
O-XYLENE	BDL	1.0	ug/L
M/P-XYLENE	BDL	2.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	104		% Rec
TOLUENE-D8	90		% Rec
4-BROMOFLUOROBENZENE	93		% Rec
DIBROMOFLUOROMETHANE	98		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 4.3 C.
Sample chain of custody number 74720.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
IL ELAP / NELAP Accreditation # 100401 Indiana SDWA Lab Accred. No. C-49-01

Scott A Bryan

Approved by: SCOTT BRYAN 04-OCT-10

HERITAGE ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-SEP-10	A894272
	Completed	**PO Number**
	07-OCT-10	..
	Printed	**Sampled**
	07-OCT-10	23-SEP-10 08:52

Report To	Bill To
RICHARD H. WATKIN SR. LOUISVILLE AND JEFFERSON COUNTY MSD 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211	RICK WATKINS LOUISVILLE & JEFFERSON COUNTY M.S.D. 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211

Sample Description

CLIENT ID: MW-04-36 DUPLICATE
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 4217 - LOUISVILLE AND JEFFERSON COUNTY MSD
DATA PACKAGE #: 60543
LOCATION: LEES LANE - ANNUAL EVENT
WELL NUMBER: GROUNDWATER

HEXAVALENT CHROMIUM SW846-7196A NELAC Y
Analyst: J. SMITH Analysis Date: 24-SEP-10 08:00 Test: M110.6.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.01	mg/L

GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C
Analyst: R. DALAL Analysis Date: 24-SEP-10 Instrument: PREP Test: P233.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	10		mL

PCB/PESTICIDE SCAN GC:ECD SW846-8081 NELAC Y
Analyst: R. DALAL Analysis Date: 24-SEP-10 21:43 Instrument: GC/ECD Test: O305.1.0
Prep: GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.1.0

Parameter	Result	Det. Limit	Units
ALPHA-BHC	BDL	0.05	ug/L
BETA-BHC	BDL	0.05	ug/L
DELTA-BHC	BDL	0.05	ug/L
GAMMA-BHC (LINDANE)	BDL	0.05	ug/L
HEPTACHLOR	BDL	0.05	ug/L
ALDRIN	BDL	0.05	ug/L
HEPTACHLOR EPOXIDE	BDL	0.05	ug/L
ENDOSULFAN I	BDL	0.05	ug/L
DIELDRIN	BDL	0.1	ug/L
4,4'-DDE	BDL	0.1	ug/L

Sample ID: A894272 MW-04-36 DUPLICATE

ENDRIN	BDL	0.1	ug/L
ENDOSULFAN II	BDL	0.1	ug/L
4,4'-DDD	BDL	0.1	ug/L
ENDOSULFAN SULFATE	BDL	0.1	ug/L
4,4'-DDT	BDL	0.1	ug/L
METHOXYCHLOR	BDL	0.5	ug/L
ENDRIN ALDEHYDE	BDL	0.1	ug/L
ENDRIN KETONE	BDL	0.1	ug/L
ALPHA-CHLORDANE	BDL	0.5	ug/L
GAMMA-CHLORDANE	BDL	0.5	ug/L
TOXAPHENE	BDL	1	ug/L
PCB AROCLOR 1016	BDL	0.5	ug/L
PCB AROCLOR 1221	BDL	0.5	ug/L
PCB AROCLOR 1232	BDL	0.5	ug/L
PCB AROCLOR 1242	BDL	0.5	ug/L
PCB AROCLOR 1248	BDL	0.5	ug/L
PCB AROCLOR 1254	BDL	0.5	ug/L
PCB AROCLOR 1260	BDL	0.5	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	89.4		% Rec

CYANIDE DISTILLATION SW846-9012B

Analyst: E. SOTKIEWICZ — Analysis Date: 27-SEP-10 09:30 — Instrument: PREP — Test: P101.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	6		mL
FINAL VOLUME	6		mL

CYANIDE, TOTAL (AUTOMATED) SW846-9012B — NELAC:Y

Analyst: R. YOUNG — Analysis Date: 27-SEP-10 16:00 — Instrument: AUTO-ANALYZER — Test: G101.4.0

Prep: CYANIDE DISTILLATION SW846-9012B P101.4.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

FIELD FILTRATION SAS

Analysis Date: — Instrument: FIELD — Test: P110.0.0

Parameter	Result	Det. Limit	Units

LEAD TRACE ICP SW846-6010B — NELAC:Y

Analyst: J. KRAMER — Analysis Date: 30-SEP-10 05:06 — Instrument: TRACE ICP — Test: M116.0.1

Prep: FIELD FILTRATION SAS P110.0.0

Sample ID: A894272 MW-04-36 DUPLICATE

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 27-SEP-10 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

ALUMINUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M101.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ALUMINUM	BDL	0.050	mg/L

ANTIMONY ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M102.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.010	mg/L

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.17	0.010	mg/L

BERYLLIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M105.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0040	mg/L

CADMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M108.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	120	0.10	mg/L

Sample ID: A894272 MW-04-36 DUPLICATE

CHROMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M110.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	0.010	mg/L

COPPER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M112.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.010	mg/L

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	8.3	0.020	mg/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	42	0.10	mg/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.20	0.010	mg/L

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	0.0050	mg/L

Sample ID: A894272 MW-04-36 DUPLICATE

POTASSIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M126.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
POTASSIUM	2.5	0.10	mg/L

SILVER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M130.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	31	0.10	mg/L

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

ARSENIC TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:02 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.0097	0.0050	mg/L

LEAD TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:38 Instrument: TRACE ICP Test: M116.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

Sample ID: A894272 MW-04-36 DUPLICATE

SELENIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:02 Instrument: TRACE ICP Test: M128.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

THALLIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:02 Instrument: TRACE ICP Test: M134.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	0.0050	mg/L

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 28-SEP-10 11:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 28-SEP-10 15:04 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00020	mg/L

GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. WILLHITE Analysis Date: 29-SEP-10 Instrument: PREP Test: P233.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C NELAC:Y

Analyst: J. MINNIEAR, II Analysis Date: 01-OCT-10 09:19 Instrument: GC/MS SVOA Test: O505.3.0

Prep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.4.0

Parameter	Result	Det. Limit	Units
ACENAPHTHENE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZYL ALCOHOL	BDL	10	ug/L

Sample ID: A894272 MW-04-36 DUPLICATE

BENZYLBUTYLPHTHALATE	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
DIBENZOFURAN	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	20	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
DINITROBENZENES	BDL	50	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
FLUORANTHENE	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	50	ug/L
3-NITROANILINE	BDL	50	ug/L
4-NITROANILINE	BDL	50	ug/L
NITROBENZENE	BDL	10	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
PHENANTHRENE	BDL	10	ug/L

Sample ID: A894272 MW-04-36 DUPLICATE

2-PICOLINE	BDL	50	ug/L
PYRENE	BDL	10	ug/L
PYRIDINE	BDL	50	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
TOLUENEDIAMINE	BDL	50	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
BENZOIC ACID	BDL	50	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	50	ug/L
2,4-DINITROPHENOL	BDL	50	ug/L
2-METHYLPHENOL	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
4-NITROPHENOL	BDL	50	ug/L
PENTACHLOROPHENOL	BDL	50	ug/L
PHENOL	BDL	10	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	50	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
.			
SURROGATE RECOVERY			

2-FLUOROPHENOL	44		% Rec
PHENOL-D5	28		% Rec
NITROBENZENE-D5	98		% Rec
2-FLUOROBIPHENYL	97		% Rec
2,4,6-TRIBROMOPHENOL	97		% Rec
TERPHENYL-D14	62		% Rec

VOLATILE ORGANICS SW846-8260B NELAC:Y

Analyst: R. SHAMP Analysis Date: 29-SEP-10 15:47 Instrument: GC/MS VOA Test: O510.7.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	1.0	ug/L
BROMOBENZENE	BDL	1.0	ug/L
BROMOCHLOROMETHANE	BDL	1.0	ug/L
BROMODICHLOROMETHANE	BDL	1.0	ug/L
BROMOFORM	BDL	1.0	ug/L
BROMOMETHANE	BDL	1.0	ug/L

Sample ID: A894272 MW-04-36 DUPLICATE

N-BUTYLBENZENE	BDL	1.0	ug/L
SEC-BUTYLBENZENE	BDL	1.0	ug/L
TERT-BUTYLBENZENE	BDL	1.0	ug/L
CARBON TETRACHLORIDE	BDL	1.0	ug/L
CHLOROBENZENE	BDL	1.0	ug/L
DIBROMOCHLOROMETHANE	BDL	1.0	ug/L
CHLOROETHANE	BDL	1.0	ug/L
CHLOROFORM	BDL	1.0	ug/L
CHLOROMETHANE	BDL	1.0	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	1.0	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	1.0	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	1.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	1.0	ug/L
DIBROMOMETHANE	BDL	1.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	1.0	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	1.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	1.0	ug/L
DICHLORODIFLUOROMETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHANE	BDL	1.0	ug/L
1,2-DICHLOROETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHENE	BDL	1.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
1,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,3-DICHLOROPROPANE	BDL	1.0	ug/L
2,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,1-DICHLOROPROPENE	BDL	1.0	ug/L
ETHYL BENZENE	BDL	1.0	ug/L
HEXACHLOROBUTADIENE	BDL	1.0	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	1.0	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	1.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	1.0	ug/L
METHYL ETHYL KETONE	BDL	5.0	ug/L
NAPHTHALENE	BDL	1.0	ug/L
N-PROPYLBENZENE	BDL	1.0	ug/L
STYRENE	BDL	1.0	ug/L
1,1,1,2-TETRACHLOROETHANE	BDL	1.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	1.0	ug/L
TETRACHLOROETHENE	BDL	1.0	ug/L
TOLUENE	BDL	1.0	ug/L
1,2,3-TRICHLOROBENZENE	BDL	1.0	ug/L

Sample ID: A894272 MW-04-36 DUPLICATE

1,2,4-TRICHLOROBENZENE	BDL	1.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	1.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	1.0	ug/L
TRICHLOROETHENE	BDL	1.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	1.0	ug/L
1,2,3-TRICHLOROPROPANE	BDL	1.0	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	1.0	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	1.0	ug/L
VINYL CHLORIDE	BDL	1.0	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	1.0	ug/L
N-HEXANE	BDL	1.0	ug/L
O-XYLENE	BDL	1.0	ug/L
M/P-XYLENE	BDL	2.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	104		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	95		% Rec
DIBROMOFLUOROMETHANE	101		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 4.3 C.
Sample chain of custody number 74720.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
IL ELAP / NELAP Accreditation # 100401 Indiana SDWA Lab Accred. No. C-49-01

Scott A Bryan

Approved by: SCOTT BRYAN 04-OCT-10

HERITAGE ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-SEP-10	A894273
	Completed	**PO Number**
	07-OCT-10	..
	Printed	**Sampled**
	07-OCT-10	23-SEP-10 08:52

Report To	Bill To
RICHARD H. WATKIN SR. LOUISVILLE AND JEFFERSON COUNTY MSD 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211	RICK WATKINS LOUISVILLE & JEFFERSON COUNTY M.S.D. 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211

Sample Description

CLIENT ID: MW-04-36 FB
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 4217 - LOUISVILLE AND JEFFERSON COUNTY MSD
DATA PACKAGE #: 60543
LOCATION: LEES LANE - ANNUAL EVENT
WELL NUMBER: GROUNDWATER

HEXAVALENT CHROMIUM SW846-7196A NELAC:Y

Analyst: J. SMITH Analysis Date: 24-SEP-10 08:00 Test: M110.6.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.01	mg/L

GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: R. DALAL Analysis Date: 24-SEP-10 Instrument: PREP Test: P233.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	10		mL

PCB/PESTICIDE SCAN GC:ECD SW846-8081 NELAC:Y

Analyst: R. DALAL Analysis Date: 24-SEP-10 21:56 Instrument: GC/ECD Test: O305.1.0

Prep: GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.1.0

Parameter	Result	Det. Limit	Units
ALPHA-BHC	BDL	0.05	ug/L
BETA-BHC	BDL	0.05	ug/L
DELTA-BHC	BDL	0.05	ug/L
GAMMA-BHC (LINDANE)	BDL	0.05	ug/L
HEPTACHLOR	BDL	0.05	ug/L
ALDRIN	BDL	0.05	ug/L
HEPTACHLOR EPOXIDE	BDL	0.05	ug/L
ENDOSULFAN I	BDL	0.05	ug/L
DIELDRIN	BDL	0.1	ug/L
4,4'-DDE	BDL	0.1	ug/L

Sample ID: A894273 MW-04-36 FB

ENDRIN	BDL	0.1	ug/L
ENDOSULFAN II	BDL	0.1	ug/L
4,4'-DDD	BDL	0.1	ug/L
ENDOSULFAN SULFATE	BDL	0.1	ug/L
4,4'-DDT	BDL	0.1	ug/L
METHOXYCHLOR	BDL	0.5	ug/L
ENDRIN ALDEHYDE	BDL	0.1	ug/L
ENDRIN KETONE	BDL	0.1	ug/L
ALPHA-CHLORDANE	BDL	0.5	ug/L
GAMMA-CHLORDANE	BDL	0.5	ug/L
TOXAPHENE	BDL	1	ug/L
PCB AROCLOR 1016	BDL	0.5	ug/L
PCB AROCLOR 1221	BDL	0.5	ug/L
PCB AROCLOR 1232	BDL	0.5	ug/L
PCB AROCLOR 1242	BDL	0.5	ug/L
PCB AROCLOR 1248	BDL	0.5	ug/L
PCB AROCLOR 1254	BDL	0.5	ug/L
PCB AROCLOR 1260	BDL	0.5	ug/L

SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	64.3		% Rec

CYANIDE DISTILLATION SW846-9012B

Analyst: E. SOTKIEWICZ | Analysis Date: 27-SEP-10 09:30 | Instrument: PREP | Test: P101.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	6		mL
FINAL VOLUME	6		mL

CYANIDE, TOTAL (AUTOMATED) SW846-9012B NELAC:Y

Analyst: R. YOUNG | Analysis Date: 27-SEP-10 16:00 | Instrument: AUTO-ANALYZER | Test: G101.4.0

Prep: CYANIDE DISTILLATION SW846-9012B P101.4.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

FIELD FILTRATION SAS

Analysis Date: | Instrument: FIELD | Test: P110.0.0

Parameter	Result	Det. Limit	Units

LEAD TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 30-SEP-10 05:10 | Instrument: TRACE ICP | Test: M116.0.1

Prep: FIELD FILTRATION SAS P110.0.0

Sample ID: A894273 MW-04-36 FB

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA | Analysis Date: 27-SEP-10 09:00 | Instrument: PREP | Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA | Analysis Date: 29-SEP-10 09:00 | Instrument: PREP | Test: P130.4.1

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL VOLUME	50		mL

ALUMINUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 28-SEP-10 08:51 | Instrument: ICP | Test: M101.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ALUMINUM	BDL	0.050	mg/L

ANTIMONY ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 28-SEP-10 08:51 | Instrument: ICP | Test: M102.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.010	mg/L

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 28-SEP-10 08:51 | Instrument: ICP | Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	0.059	0.010	mg/L

BERYLLIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 28-SEP-10 08:51 | Instrument: ICP | Test: M105.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0040	mg/L

CADMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER | Analysis Date: 28-SEP-10 08:51 | Instrument: ICP | Test: M108.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

Sample ID: A894273 MW-04-36 FB

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	0.21	0.10	mg/L

CHROMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M110.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	BDL	0.010	mg/L

COPPER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M112.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.010	mg/L

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	BDL	0.020	mg/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	BDL	0.10	mg/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	BDL	0.010	mg/L

Sample ID: A894273 MW-04-36 FB

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	0.011	0.0050	mg/L

POTASSIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M126.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
POTASSIUM	BDL	0.10	mg/L

SILVER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M130.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 30-SEP-10 02:50 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.1

Parameter	Result	Det. Limit	Units
SODIUM	0.31	0.10	mg/L

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

ARSENIC TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:23 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0050	mg/L

Sample ID: A894273 MW-04-36 FB

LEAD TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:51 Instrument: TRACE ICP Test: M116.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

SELENIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:23 Instrument: TRACE ICP Test: M128.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

THALLIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:23 Instrument: TRACE ICP Test: M134.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	0.0050	mg/L

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 28-SEP-10 11:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 28-SEP-10 15:05 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00020	mg/L

GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. WILLHITE Analysis Date: 29-SEP-10 Instrument: PREP Test: P233.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C NELAC:Y

Analyst: J. MINNIEAR, II Analysis Date: 01-OCT-10 09:56 Instrument: GC/MS SVOA Test: O505.3.0

Prep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.4.0

Parameter	Result	Det. Limit	Units
ACENAPHTHENE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L

Sample ID: A894273 MW-04-36 FB

BENZO(A)PYRENE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZYL ALCOHOL	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
DIBENZOFURAN	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	20	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
DINITROBENZENES	BDL	50	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
FLUORANTHENE	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	50	ug/L
3-NITROANILINE	BDL	50	ug/L

Sample ID: A894273 MW-04-36 FB

4-NITROANILINE	BDL	50	ug/L
NITROBENZENE	BDL	10	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
PHENANTHRENE	BDL	10	ug/L
2-PICOLINE	BDL	50	ug/L
PYRENE	BDL	10	ug/L
PYRIDINE	BDL	50	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
TOLUENEDIAMINE	BDL	50	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
BENZOIC ACID	BDL	50	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	50	ug/L
2,4-DINITROPHENOL	BDL	50	ug/L
2-METHYLPHENOL	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
4-NITROPHENOL	BDL	50	ug/L
PENTACHLOROPHENOL	BDL	50	ug/L
PHENOL	BDL	10	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	50	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
.			
SURROGATE RECOVERY			

2-FLUOROPHENOL	77		% Rec
PHENOL-D5	57		% Rec
NITROBENZENE-D5	122		% Rec
2-FLUOROBIPHENYL	118		% Rec
2,4,6-TRIBROMOPHENOL	111		% Rec
TERPHENYL-D14	77		% Rec

VOLATILE ORGANICS SW846-8260B NELAC:Y

Analyst: R. SHAMP Analysis Date: 30-SEP-10 12:49 Instrument: GC/MS VOA Test: O510.7.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	1.0	ug/L

Sample ID: A894273 MW-04-36 FB

BROMOBENZENE	BDL	1.0	ug/L
BROMOCHLOROMETHANE	BDL	1.0	ug/L
BROMODICHLOROMETHANE	BDL	1.0	ug/L
BROMOFORM	BDL	1.0	ug/L
BROMOMETHANE	BDL	1.0	ug/L
N-BUTYLBENZENE	BDL	1.0	ug/L
SEC-BUTYLBENZENE	BDL	1.0	ug/L
TERT-BUTYLBENZENE	BDL	1.0	ug/L
CARBON TETRACHLORIDE	BDL	1.0	ug/L
CHLOROBENZENE	BDL	1.0	ug/L
DIBROMOCHLOROMETHANE	BDL	1.0	ug/L
CHLOROETHANE	BDL	1.0	ug/L
CHLOROFORM	BDL	1.0	ug/L
CHLOROMETHANE	BDL	1.0	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	1.0	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	1.0	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	1.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	1.0	ug/L
DIBROMOMETHANE	BDL	1.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	1.0	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	1.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	1.0	ug/L
DICHLORODIFLUOROMETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHANE	BDL	1.0	ug/L
1,2-DICHLOROETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHENE	BDL	1.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
1,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,3-DICHLOROPROPANE	BDL	1.0	ug/L
2,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,1-DICHLOROPROPENE	BDL	1.0	ug/L
ETHYL BENZENE	BDL	1.0	ug/L
HEXACHLOROBUTADIENE	BDL	1.0	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	1.0	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	1.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	B 2.8	1.0	ug/L
METHYL ETHYL KETONE	BDL	5.0	ug/L
NAPHTHALENE	BDL	1.0	ug/L
N-PROPYLBENZENE	BDL	1.0	ug/L
STYRENE	BDL	1.0	ug/L

Sample ID: A894273 MW-04-36 FB

1,1,1,2-TETRACHLOROETHANE	BDL	1.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	1.0	ug/L
TETRACHLOROETHENE	BDL	1.0	ug/L
TOLUENE	BDL	1.0	ug/L
1,2,3-TRICHLOROBENZENE	BDL	1.0	ug/L
1,2,4-TRICHLOROBENZENE	BDL	1.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	1.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	1.0	ug/L
TRICHLOROETHENE	BDL	1.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	1.0	ug/L
1,2,3-TRICHLOROPROPANE	BDL	1.0	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	1.0	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	1.0	ug/L
VINYL CHLORIDE	BDL	1.0	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	1.0	ug/L
N-HEXANE	BDL	1.0	ug/L
O-XYLENE	BDL	1.0	ug/L
M/P-XYLENE	BDL	2.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	101		% Rec
TOLUENE-D8	94		% Rec
4-BROMOFLUOROBENZENE	98		% Rec
DIBROMOFLUOROMETHANE	100		% Rec

MeCL2 was detected in method blank at 1.3 ug/l.

Prep Method SW846-5030B Purge and Trap

Sample Comments

B Detected in blank
BDL Below Detection Limit

Sample was received on ice at temperature 4.3 C.
Sample chain of custody number 74720.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
IL ELAP / NELAP Accreditation # 100401 Indiana SDWA Lab Accred. No. C-49-01

Scott A Bryan

Approved by: SCOTT BRYAN 06-OCT-10

HERITAGE ENVIRONMENTAL SERVICES

CERTIFICATE OF ANALYSIS

Service Location	Received	Lab ID
HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	23-SEP-10	A894274
	Completed	**PO Number**
	07-OCT-10	..
	Printed	**Sampled**
	07-OCT-10	23-SEP-10 08:52

Report To	Bill To
RICHARD H. WATKIN SR. LOUISVILLE AND JEFFERSON COUNTY MSD 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211	RICK WATKINS LOUISVILLE & JEFFERSON COUNTY M.S.D. 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211

Sample Description

CLIENT ID: MW-05-36
MATRIX TYPE: NON-SPECIFIC WATER
SUBMITTER: 4217 - LOUISVILLE AND JEFFERSON COUNTY MSD
DATA PACKAGE #: 60543
LOCATION: LEES LANE - ANNUAL EVENT
WELL NUMBER: GROUNDWATER

HEXAVALENT CHROMIUM SW846-7196A NELAC:Y

Analyst: J. SMITH Analysis Date: 24-SEP-10 08:00 Test: M110.6.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	.05	mg/L

1:5 Dilution.

Dilution due to suspected matrix interference.

GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: R. DALAL Analysis Date: 24-SEP-10 Instrument: PREP Test: P233.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	980		mL
FINAL VOLUME	10		mL

PCB/PESTICIDE SCAN GC:ECD SW846-8081 NELAC:Y

Analyst: R. DALAL Analysis Date: 24-SEP-10 22:09 Instrument: GC/ECD Test: O305.1.0

Prep: GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.1.0

Parameter	Result	Det. Limit	Units
ALPHA-BHC	BDL	0.05	ug/L
BETA-BHC	BDL	0.05	ug/L
DELTA-BHC	BDL	0.05	ug/L
GAMMA-BHC (LINDANE)	BDL	0.05	ug/L
HEPTACHLOR	BDL	0.05	ug/L
ALDRIN	BDL	0.05	ug/L
HEPTACHLOR EPOXIDE	BDL	0.05	ug/L

Sample ID: A894274 MW-05-36

ENDOSULFAN I	BDL	0.05	ug/L
DIELDRIN	BDL	0.1	ug/L
4,4'-DDE	BDL	0.1	ug/L
ENDRIN	BDL	0.1	ug/L
ENDOSULFAN II	BDL	0.1	ug/L
4,4'-DDD	BDL	0.1	ug/L
ENDOSULFAN SULFATE	BDL	0.1	ug/L
4,4'-DDT	BDL	0.1	ug/L
METHOXYCHLOR	BDL	0.5	ug/L
ENDRIN ALDEHYDE	BDL	0.1	ug/L
ENDRIN KETONE	BDL	0.1	ug/L
ALPHA-CHLORDANE	BDL	0.5	ug/L
GAMMA-CHLORDANE	BDL	0.5	ug/L
TOXAPHENE	BDL	1	ug/L
PCB AROCLOR 1016	BDL	0.5	ug/L
PCB AROCLOR 1221	BDL	0.5	ug/L
PCB AROCLOR 1232	BDL	0.5	ug/L
PCB AROCLOR 1242	BDL	0.5	ug/L
PCB AROCLOR 1248	BDL	0.5	ug/L
PCB AROCLOR 1254	BDL	0.5	ug/L
PCB AROCLOR 1260	BDL	0.5	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	76.0		% Rec

CYANIDE DISTILLATION SW846-9012B

Analyst: E. SOTKIEWICZ — Analysis Date: 27-SEP-10 09:30 — Instrument: PREP — Test: P101.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	6		mL
FINAL VOLUME	6		mL

CYANIDE, TOTAL (AUTOMATED) SW846-9012B — NELAC:Y

Analyst: R. YOUNG — Analysis Date: 27-SEP-10 16:00 — Instrument: AUTO-ANALYZER — Test: G101.4.0

Prep: CYANIDE DISTILLATION SW846-9012B P101.4.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

FIELD FILTRATION SAS

Analysis Date: — Instrument: FIELD — Test: P110.0.0

Parameter	Result	Det. Limit	Units

Sample ID: A894274 MW-05-36

LEAD TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 30-SEP-10 05:13 Instrument: TRACE ICP Test: M116.0.1

Prep: FIELD FILTRATION SAS P110.0.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

Analyst: K. KAMARA Analysis Date: 27-SEP-10 09:00 Instrument: PREP Test: P130.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

ALUMINUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M101.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ALUMINUM	BDL	0.050	mg/L

ANTIMONY ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M102.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.010	mg/L

BARIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M104.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BARIUM	1.5	0.010	mg/L

BERYLLIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M105.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0040	mg/L

CADMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M108.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

Sample ID: A894274 MW-05-36

CALCIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M109.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CALCIUM	100	0.10	mg/L

CHROMIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M110.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

COBALT ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M111.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COBALT	0.013	0.010	mg/L

COPPER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M112.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
COPPER	BDL	0.010	mg/L

IRON ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M115.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
IRON	13	0.020	mg/L

MAGNESIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M118.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MAGNESIUM	42	0.10	mg/L

MANGANESE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M119.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.40	0.010	mg/L

Sample ID: A894274 MW-05-36

NICKEL ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M122.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
NICKEL	0.018	0.0050	mg/L

POTASSIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M126.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
POTASSIUM	28	0.10	mg/L

SILVER ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M130.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SODIUM ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M131.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SODIUM	65	0.10	mg/L

VANADIUM ICP SW846-6010B NELAC:N

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M138.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: ICP Test: M139.3.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ZINC	BDL	0.020	mg/L

ARSENIC TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:29 Instrument: TRACE ICP Test: M103.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.044	0.0050	mg/L

Sample ID: A894274 MW-05-36

LEAD TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 28-SEP-10 08:55 Instrument: TRACE ICP Test: M116.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0050	mg/L

SELENIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:29 Instrument: TRACE ICP Test: M128.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

THALLIUM TRACE ICP SW846-6010B NELAC:Y

Analyst: J. KRAMER Analysis Date: 02-OCT-10 01:29 Instrument: TRACE ICP Test: M134.0.0

Prep: FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A P130.4.0

Parameter	Result	Det. Limit	Units
THALLIUM	BDL	0.0050	mg/L

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 28-SEP-10 11:00 Instrument: PREP Test: P131.6.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	40		mL
FINAL VOLUME	40		mL

MERCURY CVAA SW846-7470A NELAC:Y

Analyst: S. O'NEAL Analysis Date: 28-SEP-10 15:06 Instrument: CVAA Test: M120.1.0

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A P131.6.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00020	mg/L

GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

Analyst: C. WILLHITE Analysis Date: 29-SEP-10 Instrument: PREP Test: P233.4.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C NELAC:Y

Analyst: J. MINNIEAR, II Analysis Date: 01-OCT-10 10:33 Instrument: GC/MS SVOA Test: O505.3.0

Prep: GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C P233.4.0

Parameter	Result	Det. Limit	Units
ACENAPHTHENE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L

Sample ID: A894274 MW-05-36

BENZO(A)PYRENE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZYL ALCOHOL	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
DIBENZOFURAN	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	20	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
DINITROBENZENES	BDL	50	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
FLUORANTHENE	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	50	ug/L
3-NITROANILINE	BDL	50	ug/L

Sample ID: A894274 MW-05-36

4-NITROANILINE	BDL	50	ug/L
NITROBENZENE	BDL	10	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
PHENANTHRENE	BDL	10	ug/L
2-PICOLINE	BDL	50	ug/L
PYRENE	BDL	10	ug/L
PYRIDINE	BDL	50	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
TOLUENEDIAMINE	BDL	50	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
BENZOIC ACID	BDL	50	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	50	ug/L
2,4-DINITROPHENOL	BDL	50	ug/L
2-METHYLPHENOL	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
4-NITROPHENOL	BDL	50	ug/L
PENTACHLOROPHENOL	BDL	50	ug/L
PHENOL	BDL	10	ug/L
1,2,4,5-TETRACHLOROBENZENE	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	50	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
SURROGATE RECOVERY			

2-FLUOROPHENOL	75		% Rec
PHENOL-D5	55		% Rec
NITROBENZENE-D5	116		% Rec
2-FLUOROBIPHENYL	114		% Rec
2,4,6-TRIBROMOPHENOL	126		% Rec
TERPHENYL-D14	71		% Rec

VOLATILE ORGANICS SW846-8260B NELAC Y

Analyst: R. SHAMP Analysis Date: 30-SEP-10 13:14 Instrument: GC/MS VOA Test: O510.7.0

Parameter	Result	Det. Limit	Units
BENZENE	BDL	1.0	ug/L

Sample ID: A894274 MW-05-36

BROMOBENZENE	BDL	1.0	ug/L
BROMOCHLOROMETHANE	BDL	1.0	ug/L
BROMODICHLOROMETHANE	BDL	1.0	ug/L
BROMOFORM	BDL	1.0	ug/L
BROMOMETHANE	BDL	1.0	ug/L
N-BUTYLBENZENE	BDL	1.0	ug/L
SEC-BUTYLBENZENE	BDL	1.0	ug/L
TERT-BUTYLBENZENE	BDL	1.0	ug/L
CARBON TETRACHLORIDE	BDL	1.0	ug/L
CHLOROBENZENE	BDL	1.0	ug/L
DIBROMOCHLOROMETHANE	BDL	1.0	ug/L
CHLOROETHANE	BDL	1.0	ug/L
CHLOROFORM	BDL	1.0	ug/L
CHLOROMETHANE	BDL	1.0	ug/L
2-CHLOROTOLUENE (O-CHLOROTOLUENE)	BDL	1.0	ug/L
4-CHLOROTOLUENE (P-CHLOROTOLUENE)	BDL	1.0	ug/L
1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	BDL	1.0	ug/L
1,2-DIBROMOETHANE (EDB)	BDL	1.0	ug/L
DIBROMOMETHANE	BDL	1.0	ug/L
1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	BDL	1.0	ug/L
1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	BDL	1.0	ug/L
1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	BDL	1.0	ug/L
DICHLORODIFLUOROMETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHANE	BDL	1.0	ug/L
1,2-DICHLOROETHANE	BDL	1.0	ug/L
1,1-DICHLOROETHENE	BDL	1.0	ug/L
CIS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
TRANS-1,2-DICHLOROETHENE	BDL	1.0	ug/L
1,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,3-DICHLOROPROPANE	BDL	1.0	ug/L
2,2-DICHLOROPROPANE	BDL	1.0	ug/L
1,1-DICHLOROPROPENE	BDL	1.0	ug/L
ETHYL BENZENE	BDL	1.0	ug/L
HEXACHLOROBUTADIENE	BDL	1.0	ug/L
ISOPROPYLBENZENE (CUMENE)	BDL	1.0	ug/L
4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	BDL	1.0	ug/L
DICHLOROMETHANE (METHYLENE CHLORIDE)	BDL	1.0	ug/L
METHYL ETHYL KETONE	BDL	5.0	ug/L
NAPHTHALENE	BDL	1.0	ug/L
N-PROPYLBENZENE	BDL	1.0	ug/L
STYRENE	BDL	1.0	ug/L

Sample ID: A894274 MW-05-36

1,1,1,2-TETRACHLOROETHANE	BDL	1.0	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	1.0	ug/L
TETRACHLOROETHENE	BDL	1.0	ug/L
TOLUENE	BDL	1.0	ug/L
1,2,3-TRICHLOROBENZENE	BDL	1.0	ug/L
1,2,4-TRICHLOROBENZENE	BDL	1.0	ug/L
1,1,1-TRICHLOROETHANE	BDL	1.0	ug/L
1,1,2-TRICHLOROETHANE	BDL	1.0	ug/L
TRICHLOROETHENE	BDL	1.0	ug/L
TRICHLOROFLUOROMETHANE	BDL	1.0	ug/L
1,2,3-TRICHLOROPROPANE	BDL	1.0	ug/L
1,2,4-TRIMETHYLBENZENE	BDL	1.0	ug/L
1,3,5-TRIMETHYLBENZENE	BDL	1.0	ug/L
VINYL CHLORIDE	BDL	1.0	ug/L
METHYL-T-BUTYL ETHER (MTBE)	BDL	1.0	ug/L
N-HEXANE	BDL	1.0	ug/L
O-XYLENE	BDL	1.0	ug/L
M/P-XYLENE	BDL	2.0	ug/L
...			
SURROGATE RECOVERY			

DICHLOROETHANE-D4	101		% Rec
TOLUENE-D8	92		% Rec
4-BROMOFLUOROBENZENE	96		% Rec
DIBROMOFLUOROMETHANE	101		% Rec

Prep Method SW846-5030B Purge and Trap

Sample Comments

BDL Below Detection Limit

Sample was received on ice at temperature 4.3 C.
Sample chain of custody number 74720.

This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab. Heritage Environmental Services, LLC certifies that the test results indicated as NELAC (National Environmental Laboratory Accreditation Conference) accredited (Yes for NELAC) meet all requirements of NELAC and Illinois EPA Part 186 unless otherwise explained or justified as to the the exact nature of the deviations.
IL ELAP / NELAP Accreditation # 100401 Indiana SDWA Lab Accred. No. C-49-01

Scott A Bryan

Approved by: SCOTT BRYAN 06-OCT-10

HERITAGE ENVIRONMENTAL SERVICES

Quality Assurance Report

60543

07-OCT-10

Service Location	Submitter
Heritage Environmental Services, LLC Commercial Laboratory Operations 7901 West Morris Street Indianapolis, IN 46231 (317) 243-8304	RICHARD H. WATKIN SR. LOUISVILLE AND JEFFERSON COUNTY MSD 3050 COMMERCE CENTER PLACE LOUISVILLE, KY 40211

Sample ID	Client ID	Date/Time Sampled	Date Received	Date Released
A894271	MW-04-36	23-Sep-10 08:52	23-Sep-10	04-Oct-2010
	WELL NUMBER :	GROUNDWATER		
	LOCATION :	LEES LANE - ANNUAL EVENT		
A894272	MW-04-36 DUPLICATE	23-Sep-10 08:52	23-Sep-10	04-Oct-2010
	WELL NUMBER :	GROUNDWATER		
	LOCATION :	LEES LANE - ANNUAL EVENT		
A894273	MW-04-36 FB	23-Sep-10 08:52	23-Sep-10	06-Oct-2010
	WELL NUMBER :	GROUNDWATER		
	LOCATION :	LEES LANE - ANNUAL EVENT		
A894274	MW-05-36	23-Sep-10 08:52	23-Sep-10	06-Oct-2010
	WELL NUMBER :	GROUNDWATER		
	LOCATION :	LEES LANE - ANNUAL EVENT		

HERITAGE ENVIRONMENTAL SERVICES

60543

NICKEL ICP SW846-6010B **M122.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	NICKEL	0.005			0.00440	mg/L	88.0	
ICV01	Q2359152	PERKIN ELM	NICKEL	1			0.976	mg/L	97.6	
CDL01	Q2359149	INORGANIC	NICKEL	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	NICKEL	1.00			0.917	mg/L	91.7	
LCCV	Q2359202	INORGANIC	NICKEL	0.005			0.00473	mg/L	94.6	
CCV	Q2359188	INORGANIC	NICKEL	5.00			4.73	mg/L	94.6	
BLA01	Q2359169	NA	NICKEL			<	0.00200	mg/L		
BLA02	Q2358858	NA	NICKEL			<	0.00200	mg/L		
LCS	Q2358859	SPEX	NICKEL	0.5			0.498	mg/L	99.6	
SER01	Q2359198	A894272	NICKEL	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	NICKEL	0		BDL		mg/L		
SPI02	Q2358861	A894272	NICKEL	0	0.500		0.454	mg/L	90.8	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	NICKEL	5.00			4.72	mg/L	94.4	
BLA01	Q2359170	NA	NICKEL			<	0.00200	mg/L		
CDL01	Q2359221	INORGANIC	NICKEL	0.005			0.00464	mg/L	92.8	
ICS-AB	Q2359217	PERKIN ELM	NICKEL	1.00			0.889	mg/L	88.9	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

SODIUM ICP SW846-6010B **M131.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							

HERITAGE ENVIRONMENTAL SERVICES

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SODIUM ICP SW846-6010B **M131.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	SODIUM	0.1			0.0856	mg/L	85.6	
ICV01	Q2359152	PERKIN ELM	SODIUM	20			19.2	mg/L	96.0	
CDL01	Q2359148	INORGANIC	SODIUM	0.1			0.0855	mg/L	85.5	
LCCV	Q2359202	INORGANIC	SODIUM	0.1			0.0866	mg/L	86.6	
CCV	Q2359188	INORGANIC	SODIUM	50			47.9	mg/L	95.8	
BLA01	Q2359169	NA	SODIUM			<	0.0400	mg/L		
BLA02	Q2358858	NA	SODIUM				0.267	mg/L		
LCS	Q2358859	SPEX	SODIUM	100			107	mg/L	107.0	
SER01	Q2359198	A894272	SODIUM	31.3			27.4	mg/L		13.3
SAMPLE	A894272		*See Certificate of Analysis, Rep: 0*							
DUP02	Q2358860	A894272	SODIUM	31.3			29.4	mg/L		6.3
SPI02	Q2358861	A894272	SODIUM	31.3	100		128	mg/L	96.7	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	SODIUM	50			47.9	mg/L	95.8	
BLA01	Q2359170	NA	SODIUM			<	0.0400	mg/L		
CDL01	Q2359221	INORGANIC	SODIUM	0.1			0.0813	mg/L	81.3	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572364 Analyst: K KAMARA Run Date: 29-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 29-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2359690	NA	Analytical Run: R572438							
LCS	Q2359691	SPEX	Analytical Run: R572438							
DUP02	Q2359692	A894570	Analytical Run: R572438							
SPI02	Q2359693	A894570	Analytical Run: R572438							
SAMPLE	A894273	Rep: 0	Analytical Run: R572438							

R572438 Analyst: J KRAMER Run Date: 29-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 30-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2360106	PERKIN ELE	SODIUM	0.1			0.0837	mg/L	83.7	
ICV01	Q2360105	PERKIN ELM	SODIUM	20			19.5	mg/L	97.5	
CDL01	Q2360094	INORGANIC	SODIUM	0.1			0.0825	mg/L	82.5	
BLA02	Q2359690	NA	SODIUM				0.00397	mg/L		
LCS	Q2359691	SPEX	SODIUM	100			107	mg/L	107.0	

HERITAGE ENVIRONMENTAL SERVICES

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SODIUM ICP SW846-6010B **M131.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572438 Analyst: J KRAMER Run Date: 29-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 30-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SER01	Q2360100	A894570	SODIUM	30.6			27.4	mg/L		11.0
DUP02	Q2359692	A894570	SODIUM	30.6			30.4	mg/L		0.6
SPI02	Q2359693	A894570	SODIUM	30.6	100		138	mg/L	107.4	
LCCV	Q2360108	INORGANIC	SODIUM	0.1			0.0843	mg/L	84.3	
CCV	Q2360074	INORGANIC	SODIUM	50			50.5	mg/L	101.0	
BLA01	Q2360053	NA	SODIUM			<	0.000324	mg/L		
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
CCV	Q2360075	INORGANIC	SODIUM	50			51.2	mg/L	102.4	
BLA01	Q2360054	NA	SODIUM			<	0.0400	mg/L		
SER01	Q2360101	A894577	SODIUM	12.9			11.5	mg/L		11.5
CDL01	Q2360095	INORGANIC	SODIUM	0.1			0.0811	mg/L	81.1	

IRON ICP SW846-6010B **M115.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
DUP02	Q2358864	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	IRON	0.02			0.0195	mg/L	97.5	
ICV01	Q2359152	PERKIN ELM	IRON	1			0.982	mg/L	98.2	
CDL01	Q2359149	INORGANIC	IRON	10			10.1	mg/L	101.0	
ICS-A	Q2359150	PERKIN-ELM	IRON	200			183	mg/L	91.5	
ICS-AB	Q2359145	PERKIN ELM	IRON	200			185	mg/L	92.5	
LCCV	Q2359202	INORGANIC	IRON	0.02			0.0205	mg/L	102.5	
CCV	Q2359188	INORGANIC	IRON	5.00			4.76	mg/L	95.2	
BLA01	Q2359169	NA	IRON			<	0.00800	mg/L		
BLA02	Q2358858	NA	IRON			<	0.00800	mg/L		
LCS	Q2358859	SPEX	IRON	1			0.985	mg/L	98.5	
SER01	Q2359198	A894272	IRON	8.26			8.13	mg/L		1.6
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	IRON	8.26			7.53	mg/L		9.2
SPI02	Q2358861	A894272	IRON	8.26	1.00	NQR	8.63	mg/L		

HERITAGE ENVIRONMENTAL SERVICES

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IRON ICP SW846-6010B **M115.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	IRON	5.00			4.73	mg/L	94.6	
BLA01	Q2359170	NA	IRON			<	0.00800	mg/L		
CDL01	Q2359221	INORGANIC	IRON	0.02			0.0224	mg/L	112.0	
ICS-A	Q2359222	PERKIN-ELM	IRON	200			178	mg/L	89.0	
ICS-AB	Q2359217	PERKIN ELM	IRON	200			180	mg/L	90.0	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DUP02	Q2358864	A894272	IRON	8.31			8.01	mg/L		3.7

COBALT ICP SW846-6010B **M111.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	COBALT	0.0100			0.00927	mg/L	92.7	
ICV01	Q2359152	PERKIN ELM	COBALT	1			0.974	mg/L	97.4	
CDL01	Q2359149	INORGANIC	COBALT	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	COBALT	0.500			0.461	mg/L	92.2	
LCCV	Q2359202	INORGANIC	COBALT	0.0100			0.0102	mg/L	102.0	
CCV	Q2359188	INORGANIC	COBALT	5.00			4.71	mg/L	94.2	

HERITAGE ENVIRONMENTAL SERVICES

60543

COBALT ICP SW846-6010B **M111.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2359169	NA	COBALT			<	0.000800	mg/L		
BLA02	Q2358858	NA	COBALT			<	0.000800	mg/L		
LCS	Q2358859	SPEX	COBALT	0.5			0.496	mg/L	99.2	
SER01	Q2359198	A894272	COBALT	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	COBALT	0		BDL		mg/L		
SPI02	Q2358861	A894272	COBALT	0	0.500		0.449	mg/L	89.8	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	COBALT	5.00			4.70	mg/L	94.0	
BLA01	Q2359170	NA	COBALT			<	0.000800	mg/L		
CDL01	Q2359221	INORGANIC	COBALT	0.0100			0.00965	mg/L	96.5	
ICS-AB	Q2359217	PERKIN ELM	COBALT	0.500			0.445	mg/L	89.0	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	COBALT			<	0.000800	mg/L		
LCS	Q2358863	INORGANIC	COBALT	0.5			0.500	mg/L	100.0	
DUP02	Q2358864	A894272	COBALT	0		BDL		mg/L		
SPI02	Q2358865	A894272	COBALT	0	0.5		0.473	mg/L	94.6	

CADMIUM ICP SW846-6010B **M108.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	RQL	Observed	Units	Rec	RPD

HERITAGE ENVIRONMENTAL SERVICES

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CADMIUM ICP SW846-6010B **M108.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	CADMIUM	0.0050			0.00478	mg/L	95.6	
ICV01	Q2359152	PERKIN ELM	CADMIUM	1			0.975	mg/L	97.5	
CDL01	Q2359149	INORGANIC	CADMIUM	10			10.0	mg/L	100.0	
ICS-AB	Q2359145	PERKIN ELM	CADMIUM	1.00			1.05	mg/L	105.0	
LCCV	Q2359202	INORGANIC	CADMIUM	0.0050			0.00461	mg/L	92.2	
CCV	Q2359188	INORGANIC	CADMIUM	5.00			4.92	mg/L	98.4	
BLA01	Q2359169	NA	CADMIUM			<	0.000400	mg/L		
BLA02	Q2358858	NA	CADMIUM			<	0.000400	mg/L		
LCS	Q2358859	SPEX	CADMIUM	0.05			0.0514	mg/L	102.8	
SER01	Q2359198	A894272	CADMIUM	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	CADMIUM	0		BDL		mg/L		
SPI02	Q2358861	A894272	CADMIUM	0	0.050		0.0476	mg/L	95.2	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	CADMIUM	5.00			4.89	mg/L	97.8	
BLA01	Q2359170	NA	CADMIUM			<	0.000400	mg/L		
CDL01	Q2359221	INORGANIC	CADMIUM	0.0050			0.00448	mg/L	89.6	
ICS-AB	Q2359217	PERKIN ELM	CADMIUM	1.00			1.00	mg/L	100.0	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	CADMIUM			<	0.000400	mg/L		
LCS	Q2358863	INORGANIC	CADMIUM	0.05			0.0505	mg/L	101.0	
DUP02	Q2358864	A894272	CADMIUM	0		BDL		mg/L		
SPI02	Q2358865	A894272	CADMIUM	0	0.05		0.0483	mg/L	96.6	

PCB/PESTICIDE SCAN GC:ECD SW846-8081 **O305.1**
Prep : GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572249 Analyst: T PINCKERT Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: E WERNZ Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358580		Analytical Run: R572256							
LCS	Q2358581		Analytical Run: R572256							
SPI02	Q2358582	A894271	Analytical Run: R572256							
DPS02	Q2358583	A894271	Analytical Run: R572256							
SAMPLE	A894271	Rep: 0	Analytical Run: R572256							
SAMPLE	A894272	Rep: 0	Analytical Run: R572256							
SAMPLE	A894273	Rep: 0	Analytical Run: R572256							
SAMPLE	A894274	Rep: 0	Analytical Run: R572256							

HERITAGE ENVIRONMENTAL SERVICES

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PCB/PESTICIDE SCAN GC:ECD SW846-8081 **O305.1**
Prep : GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572249 Analyst: T PINCKERT Run Date: 27-Sep-10
Prep Reviewer: E WERNZ Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2359067		Analytical Run: R572339							
LCS	Q2359068		Analytical Run: R572339							
Q2358581	Endrin recovery elevated, samples are BDL.									

R572256 Analyst: R DALAL Run Date: 24-Sep-10 Instrument: GC/ECD
Analytical Reviewer: E WERNZ Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2358604		ALPHA-BHC	11100000 0						11.80
CAL01	Q2358604		BETA-BHC	39600000						6.75
CAL01	Q2358604		DELTA-BHC	83200000						17.08
CAL01	Q2358604		GAMMA-BHC (LINDANE)	88700000						11.83
CAL01	Q2358604		HEPTACHLOR	53900000						7.61
CAL01	Q2358604		ALDRIN	12300000 0						8.56
CAL01	Q2358604		HEPTACHLOR EPOXIDE	78600000						6.48
CAL01	Q2358604		ENDOSULFAN I	71000000						7.10
CAL01	Q2358604		DIELDRIN	71600000						5.67
CAL01	Q2358604		4,4'-DDE	11100000 0						5.15
CAL01	Q2358604		ENDRIN	32200000						10.57
CAL01	Q2358604		ENDOSULFAN II	56700000						3.38
CAL01	Q2358604		4,4'-DDD	53300000						14.31
CAL01	Q2358604		ENDOSULFAN SULFATE	49300000						2.96
CAL01	Q2358604		4,4'-DDT	21400000						23.80
CAL01	Q2358604		METHOXYCHLOR	11200000						16.14
CAL01	Q2358604		ENDRIN ALDEHYDE	42600000						2.49
CAL01	Q2358604		ENDRIN KETONE	47300000						5.50
CAL01	Q2358604		ALPHA-CHLORDANE	78900000						6.13
CAL01	Q2358604		GAMMA-CHLORDANE	81100000						7.73
CAL01	Q2358604		DECACHLOROBIPHENYL (DCB)	68400000						4.98
ICV01	Q2358605		ALPHA-BHC	50.0			45.7	ug/L	91.4	
ICV01	Q2358605		BETA-BHC	50.0			48.8	ug/L	97.6	
ICV01	Q2358605		DELTA-BHC	50.0			45.0	ug/L	90.0	
ICV01	Q2358605		GAMMA-BHC (LINDANE)	50.0			45.9	ug/L	91.8	
ICV01	Q2358605		HEPTACHLOR	50.0			44.5	ug/L	89.0	
ICV01	Q2358605		ALDRIN	50.0			50.4	ug/L	100.8	
ICV01	Q2358605		HEPTACHLOR EPOXIDE	50.0			49.5	ug/L	99.0	
ICV01	Q2358605		ENDOSULFAN I	50.0			51.5	ug/L	103.0	
ICV01	Q2358605		DIELDRIN	50.0			49.1	ug/L	98.2	
ICV01	Q2358605		4,4'-DDE	50.0			54.0	ug/L	108.0	
ICV01	Q2358605		ENDRIN	50.0			50.1	ug/L	100.2	
ICV01	Q2358605		ENDOSULFAN II	50.0			45.2	ug/L	90.4	
ICV01	Q2358605		4,4'-DDD	50.0			43.8	ug/L	87.6	
ICV01	Q2358605		ENDOSULFAN SULFATE	50.0			44.4	ug/L	88.8	
ICV01	Q2358605		4,4'-DDT	50.0			40.7	ug/L	81.4	
ICV01	Q2358605		METHOXYCHLOR	50.0			55.2	ug/L	110.4	
ICV01	Q2358605		ENDRIN ALDEHYDE	50.0			38.4	ug/L	76.8	

HERITAGE ENVIRONMENTAL SERVICES

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PCB/PESTICIDE SCAN GC:ECD SW846-8081 **O305.1**
Prep : GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572256 Analyst: R DALAL Run Date: 24-Sep-10
Analytical Reviewer: E WERNZ Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2358605		ENDRIN KETONE	50.0			39.5	ug/L	79.0	
ICV01	Q2358605		ALPHA-CHLORDANE	50.0			49.6	ug/L	99.2	
ICV01	Q2358605		GAMMA-CHLORDANE	50.0			48.8	ug/L	97.6	
BLA02	Q2358580		ALPHA-BHC			BDL	0.05	ug/L		
BLA02	Q2358580		BETA-BHC			BDL	0.05	ug/L		
BLA02	Q2358580		DELTA-BHC			BDL	0.05	ug/L		
BLA02	Q2358580		GAMMA-BHC (LINDANE)			BDL	0.05	ug/L		
BLA02	Q2358580		HEPTACHLOR			BDL	0.05	ug/L		
BLA02	Q2358580		ALDRIN			BDL	0.05	ug/L		
BLA02	Q2358580		HEPTACHLOR EPOXIDE			BDL	0.05	ug/L		
BLA02	Q2358580		ENDOSULFAN I			BDL	0.05	ug/L		
BLA02	Q2358580		DIELDRIN			BDL	0.05	ug/L		
BLA02	Q2358580		4,4'-DDE			BDL	0.1	ug/L		
BLA02	Q2358580		ENDRIN			BDL	0.05	ug/L		
BLA02	Q2358580		ENDOSULFAN II			BDL	0.05	ug/L		
BLA02	Q2358580		4,4'-DDD			BDL	0.1	ug/L		
BLA02	Q2358580		ENDOSULFAN SULFATE			BDL	0.05	ug/L		
BLA02	Q2358580		4,4'-DDT			BDL	0.05	ug/L		
BLA02	Q2358580		METHOXYCHLOR			BDL	0.1	ug/L		
BLA02	Q2358580		ENDRIN ALDEHYDE			BDL	0.10	ug/L		
BLA02	Q2358580		ENDRIN KETONE			BDL	0.1	ug/L		
BLA02	Q2358580		ALPHA-CHLORDANE			BDL	0.1	ug/L		
BLA02	Q2358580		GAMMA-CHLORDANE			BDL	0.1	ug/L		
BLA02	Q2358580		TOXAPHENE			BDL	1	ug/L		
BLA02	Q2358580		PCB AROCLOR 1016			BDL	0.5	ug/L		
BLA02	Q2358580		PCB AROCLOR 1221			BDL	0.5	ug/L		
BLA02	Q2358580		PCB AROCLOR 1232			BDL	0.5	ug/L		
BLA02	Q2358580		PCB AROCLOR 1242			BDL	0.5	ug/L		
BLA02	Q2358580		PCB AROCLOR 1248			BDL	0.5	ug/L		
BLA02	Q2358580		PCB AROCLOR 1254			BDL	1	ug/L		
BLA02	Q2358580		PCB AROCLOR 1260			BDL	0.5	ug/L		
BLA02	Q2358580		DECACHLOROBIPHENYL (DCB)						80.6	
LCS	Q2358581		ALPHA-BHC	0.20			0.209	ug/L	104.5	
LCS	Q2358581		BETA-BHC	0.20			0.214	ug/L	107.0	
LCS	Q2358581		DELTA-BHC	0.20			0.210	ug/L	105.0	
LCS	Q2358581		GAMMA-BHC (LINDANE)	0.20			0.215	ug/L	107.5	
LCS	Q2358581		HEPTACHLOR	0.20			0.177	ug/L	88.5	
LCS	Q2358581		ALDRIN	0.20			0.218	ug/L	109.0	
LCS	Q2358581		HEPTACHLOR EPOXIDE	0.20			0.258	ug/L	129.0	
LCS	Q2358581		ENDOSULFAN I	0.20			0.233	ug/L	116.5	
LCS	Q2358581		DIELDRIN	0.40			0.485	ug/L	121.2	
LCS	Q2358581		4,4'-DDE	0.40			0.456	ug/L	114.0	
LCS	Q2358581		ENDRIN	0.40			0.639	ug/L	159.8	
LCS	Q2358581		ENDOSULFAN II	0.40			0.436	ug/L	109.0	
LCS	Q2358581		4,4'-DDD	0.40			0.496	ug/L	124.0	
LCS	Q2358581		ENDOSULFAN SULFATE	0.40			0.429	ug/L	107.2	
LCS	Q2358581		4,4'-DDT	0.40			0.509	ug/L	127.2	

HERITAGE ENVIRONMENTAL SERVICES

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PCB/PESTICIDE SCAN GC:ECD SW846-8081 **O305.1**
Prep : GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572256 Analyst: R DALAL Run Date: 24-Sep-10
Analytical Reviewer: E WERNZ Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS	Q2358581		METHOXYCHLOR	2.00			2.602	ug/L	130.1	
LCS	Q2358581		ENDRIN ALDEHYDE	0.40			0.469	ug/L	117.2	
LCS	Q2358581		ENDRIN KETONE	0.40			0.393	ug/L	98.2	
LCS	Q2358581		ALPHA-CHLORDANE	0.20			0.230	ug/L	115.0	
LCS	Q2358581		GAMMA-CHLORDANE	0.20			0.216	ug/L	108.0	
LCS	Q2358581		DECACHLOROBIPHENYL (DCB)						89.6	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SPI02	Q2358582	A894271	ALPHA-BHC	0	0.20		0.212	ug/L	106.0	
SPI02	Q2358582	A894271	BETA-BHC	0	0.20		0.222	ug/L	111.0	
SPI02	Q2358582	A894271	DELTA-BHC	0	0.20		0.21	ug/L	105.0	
SPI02	Q2358582	A894271	GAMMA-BHC (LINDANE)	0	0.20		0.218	ug/L	109.0	
SPI02	Q2358582	A894271	HEPTACHLOR	0	0.20		0.178	ug/L	89.0	
SPI02	Q2358582	A894271	ALDRIN	0	0.20		0.22	ug/L	110.0	
SPI02	Q2358582	A894271	HEPTACHLOR EPOXIDE	0	0.20		0.25	ug/L	125.0	
SPI02	Q2358582	A894271	ENDOSULFAN I	0	0.20		0.24	ug/L	120.0	
SPI02	Q2358582	A894271	DIELDRIN	0	0.40		0.49	ug/L	122.5	
SPI02	Q2358582	A894271	4,4'-DDE	0	0.40		0.45	ug/L	112.5	
SPI02	Q2358582	A894271	ENDRIN	0	0.40		0.64	ug/L	160.0	
SPI02	Q2358582	A894271	ENDOSULFAN II	0	0.40		0.44	ug/L	110.0	
SPI02	Q2358582	A894271	4,4'-DDD	0	0.40		0.49	ug/L	122.5	
SPI02	Q2358582	A894271	ENDOSULFAN SULFATE	0	0.40		0.44	ug/L	110.0	
SPI02	Q2358582	A894271	4,4'-DDT	0	0.40		0.50	ug/L	125.0	
SPI02	Q2358582	A894271	METHOXYCHLOR	0	2.00		2.55	ug/L	127.5	
SPI02	Q2358582	A894271	ENDRIN ALDEHYDE	0	0.40		0.39	ug/L	97.5	
SPI02	Q2358582	A894271	ENDRIN KETONE	0	0.40		0.39	ug/L	97.5	
SPI02	Q2358582	A894271	ALPHA-CHLORDANE	0	0.20		0.23	ug/L	115.0	
SPI02	Q2358582	A894271	GAMMA-CHLORDANE	0	0.20		0.22	ug/L	110.0	
SPI02	Q2358582	A894271	DECACHLOROBIPHENYL (DCB)						82.9	
DPS02	Q2358583	A894271	ALPHA-BHC	0	0.20		0.207	ug/L	103.5	2.4
DPS02	Q2358583	A894271	BETA-BHC	0	0.20		0.220	ug/L	110.0	0.9
DPS02	Q2358583	A894271	DELTA-BHC	0	0.20		0.22	ug/L	110.0	4.6
DPS02	Q2358583	A894271	GAMMA-BHC (LINDANE)	0	0.20		0.220	ug/L	110.0	0.9
DPS02	Q2358583	A894271	HEPTACHLOR	0	0.20		0.19	ug/L	95.0	6.5
DPS02	Q2358583	A894271	ALDRIN	0	0.20		0.22	ug/L	110.0	0
DPS02	Q2358583	A894271	HEPTACHLOR EPOXIDE	0	0.20		0.25	ug/L	125.0	0
DPS02	Q2358583	A894271	ENDOSULFAN I	0	0.20		0.24	ug/L	120.0	0
DPS02	Q2358583	A894271	DIELDRIN	0	0.40		0.48	ug/L	120.0	2.1
DPS02	Q2358583	A894271	4,4'-DDE	0	0.40		0.44	ug/L	110.0	2.2
DPS02	Q2358583	A894271	ENDRIN	0	0.40		0.63	ug/L	157.5	1.6
DPS02	Q2358583	A894271	ENDOSULFAN II	0	0.40		0.45	ug/L	112.5	2.2
DPS02	Q2358583	A894271	4,4'-DDD	0	0.40		0.49	ug/L	122.5	0
DPS02	Q2358583	A894271	ENDOSULFAN SULFATE	0	0.40		0.43	ug/L	107.5	2.3
DPS02	Q2358583	A894271	4,4'-DDT	0	0.40		0.50	ug/L	125.0	0
DPS02	Q2358583	A894271	METHOXYCHLOR	0	2.00		2.50	ug/L	125.0	2.0
DPS02	Q2358583	A894271	ENDRIN ALDEHYDE	0	0.40		0.37	ug/L	92.5	5.3
DPS02	Q2358583	A894271	ENDRIN KETONE	0	0.40		0.39	ug/L	97.5	0
DPS02	Q2358583	A894271	ALPHA-CHLORDANE	0	0.20		0.23	ug/L	115.0	0

HERITAGE ENVIRONMENTAL SERVICES

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PCB/PESTICIDE SCAN GC:ECD SW846-8081 **O305.1**
Prep : GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572256 Analyst: R DALAL Run Date: 24-Sep-10
Analytical Reviewer: E WERNZ Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DPS02	Q2358583	A894271	GAMMA-CHLORDANE	0	0.20		0.22	ug/L	110.0	0
DPS02	Q2358583	A894271	DECACHLOROBIPHENYL (DCB)							91.2
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2358606		ALPHA-BHC	20.0			21.9	ug/L	109.5	
CCV	Q2358606		BETA-BHC	20.0			22.9	ug/L	114.5	
CCV	Q2358606		DELTA-BHC	20.0			20.8	ug/L	104.0	
CCV	Q2358606		GAMMA-BHC (LINDANE)	20.0			22.1	ug/L	110.5	
CCV	Q2358606		HEPTACHLOR	20.0			21.5	ug/L	107.5	
CCV	Q2358606		ALDRIN	20.0			23.3	ug/L	116.5	
CCV	Q2358606		HEPTACHLOR EPOXIDE	20.0			24.1	ug/L	120.5	
CCV	Q2358606		ENDOSULFAN I	20.0			22.4	ug/L	112.0	
CCV	Q2358606		DIELDRIN	40.0			48.0	ug/L	120.0	
CCV	Q2358606		4,4'-DDE	40.0			44.2	ug/L	110.5	
CCV	Q2358606		ENDRIN	40.0			47.2	ug/L	118.0	
CCV	Q2358606		ENDOSULFAN II	40.0			43.1	ug/L	107.8	
CCV	Q2358606		4,4'-DDD	40.0			47.2	ug/L	118.0	
CCV	Q2358606		ENDOSULFAN SULFATE	40.0			43.1	ug/L	107.8	
CCV	Q2358606		4,4'-DDT	40.0			39.8	ug/L	99.5	
CCV	Q2358606		METHOXYCHLOR	200			203	ug/L	101.5	
CCV	Q2358606		ENDRIN ALDEHYDE	40.0			39.3	ug/L	98.2	
CCV	Q2358606		ENDRIN KETONE	40.0			39.8	ug/L	99.5	
CCV	Q2358606		ALPHA-CHLORDANE	20.0			23.2	ug/L	116.0	
CCV	Q2358606		GAMMA-CHLORDANE	20.0			23.1	ug/L	115.5	
CCV	Q2358606		DECACHLOROBIPHENYL (DCB)						97.8	

Q2358581 Endrin recovery elevated, samples are BDL.

R572339 Analyst: T PINCKERT Run Date: 27-Sep-10 Instrument: GC/ECD
Analytical Reviewer: E WERNZ Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2359067		GAMMA-BHC (LINDANE)			BDL	0.1	ug/L		
BLA02	Q2359067		HEPTACHLOR			BDL	0.05	ug/L		
BLA02	Q2359067		ALDRIN			BDL	0.5	ug/L		
BLA02	Q2359067		ENDOSULFAN I			BDL	0.05	ug/L		
BLA02	Q2359067		ENDRIN			BDL	0.1	ug/L		
BLA02	Q2359067		METHOXYCHLOR			BDL	2.0	ug/L		
BLA02	Q2359067		TOXAPHENE			BDL	2.0	ug/L		
BLA02	Q2359067		DECACHLOROBIPHENYL (DCB)						109.4	
LCS	Q2359068		ALPHA-BHC	0.20			0.225	ug/L	112.5	
LCS	Q2359068		BETA-BHC	0.20			0.217	ug/L	108.5	
LCS	Q2359068		DELTA-BHC	0.20			0.226	ug/L	113.0	
LCS	Q2359068		GAMMA-BHC (LINDANE)	0.20			0.223	ug/L	111.5	
LCS	Q2359068		HEPTACHLOR	0.20			0.218	ug/L	109.0	
LCS	Q2359068		ALDRIN	0.20			0.241	ug/L	120.5	
LCS	Q2359068		HEPTACHLOR EPOXIDE	0.20			0.234	ug/L	117.0	
LCS	Q2359068		ENDOSULFAN I	0.20			0.232	ug/L	116.0	

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PCB/PESTICIDE SCAN GC:ECD SW846-8081 **O305.1**
Prep : GC PESTICIDE SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572339 Analyst: T PINCKERT Run Date: 27-Sep-10
Analytical Reviewer: E WERNZ Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS	Q2359068		DIELDRIN	0.40			0.449	ug/L	112.2	
LCS	Q2359068		4,4'-DDE	0.40			0.453	ug/L	113.2	
LCS	Q2359068		ENDRIN	0.40			0.494	ug/L	123.5	
LCS	Q2359068		ENDOSULFAN II	0.40			0.439	ug/L	109.8	
LCS	Q2359068		4,4'-DDD	0.40			0.448	ug/L	112.0	
LCS	Q2359068		ENDOSULFAN SULFATE	0.40			0.421	ug/L	105.2	
LCS	Q2359068		4,4'-DDT	0.40			0.482	ug/L	120.5	
LCS	Q2359068		METHOXYCHLOR	2.00			2.46	ug/L	123.0	
LCS	Q2359068		ENDRIN ALDEHYDE	0.40			0.415	ug/L	103.8	
LCS	Q2359068		ENDRIN KETONE	0.40			0.405	ug/L	101.2	
LCS	Q2359068		ALPHA-CHLORDANE	0.20			0.222	ug/L	111.0	
LCS	Q2359068		GAMMA-CHLORDANE	0.20			0.218	ug/L	109.0	

LEAD TRACE ICP SW846-6010B **M116.0**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: TRACE ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	LEAD	0.01			0.00794	mg/L	79.4	
ICV01	Q2359152	PERKIN ELM	LEAD	1			0.967	mg/L	96.7	
CDL01	Q2359149	INORGANIC	LEAD	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	LEAD	1.00			0.953	mg/L	95.3	
LCCV	Q2359202	INORGANIC	LEAD	0.01			0.00923	mg/L	92.3	
CCV	Q2359188	INORGANIC	LEAD	5.00			4.66	mg/L	93.2	
BLA01	Q2359169	NA	LEAD			<	0.00200	mg/L		
BLA02	Q2358858	NA	LEAD			<	0.00200	mg/L		
LCS	Q2358859	SPEX	LEAD	0.5			0.493	mg/L	98.6	
SER01	Q2359198	A894272	LEAD	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							

HERITAGE ENVIRONMENTAL SERVICES

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LEAD TRACE ICP SW846-6010B **M116.0**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DUP02	Q2358860	A894272	LEAD	0		BDL		mg/L		
SPI02	Q2358861	A894272	LEAD	0	0.500		0.450	mg/L	90.0	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	LEAD	5.00			4.64	mg/L	92.8	
BLA01	Q2359170	NA	LEAD			<	0.00200	mg/L		
CDL01	Q2359221	INORGANIC	LEAD	0.01			0.00832	mg/L	83.2	
ICS-AB	Q2359217	PERKIN ELM	LEAD	1.00			0.913	mg/L	91.3	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: TRACE ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	LEAD			<	0.00200	mg/L		
LCS	Q2358863	INORGANIC	LEAD	0.5			0.504	mg/L	100.8	
DUP02	Q2358864	A894272	LEAD	0		BDL		mg/L		
SPI02	Q2358865	A894272	LEAD	0	0.5		0.479	mg/L	95.8	

MANGANESE ICP SW846-6010B **M119.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	MANGANESE	0.0100			0.0102	mg/L	102.0	
ICV01	Q2359152	PERKIN ELM	MANGANESE	1			0.981	mg/L	98.1	
CDL01	Q2359149	INORGANIC	MANGANESE	10			10.1	mg/L	101.0	

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MANGANESE ICP SW846-6010B **M119.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICS-AB	Q2359145	PERKIN ELM	MANGANESE	0.500			0.490	mg/L	98.0	
LCCV	Q2359202	INORGANIC	MANGANESE	0.0100			0.00987	mg/L	98.7	
CCV	Q2359188	INORGANIC	MANGANESE	5.00			4.76	mg/L	95.2	
BLA01	Q2359169	NA	MANGANESE			<	0.00400	mg/L		
BLA02	Q2358858	NA	MANGANESE			<	0.00400	mg/L		
LCS	Q2358859	SPEX	MANGANESE	0.5			0.498	mg/L	99.6	
SER01	Q2359198	A894272	MANGANESE	0.195		CNA	0.191	mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	MANGANESE	0.195			0.178	mg/L		9.1
SPI02	Q2358861	A894272	MANGANESE	0.195	0.500		0.639	mg/L	88.8	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	MANGANESE	5.00			4.74	mg/L	94.8	
BLA01	Q2359170	NA	MANGANESE			<	0.00400	mg/L		
CDL01	Q2359221	INORGANIC	MANGANESE	0.0100			0.0124	mg/L	124.0	
ICS-AB	Q2359217	PERKIN ELM	MANGANESE	0.500			0.476	mg/L	95.2	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	MANGANESE			<	0.000800	mg/L		
LCS	Q2358863	INORGANIC	MANGANESE	0.5			0.499	mg/L	99.8	
DUP02	Q2358864	A894272	MANGANESE	0.197			0.190	mg/L		3.6
SPI02	Q2358865	A894272	MANGANESE	0.197	0.5		0.666	mg/L	93.8	

BARIUM ICP SW846-6010B **M104.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD

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BARIUM ICP SW846-6010B **M104.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	BARIUM	0.0100			0.0101	mg/L	101.0	
ICV01	Q2359152	PERKIN ELM	BARIUM	1			1.00	mg/L	100.0	
CDL01	Q2359149	INORGANIC	BARIUM	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	BARIUM	0.500			0.508	mg/L	101.6	
LCCV	Q2359202	INORGANIC	BARIUM	0.0100			0.0101	mg/L	101.0	
CCV	Q2359188	INORGANIC	BARIUM	5.00			4.92	mg/L	98.4	
BLA01	Q2359169	NA	BARIUM			<	0.000800	mg/L		
BLA02	Q2358858	NA	BARIUM			<	0.000800	mg/L		
LCS	Q2358859	SPEX	BARIUM	2			2.05	mg/L	102.5	
SER01	Q2359198	A894272	BARIUM	0.167			0.164	mg/L		1.8
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	BARIUM	0.167			0.153	mg/L		8.8
SPI02	Q2358861	A894272	BARIUM	0.167	2.00		2.04	mg/L	93.6	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	BARIUM	5.00			4.89	mg/L	97.8	
BLA01	Q2359170	NA	BARIUM			<	0.000800	mg/L		
CDL01	Q2359221	INORGANIC	BARIUM	0.0100			0.00976	mg/L	97.6	
ICS-AB	Q2359217	PERKIN ELM	BARIUM	0.500			0.493	mg/L	98.6	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572441 Analyst: C WILLHITE Run Date: 29-Sep-10 Instrument: PREP
Prep Reviewer: L SMITH Review Date: 30-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2360130	HLI	Analytical Run: R572504							
LCS	Q2360131	HLI	Analytical Run: R572504							
SAMPLE	A894271	Rep: 0	Analytical Run: R572504							
SAMPLE	A894272	Rep: 0	Analytical Run: R572504							
SAMPLE	A894273	Rep: 0	Analytical Run: R572504							
SAMPLE	A894274	Rep: 0	Analytical Run: R572504							
SPI02	Q2360132	A894274	Analytical Run: R572504							
DPS02	Q2360133	A894274	Analytical Run: R572504							

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10 Instrument: GC/MS SVOA
Analytical Reviewer: L SMITH Review Date: 01-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359388		Analysis Date/Time: 28-Sep-10 04:49							
CAL01	Q2359388		ACENAPHTHENE	1.0895						0.4
CAL01	Q2359388		ACENAPHTHYLENE	1.8252						0.9
CAL01	Q2359388		ANTHRACENE	1.0095						2.1

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SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359388		BENZO(A)ANTHRACENE [(BENZO(A)ANTHRACENE]	1.0289						0.9
CAL01	Q2359388		BENZO(A)PYRENE	0.9063						1.5
CAL01	Q2359388		BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTHENE)	1.1770						1.6
CAL01	Q2359388		BENZO(G,H,I)PERYLENE	0.6207						8.9
CAL01	Q2359388		BENZO(K)FLUORANTHENE	1.1451						6.6
CAL01	Q2359388		BENZYL ALCOHOL	0.6994						4.5
CAL01	Q2359388		BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALATE)	0.6127						4.4
CAL01	Q2359388		BIS(2-CHLOROETHOXY)METHANE	0.3377						2.6
CAL01	Q2359388		BIS(2-CHLOROETHYL)ETHER	1.2364						6.4
CAL01	Q2359388		BIS(2-CHLOROISOPROPYL)ETHER	2.2310						3.6
CAL01	Q2359388		BIS(2-ETHYLHEXYL)PHTHALATE	0.8209						4.2
CAL01	Q2359388		4-BROMODIPHENYL ETHER	0.2379						3.8
CAL01	Q2359388		CARBAZOLE	0.8384						3.8
CAL01	Q2359388		4-CHLOROANILINE	0.3104						6.6
CAL01	Q2359388		2-CHLORONAPHTHALENE	1.0637						1.3
CAL01	Q2359388		4-CHLOROPHENYL-PHENYLETHER	0.6776						2.1
CAL01	Q2359388		CHRYSENE	0.9319						8.9
CAL01	Q2359388		DIBENZ(A,H)ANTHRACENE	0.6805						12
CAL01	Q2359388		DIBENZOFURAN	1.5731						1.9
CAL01	Q2359388		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.4125						1.2
CAL01	Q2359388		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.4662						1.5
CAL01	Q2359388		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.4957						1.6
CAL01	Q2359388		3,3'-DICHLOROBENZIDINE	0.1993						9.4
CAL01	Q2359388		DIETHYLPHTHALATE	1.3169						3.5
CAL01	Q2359388		DIMETHYLPHTHALATE	1.2592						5.3
CAL01	Q2359388		DI-N-BUTYLPHTHALATE	1.1765						6
CAL01	Q2359388		2,4-DINITROTOLUENE	0.3672						3.7
CAL01	Q2359388		2,6-DINITROTOLUENE	0.2902						4.2
CAL01	Q2359388		DI-N-OCTYLPHTHALATE	1.7550						9.1
CAL01	Q2359388		FLUORANTHENE	0.9656						8.4
CAL01	Q2359388		FLUORENE	1.2840						2.2
CAL01	Q2359388		HEXACHLOROBENZENE	0.2438						3.8
CAL01	Q2359388		HEXACHLOROBUTADIENE	0.2333						0.5
CAL01	Q2359388		HEXACHLOROCYCLOPENTADIENE	0.4555						7
CAL01	Q2359388		HEXACHLOROETHANE	0.5849						1.1
CAL01	Q2359388		INDENO(1,2,3-CD)PYRENE	0.8160						10
CAL01	Q2359388		ISOPHORONE	0.5788						3.8
CAL01	Q2359388		2-METHYLNAPHTHALENE	0.7739						2.5
CAL01	Q2359388		NAPHTHALENE	0.9632						0.8
CAL01	Q2359388		2-NITROANILINE (O-NITROANILINE)	0.3366						2.2
CAL01	Q2359388		3-NITROANILINE (M-NITROANILINE)	0.2224						13.6
CAL01	Q2359388		4-NITROANILINE (P-NITROANILINE)	0.2129						9.1
CAL01	Q2359388		NITROBENZENE	0.3621						2.1
CAL01	Q2359388		N-NITROSODIPHENYLAMINE	0.5320						3.6

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SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359388		N-NITROSO-DI-N-PROPYLAMINE	0.8585						5.7
CAL01	Q2359388		PHENANTHRENE	1.0140						1.6
CAL01	Q2359388		2-PICOLINE (2-METHYLPYRIDINE)	1.1845						5
CAL01	Q2359388		PYRENE	1.7911						4.6
CAL01	Q2359388		PYRIDINE	1.0640						5.5
CAL01	Q2359388		1,2,4,5-TETRACHLOROBENZENE	0.5802						1.9
CAL01	Q2359388		TOLUENEDIAMINE	0.0092						2.6
CAL01	Q2359388		1,2,4-TRICHLOROBENZENE	0.3437						0.6
CAL01	Q2359388		BENZOIC ACID			LIN				0.991
CAL01	Q2359388		4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRESOL)	0.2995						5.1
CAL01	Q2359388		2-CHLOROPHENOL	1.2883						2.1
CAL01	Q2359388		2,4-DICHLOROPHENOL	0.2723						2.3
CAL01	Q2359388		2,4-DIMETHYLPHENOL	0.3443						3.9
CAL01	Q2359388		4,6-DINITRO-O-CRESOL(2-METHYL-4,6-DINITROPHEN	0.1407						4.9
CAL01	Q2359388		2,4-DINITROPHENOL	0.1650						14.6
CAL01	Q2359388		2-METHYLPHENOL (O-CRESOL)	1.0944						6.4
CAL01	Q2359388		4-METHYLPHENOL (P-CRESOL)	1.0936						5.9
CAL01	Q2359388		2-NITROPHENOL	0.1943						2.5
CAL01	Q2359388		4-NITROPHENOL			QDR				0.993
CAL01	Q2359388		PENTACHLOROPHENOL	0.1252						14.2
CAL01	Q2359388		PHENOL	1.4566						5.9
CAL01	Q2359388		2,3,4,6-TETRACHLOROPHENOL	0.3088						8.8
CAL01	Q2359388		2,4,5-TRICHLOROPHENOL	0.4004						4
CAL01	Q2359388		2,4,6-TRICHLOROPHENOL	0.3808						2.8
CAL01	Q2359388		2-FLUOROPHENOL	1.0874						5.4
CAL01	Q2359388		PHENOL-D5	1.3460						4.1
CAL01	Q2359388		NITROBENZENE-D5	0.3670						1.8
CAL01	Q2359388		2-FLUOROBIPHENYL	1.3008						1.7
CAL01	Q2359388		2,4,6-TRIBROMOPHENOL	0.1101						6
CAL01	Q2359388		TERPHENYL-D14	1.2727						4.9
CCVD	Q2360601		Analysis Date/Time: 01-Oct-10 04:21							
CCVD	Q2360601		ACENAPHTHENE	1.0895			1.1057			1.5
CCVD	Q2360601		ACENAPHTHYLENE	1.8252			1.8581			1.8
CCVD	Q2360601		ANTHRACENE	1.0095			1.0311			2.1
CCVD	Q2360601		BENZO(A)ANTHRACENE [(BENZO(A)ANTHRACENE]	1.0289			1.0446			1.5
CCVD	Q2360601		BENZO(A)PYRENE	0.9063			0.8880			2
CCVD	Q2360601		BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTHENE)	1.1770			1.1332			3.7
CCVD	Q2360601		BENZO(G,H,I)PERYLENE	0.6207			0.7066			13.8
CCVD	Q2360601		BENZO(K)FLUORANTHENE	1.1451			1.2042			5.2
CCVD	Q2360601		BENZYL ALCOHOL	0.6994			0.7172			2.5
CCVD	Q2360601		BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALATE)	0.6127			0.6274			2.4
CCVD	Q2360601		BIS(2-CHLOROETHOXY)METHANE	0.3377			0.3419			1.2
CCVD	Q2360601		BIS(2-CHLOROETHYL)ETHER	1.2364			1.2189			1.4
CCVD	Q2360601		BIS(2-CHLOROISOPROPYL)ETHER	2.2310			2.2425			0.5
CCVD	Q2360601		BIS(2-ETHYLHEXYL)PHTHALATE	0.8209			0.8562			4.3

HERITAGE ENVIRONMENTAL SERVICES

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SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCVD	Q2360601		4-BROMODIPHENYL ETHER	0.2379			0.2432			2.2
CCVD	Q2360601		CARBAZOLE	0.8384			0.7975			4.9
CCVD	Q2360601		4-CHLOROANILINE	0.3104			0.3280			5.7
CCVD	Q2360601		2-CHLORONAPHTHALENE	1.0637			1.0328			2.9
CCVD	Q2360601		4-CHLOROPHENYL-PHENYLETHER	0.6776			0.6702			1.1
CCVD	Q2360601		CHRYSENE	0.9319			0.9376			0.6
CCVD	Q2360601		DIBENZ(A,H)ANTHRACENE	0.6805			0.7119			4.6
CCVD	Q2360601		DIBENZOFURAN	1.5731			1.5964			1.5
CCVD	Q2360601		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.4125			1.4103			0.2
CCVD	Q2360601		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.4662			1.4667			0
CCVD	Q2360601		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.4957			1.4872			0.6
CCVD	Q2360601		3,3'-DICHLOROBENZIDINE	0.1993			0.2319			16.4
CCVD	Q2360601		DIETHYLPHTHALATE	1.3169			1.3324			1.2
CCVD	Q2360601		DIMETHYLPHTHALATE	1.2592			1.3078			3.9
CCVD	Q2360601		DI-N-BUTYLPHTHALATE	1.1765			1.1821			0.5
CCVD	Q2360601		2,4-DINITROTOLUENE	0.3672			0.3644			0.8
CCVD	Q2360601		2,6-DINITROTOLUENE	0.2902			0.2815			3
CCVD	Q2360601		DI-N-OCTYLPHTHALATE	1.7550			1.8373			4.7
CCVD	Q2360601		FLUORANTHENE	0.9656			0.9104			5.7
CCVD	Q2360601		FLUORENE	1.2840			1.2586			2
CCVD	Q2360601		HEXACHLOROBENZENE	0.2438			0.2518			3.3
CCVD	Q2360601		HEXACHLOROBUTADIENE	0.2333			0.2324			0.4
CCVD	Q2360601		HEXACHLOROCYCLOPENTADIENE	0.4555			0.4613			1.3
CCVD	Q2360601		HEXACHLOROETHANE	0.5849			0.5952			1.8
CCVD	Q2360601		INDENO(1,2,3-CD)PYRENE	0.8160			0.8819			8.1
CCVD	Q2360601		ISOPHORONE	0.5788			0.5776			0.2
CCVD	Q2360601		2-METHYLNAPHTHALENE	0.7739			0.7921			2.4
CCVD	Q2360601		NAPHTHALENE	0.9632			0.9627			0.1
CCVD	Q2360601		2-NITROANILINE (O-NITROANILINE)	0.3366			0.3383			0.5
CCVD	Q2360601		3-NITROANILINE (M-NITROANILINE)	0.2224			0.2429			9.2
CCVD	Q2360601		4-NITROANILINE (P-NITROANILINE)	0.2129			0.1950			8.4
CCVD	Q2360601		NITROBENZENE	0.3621			0.3630			0.2
CCVD	Q2360601		N-NITROSODIPHENYLAMINE	0.5320			0.5316			0.1
CCVD	Q2360601		N-NITROSO-DI-N-PROPYLAMINE	0.8585			0.9136			6.4
CCVD	Q2360601		PHENANTHRENE	1.0140			1.0215			0.7
CCVD	Q2360601		2-PICOLINE (2-METHYLPYRIDINE)	1.1845			1.2523			5.7
CCVD	Q2360601		PYRENE	1.7911			1.7546			2
CCVD	Q2360601		PYRIDINE	1.0640			1.0378			2.5
CCVD	Q2360601		1,2,4,5-TETRACHLOROBENZENE	0.5802			0.5634			2.9
CCVD	Q2360601		TOLUENEDIAMINE	0.0092			0.0097			5.4
CCVD	Q2360601		1,2,4-TRICHLOROBENZENE	0.3437			0.3422			0.4
CCVD	Q2360601		BENZOIC ACID	50.000		LIN	49.814			0.4
CCVD	Q2360601		4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRESOL)	0.2995			0.3182			6.2
CCVD	Q2360601		2-CHLOROPHENOL	1.2883			1.3083			1.6
CCVD	Q2360601		2,4-DICHLOROPHENOL	0.2723			0.2769			1.7

HERITAGE ENVIRONMENTAL SERVICES

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SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCVD	Q2360601		2,4-DIMETHYLPHENOL	0.3443			0.3540			2.8
CCVD	Q2360601		4,6-DINITRO-O-CRESOL(2-METHYL-4,6-DINITROPHEN	0.1407			0.1416			0.6
CCVD	Q2360601		2,4-DINITROPHENOL	0.1650			0.1602			2.9
CCVD	Q2360601		2-METHYLPHENOL (O-CRESOL)	1.0944			1.1530			5.4
CCVD	Q2360601		4-METHYLPHENOL (P-CRESOL)	1.0936			1.1468			4.9
CCVD	Q2360601		2-NITROPHENOL	0.1943			0.1983			2.1
CCVD	Q2360601		4-NITROPHENOL	50.000		QDR	46.966			6.1
CCVD	Q2360601		PENTACHLOROPHENOL	0.1252			0.1347			7.6
CCVD	Q2360601		PHENOL	1.4566			1.5260			4.8
CCVD	Q2360601		2,3,4,6-TETRACHLOROPHENOL	0.3088			0.3215			4.1
CCVD	Q2360601		2,4,5-TRICHLOROPHENOL	0.4004			0.4100			2.4
CCVD	Q2360601		2,4,6-TRICHLOROPHENOL	0.3808			0.3818			0.3
CCVD	Q2360601		2-FLUOROPHENOL	1.0874			1.0714			1.5
CCVD	Q2360601		PHENOL-D5	1.3460			1.3583			0.9
CCVD	Q2360601		NITROBENZENE-D5	0.3670			0.3694			0.7
CCVD	Q2360601		2-FLUOROBIPHENYL	1.3008			1.2641			2.8
CCVD	Q2360601		2,4,6-TRIBROMOPHENOL	0.1101			0.1142			3.7
CCVD	Q2360601		TERPHENYL-D14	1.2727			1.2326			3.2
BLA02	Q2360130	HLI	Analysis Date/Time: 01-Oct-10 06:50							
BLA02	Q2360130	HLI	ACENAPHTHENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	ACENAPHTHYLENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	ANTHRACENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZO(A)ANTHRACENE [(BENZO(A)ANTHRACENE]			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZO(A)PYRENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTHENE)			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZO(G,H,I)PERYLENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZO(K)FLUORANTHENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZYL ALCOHOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALATE)			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BIS(2-CHLOROETHOXY)METHANE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BIS(2-CHLOROETHYL)ETHER			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BIS(2-CHLOROISOPROPYL)ETHER			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BIS(2-ETHYLHEXYL)PHTHALATE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	4-BROMODIPHENYL ETHER			BDL	10.	ug/L		
BLA02	Q2360130	HLI	CARBAZOLE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	4-CHLOROANILINE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2-CHLORONAPHTHALENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	4-CHLOROPHENYL-PHENYLETHER			BDL	10.	ug/L		
BLA02	Q2360130	HLI	CHRYSENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	DIBENZ(A,H)ANTHRACENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	DIBENZOFURAN			BDL	10.	ug/L		
BLA02	Q2360130	HLI	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			BDL	10.	ug/L		
BLA02	Q2360130	HLI	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			BDL	10.	ug/L		
BLA02	Q2360130	HLI	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			BDL	10.	ug/L		

HERITAGE ENVIRONMENTAL SERVICES

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SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2360130	HLI	3,3'-DICHLOROBENZIDINE			BDL	20.	ug/L		
BLA02	Q2360130	HLI	DIETHYLPHTHALATE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	DIMETHYLPHTHALATE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	DI-N-BUTYLPHTHALATE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2,4-DINITROTOLUENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2,6-DINITROTOLUENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	DI-N-OCTYLPHTHALATE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	FLUORANTHENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	FLUORENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	HEXACHLOROBENZENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	HEXACHLOROBUTADIENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	HEXACHLOROCYCLOPENTADIENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	HEXACHLOROETHANE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	INDENO(1,2,3-CD)PYRENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	ISOPHORONE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2-METHYLNAPHTHALENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	NAPHTHALENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2-NITROANILINE (O-NITROANILINE)			BDL	50.	ug/L		
BLA02	Q2360130	HLI	3-NITROANILINE (M-NITROANILINE)			BDL	50.	ug/L		
BLA02	Q2360130	HLI	4-NITROANILINE (P-NITROANILINE)			BDL	50.	ug/L		
BLA02	Q2360130	HLI	NITROBENZENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	N-NITROSODIPHENYLAMINE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	N-NITROSO-DI-N-PROPYLAMINE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	PHENANTHRENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2-PICOLINE (2-METHYLPYRIDINE)			BDL	50.	ug/L		
BLA02	Q2360130	HLI	PYRENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	PYRIDINE			BDL	50.	ug/L		
BLA02	Q2360130	HLI	1,2,4,5-TETRACHLOROBENZENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	1,2,4-TRICHLOROBENZENE			BDL	10.	ug/L		
BLA02	Q2360130	HLI	BENZOIC ACID			BDL	50.	ug/L		
BLA02	Q2360130	HLI	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRESOL)			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2-CHLOROPHENOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2,4-DICHLOROPHENOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2,4-DIMETHYLPHENOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2,4-DINITROPHENOL			BDL	50.	ug/L		
BLA02	Q2360130	HLI	2-METHYLPHENOL (O-CRESOL)			BDL	10.	ug/L		
BLA02	Q2360130	HLI	4-METHYLPHENOL (P-CRESOL)			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2-NITROPHENOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	4-NITROPHENOL			BDL	50.	ug/L		
BLA02	Q2360130	HLI	PENTACHLOROPHENOL			BDL	50.	ug/L		
BLA02	Q2360130	HLI	PHENOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2,3,4,6-TETRACHLOROPHENOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2,4,5-TRICHLOROPHENOL			BDL	50.	ug/L		
BLA02	Q2360130	HLI	2,4,6-TRICHLOROPHENOL			BDL	10.	ug/L		
BLA02	Q2360130	HLI	2-FLUOROPHENOL						61	
BLA02	Q2360130	HLI	PHENOL-D5						40	

HERITAGE ENVIRONMENTAL SERVICES

60543

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2360130	HLI	NITROBENZENE-D5						98	
BLA02	Q2360130	HLI	2-FLUOROBIPHENYL						96	
BLA02	Q2360130	HLI	2,4,6-TRIBROMOPHENOL						98	
BLA02	Q2360130	HLI	TERPHENYL-D14						84	
LCS	Q2360131	HLI	Analysis Date/Time: 01-Oct-10 07:27							
LCS	Q2360131	HLI	ACENAPHTHENE	100			101	ug/L	101	
LCS	Q2360131	HLI	ACENAPHTHYLENE	100			98.5	ug/L	98.5	
LCS	Q2360131	HLI	ANTHRACENE	100			98.6	ug/L	98.6	
LCS	Q2360131	HLI	BENZO(A)ANTHRACENE [(BENZO(A)ANTHRACENE]	100			97.8	ug/L	97.8	
LCS	Q2360131	HLI	BENZO(A)PYRENE	100			112	ug/L	112	
LCS	Q2360131	HLI	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTHENE)	100			90.5	ug/L	90.5	
LCS	Q2360131	HLI	BENZO(G,H,I)PERYLENE	100			104	ug/L	104	
LCS	Q2360131	HLI	BENZO(K)FLUORANTHENE	100			99.6	ug/L	99.6	
LCS	Q2360131	HLI	BENZYL ALCOHOL	100			80.9	ug/L	80.9	
LCS	Q2360131	HLI	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALATE)	100			95.2	ug/L	95.2	
LCS	Q2360131	HLI	BIS(2-CHLOROETHOXY)METHANE	100			93	ug/L	93	
LCS	Q2360131	HLI	BIS(2-CHLOROETHYL)ETHER	100			88.3	ug/L	88.3	
LCS	Q2360131	HLI	BIS(2-CHLOROISOPROPYL)ETHER	100			91.7	ug/L	91.7	
LCS	Q2360131	HLI	BIS(2-ETHYLHEXYL)PHTHALATE	100			93.3	ug/L	93.3	
LCS	Q2360131	HLI	4-BROMODIPHENYL ETHER	100			108	ug/L	108	
LCS	Q2360131	HLI	CARBAZOLE	100			81	ug/L	81	
LCS	Q2360131	HLI	4-CHLOROANILINE	100			109	ug/L	109	
LCS	Q2360131	HLI	2-CHLORONAPHTHALENE	100			122	ug/L	122	
LCS	Q2360131	HLI	4-CHLOROPHENYL-PHENYLETHER	100			98	ug/L	98	
LCS	Q2360131	HLI	CHRYSENE	100			104	ug/L	104	
LCS	Q2360131	HLI	DIBENZ(A,H)ANTHRACENE	100			98.1	ug/L	98.1	
LCS	Q2360131	HLI	DIBENZOFURAN	100			98.3	ug/L	98.3	
LCS	Q2360131	HLI	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	100			94.8	ug/L	94.8	
LCS	Q2360131	HLI	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	100			92.6	ug/L	92.6	
LCS	Q2360131	HLI	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	100			94.4	ug/L	94.4	
LCS	Q2360131	HLI	3,3'-DICHLOROBENZIDINE	100			152	ug/L	152	
LCS	Q2360131	HLI	DIETHYLPHTHALATE	100			99.3	ug/L	99.3	
LCS	Q2360131	HLI	DIMETHYLPHTHALATE	100			98.4	ug/L	98.4	
LCS	Q2360131	HLI	DI-N-BUTYLPHTHALATE	100			86.3	ug/L	86.3	
LCS	Q2360131	HLI	2,4-DINITROTOLUENE	100			96.7	ug/L	96.7	
LCS	Q2360131	HLI	2,6-DINITROTOLUENE	100			96	ug/L	96	
LCS	Q2360131	HLI	DI-N-OCTYLPHTHALATE	100			83.6	ug/L	83.6	
LCS	Q2360131	HLI	FLUORANTHENE	100			81.9	ug/L	81.9	
LCS	Q2360131	HLI	FLUORENE	100			97.1	ug/L	97.1	
LCS	Q2360131	HLI	HEXACHLOROBENZENE	100			103	ug/L	103	
LCS	Q2360131	HLI	HEXACHLOROBUTADIENE	100			95.1	ug/L	95.1	
LCS	Q2360131	HLI	HEXACHLOROCYCLOPENTADIENE	100			73.2	ug/L	73.2	
LCS	Q2360131	HLI	HEXACHLOROETHANE	100			93.9	ug/L	93.9	
LCS	Q2360131	HLI	INDENO(1,2,3-CD)PYRENE	100			100	ug/L	100	

HERITAGE ENVIRONMENTAL SERVICES

60543

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS	Q2360131	HLI	ISOPHORONE	100			95.7	ug/L	95.7	
LCS	Q2360131	HLI	2-METHYLNAPHTHALENE	100			111	ug/L	111	
LCS	Q2360131	HLI	NAPHTHALENE	100			96.4	ug/L	96.4	
LCS	Q2360131	HLI	2-NITROANILINE (O-NITROANILINE)	100			103	ug/L	103	
LCS	Q2360131	HLI	3-NITROANILINE (M-NITROANILINE)	100			122	ug/L	122	
LCS	Q2360131	HLI	4-NITROANILINE (P-NITROANILINE)	100			99	ug/L	99	
LCS	Q2360131	HLI	NITROBENZENE	100			95.4	ug/L	95.4	
LCS	Q2360131	HLI	N-NITROSODIPHENYLAMINE	200			206	ug/L	103	
LCS	Q2360131	HLI	N-NITROSO-DI-N-PROPYLAMINE	100			89.8	ug/L	89.8	
LCS	Q2360131	HLI	PHENANTHRENE	100			102	ug/L	102	
LCS	Q2360131	HLI	2-PICOLINE (2-METHYLPYRIDINE)	100			73	ug/L	73	
LCS	Q2360131	HLI	PYRENE	100			99.4	ug/L	99.4	
LCS	Q2360131	HLI	PYRIDINE	100			34.6	ug/L	34.6	
LCS	Q2360131	HLI	1,2,4,5-TETRACHLOROBENZENE	100			99.6	ug/L	99.6	
LCS	Q2360131	HLI	1,2,4-TRICHLOROBENZENE	100			93.8	ug/L	93.8	
LCS	Q2360131	HLI	BENZOIC ACID	100			14.1	ug/L	14.1	
LCS	Q2360131	HLI	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRESOL)	100			94.5	ug/L	94.5	
LCS	Q2360131	HLI	2-CHLOROPHENOL	100			94.7	ug/L	94.7	
LCS	Q2360131	HLI	2,4-DICHLOROPHENOL	100			90.7	ug/L	90.7	
LCS	Q2360131	HLI	2,4-DIMETHYLPHENOL	100			64	ug/L	64	
LCS	Q2360131	HLI	4,6-DINITRO-O-CRESOL(2-METHYL-4,6-DINITROPHEN	100			99.3	ug/L	99.3	
LCS	Q2360131	HLI	2,4-DINITROPHENOL	100			100	ug/L	100	
LCS	Q2360131	HLI	2-METHYLPHENOL (O-CRESOL)	100			79.9	ug/L	79.9	
LCS	Q2360131	HLI	4-METHYLPHENOL (P-CRESOL)	100			73.1	ug/L	73.1	
LCS	Q2360131	HLI	2-NITROPHENOL	100			94.6	ug/L	94.6	
LCS	Q2360131	HLI	4-NITROPHENOL	100			41.7	ug/L	41.7	
LCS	Q2360131	HLI	PENTACHLOROPHENOL	100			109	ug/L	109	
LCS	Q2360131	HLI	PHENOL	100			49.4	ug/L	49.4	
LCS	Q2360131	HLI	2,3,4,6-TETRACHLOROPHENOL	100			95.8	ug/L	95.8	
LCS	Q2360131	HLI	2,4,5-TRICHLOROPHENOL	100			97.6	ug/L	97.6	
LCS	Q2360131	HLI	2,4,6-TRICHLOROPHENOL	100			101	ug/L	101	
SAMPLE	A894271		Analysis Date/Time: 01-Oct-10 08:41							
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894272		Analysis Date/Time: 01-Oct-10 09:19							
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		Analysis Date/Time: 01-Oct-10 09:56							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		Analysis Date/Time: 01-Oct-10 10:33							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
SPI02	Q2360132	A894274	Analysis Date/Time: 01-Oct-10 11:10							
SPI02	Q2360132	A894274	ACENAPHTHENE	0	100		98.8	ug/L	98.8	
SPI02	Q2360132	A894274	ACENAPHTHYLENE	0	100		98.1	ug/L	98.1	
SPI02	Q2360132	A894274	ANTHRACENE	0	100		99.6	ug/L	99.6	
SPI02	Q2360132	A894274	BENZO(A)ANTHRACENE [(BENZO(A)ANTHRACENE]	0	100		99.8	ug/L	99.8	
SPI02	Q2360132	A894274	BENZO(A)PYRENE	0	100		102	ug/L	102	

HERITAGE ENVIRONMENTAL SERVICES

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SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI02	Q2360132	A894274	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTHENE)	0	100		96.9	ug/L	96.9	
SPI02	Q2360132	A894274	BENZO(G,H,I)PERYLENE	0	100		109	ug/L	109	
SPI02	Q2360132	A894274	BENZO(K)FLUORANTHENE	0	100		95.6	ug/L	95.6	
SPI02	Q2360132	A894274	BENZYL ALCOHOL	0	100		80.3	ug/L	80.3	
SPI02	Q2360132	A894274	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALATE)	0	100		90.9	ug/L	90.9	
SPI02	Q2360132	A894274	BIS(2-CHLOROETHOXY)METHANE	0	100		95.6	ug/L	95.6	
SPI02	Q2360132	A894274	BIS(2-CHLOROETHYL)ETHER	0	100		91.4	ug/L	91.4	
SPI02	Q2360132	A894274	BIS(2-CHLOROISOPROPYL)ETHER	0	100		91.2	ug/L	91.2	
SPI02	Q2360132	A894274	BIS(2-ETHYLHEXYL)PHTHALATE	0	100		92.4	ug/L	92.4	
SPI02	Q2360132	A894274	4-BROMODIPHENYL ETHER	0	100		106	ug/L	106	
SPI02	Q2360132	A894274	CARBAZOLE	0	100		85.9	ug/L	85.9	
SPI02	Q2360132	A894274	4-CHLOROANILINE	0	100		97.7	ug/L	97.7	
SPI02	Q2360132	A894274	2-CHLORONAPHTHALENE	0	100		96.3	ug/L	96.3	
SPI02	Q2360132	A894274	4-CHLOROPHENYL-PHENYLETHER	0	100		99	ug/L	99	
SPI02	Q2360132	A894274	CHRYSENE	0	100		96.2	ug/L	96.2	
SPI02	Q2360132	A894274	DIBENZ(A,H)ANTHRACENE	0	100		101	ug/L	101	
SPI02	Q2360132	A894274	DIBENZOFURAN	0	100		96.8	ug/L	96.8	
SPI02	Q2360132	A894274	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	100		94.7	ug/L	94.7	
SPI02	Q2360132	A894274	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	100		92.2	ug/L	92.2	
SPI02	Q2360132	A894274	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	100		92.7	ug/L	92.7	
SPI02	Q2360132	A894274	3,3'-DICHLOROBENZIDINE	0	100		76.2	ug/L	76.2	
SPI02	Q2360132	A894274	DIETHYLPHTHALATE	0	100		102	ug/L	102	
SPI02	Q2360132	A894274	DIMETHYLPHTHALATE	0	100		102	ug/L	102	
SPI02	Q2360132	A894274	DI-N-BUTYLPHTHALATE	0	100		89.6	ug/L	89.6	
SPI02	Q2360132	A894274	2,4-DINITROTOLUENE	0	100		97.1	ug/L	97.1	
SPI02	Q2360132	A894274	2,6-DINITROTOLUENE	0	100		91.1	ug/L	91.1	
SPI02	Q2360132	A894274	DI-N-OCTYLPHTHALATE	0	100		81.5	ug/L	81.5	
SPI02	Q2360132	A894274	FLUORANTHENE	0	100		83	ug/L	83	
SPI02	Q2360132	A894274	FLUORENE	0	100		98.1	ug/L	98.1	
SPI02	Q2360132	A894274	HEXACHLOROBENZENE	0	100		104	ug/L	104	
SPI02	Q2360132	A894274	HEXACHLOROBUTADIENE	0	100		93.7	ug/L	93.7	
SPI02	Q2360132	A894274	HEXACHLOROCYCLOPENTADIENE	0	100		90.7	ug/L	90.7	
SPI02	Q2360132	A894274	HEXACHLOROETHANE	0	100		94	ug/L	94	
SPI02	Q2360132	A894274	INDENO(1,2,3-CD)PYRENE	0	100		102	ug/L	102	
SPI02	Q2360132	A894274	ISOPHORONE	0	100		94.5	ug/L	94.5	
SPI02	Q2360132	A894274	2-METHYLNAPHTHALENE	0	100		110	ug/L	110	
SPI02	Q2360132	A894274	NAPHTHALENE	0	100		95.2	ug/L	95.2	
SPI02	Q2360132	A894274	2-NITROANILINE (O-NITROANILINE)	0	100		99	ug/L	99	
SPI02	Q2360132	A894274	3-NITROANILINE (M-NITROANILINE)	0	100		109	ug/L	109	
SPI02	Q2360132	A894274	4-NITROANILINE (P-NITROANILINE)	0	100		91.1	ug/L	91.1	
SPI02	Q2360132	A894274	NITROBENZENE	0	100		94.5	ug/L	94.5	
SPI02	Q2360132	A894274	N-NITROSODIPHENYLAMINE	0	100		110	ug/L	110	
SPI02	Q2360132	A894274	N-NITROSO-DI-N-PROPYLAMINE	0	100		101	ug/L	101	
SPI02	Q2360132	A894274	PHENANTHRENE	0	100		101	ug/L	101	

HERITAGE ENVIRONMENTAL SERVICES

60543

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI02	Q2360132	A894274	2-PICOLINE (2-METHYLPYRIDINE)	0	100		44	ug/L	44	
SPI02	Q2360132	A894274	PYRENE	0	100		95.9	ug/L	95.9	
SPI02	Q2360132	A894274	PYRIDINE	0	100		35.8	ug/L	35.8	
SPI02	Q2360132	A894274	1,2,4,5-TETRACHLOROBENZENE	0	100		79.7	ug/L	79.7	
SPI02	Q2360132	A894274	1,2,4-TRICHLOROBENZENE	0	100		93.2	ug/L	93.2	
SPI02	Q2360132	A894274	BENZOIC ACID	0	100		41.6	ug/L	41.6	
SPI02	Q2360132	A894274	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRESOL)	0	100		94.5	ug/L	94.5	
SPI02	Q2360132	A894274	2-CHLOROPHENOL	0	100		91	ug/L	91	
SPI02	Q2360132	A894274	2,4-DICHLOROPHENOL	0	100		92.2	ug/L	92.2	
SPI02	Q2360132	A894274	2,4-DIMETHYLPHENOL	0	100		64.2	ug/L	64.2	
SPI02	Q2360132	A894274	4,6-DINITRO-O-CRESOL (2-METHYL-4,6-DINITROPHEN	0	100		106	ug/L	106	
SPI02	Q2360132	A894274	2,4-DINITROPHENOL	0	100		107	ug/L	107	
SPI02	Q2360132	A894274	2-METHYLPHENOL (O-CRESOL)	0	100		75.2	ug/L	75.2	
SPI02	Q2360132	A894274	4-METHYLPHENOL (P-CRESOL)	0	100		68.1	ug/L	68.1	
SPI02	Q2360132	A894274	2-NITROPHENOL	0	100		94.1	ug/L	94.1	
SPI02	Q2360132	A894274	4-NITROPHENOL	0	100		35.2	ug/L	35.2	
SPI02	Q2360132	A894274	PENTACHLOROPHENOL	0	100		116	ug/L	116	
SPI02	Q2360132	A894274	PHENOL	0	100		39.2	ug/L	39.2	
SPI02	Q2360132	A894274	2,3,4,6-TETRACHLOROPHENOL	0	100		99.1	ug/L	99.1	
SPI02	Q2360132	A894274	2,4,5-TRICHLOROPHENOL	0	100		97.6	ug/L	97.6	
SPI02	Q2360132	A894274	2,4,6-TRICHLOROPHENOL	0	100		97.6	ug/L	97.6	
DPS02	Q2360133	A894274	Analysis Date/Time: 01-Oct-10 11:47							
DPS02	Q2360133	A894274	ACENAPHTHENE	0	100		98.2	ug/L	98.2	0.6
DPS02	Q2360133	A894274	ACENAPHTHYLENE	0	100		97.7	ug/L	97.7	0.4
DPS02	Q2360133	A894274	ANTHRACENE	0	100		102	ug/L	101.7	2.1
DPS02	Q2360133	A894274	BENZO(A)ANTHRACENE [(BENZO(A)ANTHRACENE]	0	100		103	ug/L	102.7	2.9
DPS02	Q2360133	A894274	BENZO(A)PYRENE	0	100		98.1	ug/L	98.1	3.7
DPS02	Q2360133	A894274	BENZO(B)FLUORANTHENE (3,4-BENZOFLUORANTHENE)	0	100		96.3	ug/L	96.3	0.6
DPS02	Q2360133	A894274	BENZO(G,H,I)PERYLENE	0	100		101	ug/L	101.2	7.1
DPS02	Q2360133	A894274	BENZO(K)FLUORANTHENE	0	100		91.5	ug/L	91.5	4.4
DPS02	Q2360133	A894274	BENZYL ALCOHOL	0	100		78.5	ug/L	78.5	2.3
DPS02	Q2360133	A894274	BENZYLBUTYLPHTHALATE (BUTYLBENZYLPHTHALATE)	0	100		94.5	ug/L	94.5	3.9
DPS02	Q2360133	A894274	BIS(2-CHLOROETHOXY)METHANE	0	100		95.5	ug/L	95.5	0.1
DPS02	Q2360133	A894274	BIS(2-CHLOROETHYL)ETHER	0	100		88.2	ug/L	88.2	3.6
DPS02	Q2360133	A894274	BIS(2-CHLOROISOPROPYL)ETHER	0	100		87.6	ug/L	87.6	4
DPS02	Q2360133	A894274	BIS(2-ETHYLHEXYL)PHTHALATE	0	100		97	ug/L	97	4.9
DPS02	Q2360133	A894274	4-BROMODIPHENYL ETHER	0	100		103	ug/L	102.5	3.5
DPS02	Q2360133	A894274	CARBAZOLE	0	100		93.5	ug/L	93.5	8.5
DPS02	Q2360133	A894274	4-CHLOROANILINE	0	100		99.7	ug/L	99.7	2
DPS02	Q2360133	A894274	2-CHLORONAPHTHALENE	0	100		96.9	ug/L	96.9	0.6
DPS02	Q2360133	A894274	4-CHLOROPHENYL-PHENYLETHER	0	100		95.3	ug/L	95.3	3.8
DPS02	Q2360133	A894274	CHRYSENE	0	100		97.3	ug/L	97.3	1.1
DPS02	Q2360133	A894274	DIBENZ(A,H)ANTHRACENE	0	100		99.8	ug/L	99.8	1.3
DPS02	Q2360133	A894274	DIBENZOFURAN	0	100		96.6	ug/L	96.6	0.2
DPS02	Q2360133	A894274	1,2-DICHLOROBENZENE (O-	0	100		90.5	ug/L	90.5	4.5

HERITAGE ENVIRONMENTAL SERVICES

60543

SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analyst: J MINNIEAR, II Run Date: 01-Oct-10
Analytical Reviewer: L SMITH Review Date: 01-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
			DICHLOROBENZENE)							
DPS02	Q2360133	A894274	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	100		88.9	ug/L	88.9	3.6
DPS02	Q2360133	A894274	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	100		89.9	ug/L	89.9	3.1
DPS02	Q2360133	A894274	3,3'-DICHLOROBENZIDINE	0	100		89.6	ug/L	89.6	16.2
DPS02	Q2360133	A894274	DIETHYLPHTHALATE	0	100		99.2	ug/L	99.2	2.7
DPS02	Q2360133	A894274	DIMETHYLPHTHALATE	0	100		100	ug/L	100.2	1.5
DPS02	Q2360133	A894274	DI-N-BUTYLPHTHALATE	0	100		97.1	ug/L	97.1	8
DPS02	Q2360133	A894274	2,4-DINITROTOLUENE	0	100		94.6	ug/L	94.6	2.6
DPS02	Q2360133	A894274	2,6-DINITROTOLUENE	0	100		93.1	ug/L	93.1	2.2
DPS02	Q2360133	A894274	DI-N-OCTYLPHTHALATE	0	100		79.2	ug/L	79.2	2.9
DPS02	Q2360133	A894274	FLUORANTHENE	0	100		91.7	ug/L	91.7	10
DPS02	Q2360133	A894274	FLUORENE	0	100		96.4	ug/L	96.4	1.7
DPS02	Q2360133	A894274	HEXACHLOROBENZENE	0	100		101	ug/L	100.7	3.3
DPS02	Q2360133	A894274	HEXACHLOROBUTADIENE	0	100		94.8	ug/L	94.8	1.2
DPS02	Q2360133	A894274	HEXACHLOROCYCLOPENTADIENE	0	100		86.5	ug/L	86.5	4.7
DPS02	Q2360133	A894274	HEXACHLOROETHANE	0	100		90.5	ug/L	90.5	3.8
DPS02	Q2360133	A894274	INDENO(1,2,3-CD)PYRENE	0	100		104	ug/L	103.7	1.4
DPS02	Q2360133	A894274	ISOPHORONE	0	100		92.8	ug/L	92.8	1.8
DPS02	Q2360133	A894274	2-METHYLNAPHTHALENE	0	100		107	ug/L	107.3	2.2
DPS02	Q2360133	A894274	NAPHTHALENE	0	100		94.8	ug/L	94.8	0.4
DPS02	Q2360133	A894274	2-NITROANILINE (O-NITROANILINE)	0	100		96.4	ug/L	96.4	2.7
DPS02	Q2360133	A894274	3-NITROANILINE (M-NITROANILINE)	0	100		112	ug/L	111.8	2.8
DPS02	Q2360133	A894274	4-NITROANILINE (P-NITROANILINE)	0	100		103	ug/L	103.2	12.5
DPS02	Q2360133	A894274	NITROBENZENE	0	100		94.6	ug/L	94.6	0.1
DPS02	Q2360133	A894274	N-NITROSODIPHENYLAMINE	0	100		106	ug/L	106	3.6
DPS02	Q2360133	A894274	N-NITROSO-DI-N-PROPYLAMINE	0	100		95.4	ug/L	95.4	5.2
DPS02	Q2360133	A894274	PHENANTHRENE	0	100		102	ug/L	102.5	2
DPS02	Q2360133	A894274	2-PICOLINE (2-METHYLPYRIDINE)	0	100		64.7	ug/L	64.7	38.1
DPS02	Q2360133	A894274	PYRENE	0	100		101	ug/L	100.8	5
DPS02	Q2360133	A894274	PYRIDINE	0	100		54.1	ug/L	54.1	40.7
DPS02	Q2360133	A894274	1,2,4,5-TETRACHLOROBENZENE	0	100		80.2	ug/L	80.2	0.6
DPS02	Q2360133	A894274	1,2,4-TRICHLOROBENZENE	0	100		94	ug/L	94	0.9
DPS02	Q2360133	A894274	BENZOIC ACID	0	100		38.4	ug/L	38.4	8
DPS02	Q2360133	A894274	4-CHLORO-3-METHYLPHENOL (P-CHLORO-M-CRESOL)	0	100		92.4	ug/L	92.4	2.2
DPS02	Q2360133	A894274	2-CHLOROPHENOL	0	100		88.1	ug/L	88.1	3.2
DPS02	Q2360133	A894274	2,4-DICHLOROPHENOL	0	100		91.2	ug/L	91.2	1.1
DPS02	Q2360133	A894274	2,4-DIMETHYLPHENOL	0	100		67.5	ug/L	67.5	5
DPS02	Q2360133	A894274	4,6-DINITRO-O-CRESOL(2-METHYL-4,6-DINITROPHEN	0	100		108	ug/L	107.9	1.8
DPS02	Q2360133	A894274	2,4-DINITROPHENOL	0	100		106	ug/L	106.3	0.8
DPS02	Q2360133	A894274	2-METHYLPHENOL (O-CRESOL)	0	100		72.8	ug/L	72.8	3.2
DPS02	Q2360133	A894274	4-METHYLPHENOL (P-CRESOL)	0	100		65.7	ug/L	65.7	3.6
DPS02	Q2360133	A894274	2-NITROPHENOL	0	100		94.1	ug/L	94.1	0
DPS02	Q2360133	A894274	4-NITROPHENOL	0	100		40.9	ug/L	40.9	15
DPS02	Q2360133	A894274	PENTACHLOROPHENOL	0	100		117	ug/L	117.2	0.9
DPS02	Q2360133	A894274	PHENOL	0	100		38.4	ug/L	38.4	2.1

HERITAGE ENVIRONMENTAL SERVICES

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SEMI-VOLATILE ORGANICS (BASE/NEUTRAL/ACID FRACTIONS) SW846-8270C **O505.3**
Prep : GC/MS SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510C

R572504 Analytical — Analyst: J MINNIEAR, II — Reviewer: L SMITH — Run Date: 01-Oct-10 — Review Date: 01-Oct-10 — Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DPS02	Q2360133	A894274	2,3,4,6-TETRACHLOROPHENOL	0	100		96.5	ug/L	96.5	2.7
DPS02	Q2360133	A894274	2,4,5-TRICHLOROPHENOL	0	100		97.8	ug/L	97.8	0.2
DPS02	Q2360133	A894274	2,4,6-TRICHLOROPHENOL	0	100		98	ug/L	98	0.4

Q2359388 Value reported for analytes calibrated by linear (LIN) or
Q2359388 quadratic (QDR) equations is r2 (Coef. of Determination).
Q2360601 Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)
Q2360601 equations is concentration (UG/ML).

THALLIUM TRACE ICP SW846-6010B **M134.0**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Prep — Analyst: K KAMARA — Reviewer: S ENDERSEN — Run Date: 27-Sep-10 — Review Date: 27-Sep-10 — Instrument: PREP

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572515							
SAMPLE	A894272	Rep: 0	Analytical Run: R572515							
SAMPLE	A894273	Rep: 0	Analytical Run: R572515							
SAMPLE	A894274	Rep: 0	Analytical Run: R572515							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analytical — Analyst: J KRAMER — Reviewer: S ENDERSEN — Run Date: 27-Sep-10 — Review Date: 28-Sep-10 — Instrument: TRACE ICP

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	THALLIUM			<	0.00400	mg/L		
LCS	Q2358859	SPEX	THALLIUM	3			2.93	mg/L	97.7	
DUP02	Q2358860	A894272	THALLIUM	0		BDL		mg/L		
SPI02	Q2358861	A894272	THALLIUM	0	3		2.65	mg/L	88.3	

R572515 Analytical — Analyst: J KRAMER — Reviewer: S ENDERSEN — Run Date: 01-Oct-10 — Review Date: 02-Oct-10 — Instrument: TRACE ICP

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2360810	PERKIN ELE	THALLIUM	0.01			0.0111	mg/L	111.0	
ICV01	Q2360809	PERKIN ELM	THALLIUM	1			1.00	mg/L	100.0	
LCCV	Q2360812	INORGANIC	THALLIUM	0.01			0.0113	mg/L	113.0	
CDL01	Q2360801	PERKIN ELM	THALLIUM	0.02			0.0186	mg/L	93.0	
ICS-AB	Q2360820	PERKIN ELM	THALLIUM	0.1			0.0813	mg/L	81.3	
CCV	Q2360823	INORGANIC	THALLIUM	2			1.91	mg/L	95.5	
BLA01	Q2360814	NA	THALLIUM			<	0.00400	mg/L		

HERITAGE ENVIRONMENTAL SERVICES

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THALLIUM TRACE ICP SW846-6010B **M134.0**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572515 Analyst: J KRAMER Run Date: 01-Oct-10
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	THALLIUM			<	0.00400	mg/L		
LCS	Q2358863	INORGANIC	THALLIUM	3			3.00	mg/L	100.0	
SER01	Q2360833	A894272	THALLIUM	0		CNA	0.0163	mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358864	A894272	THALLIUM	0		BDL		mg/L		
SPI02	Q2358865	A894272	THALLIUM	0	3		2.86	mg/L	95.3	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2360824	INORGANIC	THALLIUM	2			1.92	mg/L	96.0	
BLA01	Q2360815	NA	THALLIUM			<	0.00400	mg/L		
SER01	Q2360835	A894781	THALLIUM	0		CNA	0.0197	mg/L		
CDL01	Q2360830	INORGANIC	THALLIUM	0.01			0.0118	mg/L	118.0	
ICS-AB	Q2360821	PERKIN ELM	THALLIUM	0.1			0.0861	mg/L	86.1	

Q2360833 1:5 Dilution.
Q2360835 1:5 Dilution.

ANTIMONY ICP SW846-6010B **M102.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	ANTIMONY	0.01			0.0108	mg/L	108.0	
ICV01	Q2359152	PERKIN ELM	ANTIMONY	0.5			0.504	mg/L	100.8	
CDL01	Q2359147	PERKIN ELM	ANTIMONY	0.120			0.121	mg/L	100.8	
ICS-AB	Q2359145	PERKIN ELM	ANTIMONY	0.6			0.646	mg/L	107.7	
LCCV	Q2359202	INORGANIC	ANTIMONY	0.01			0.00972	mg/L	97.2	
CCV	Q2359188	INORGANIC	ANTIMONY	1			0.995	mg/L	99.5	

HERITAGE ENVIRONMENTAL SERVICES

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ANTIMONY ICP SW846-6010B **M102.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2359169	NA	ANTIMONY			<	0.00400	mg/L		
BLA02	Q2358858	NA	ANTIMONY			<	0.00400	mg/L		
LCS	Q2358859	SPEX	ANTIMONY	0.5			0.543	mg/L	108.6	
SER01	Q2359198	A894272	ANTIMONY	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	ANTIMONY	0		BDL		mg/L		
SPI02	Q2358861	A894272	ANTIMONY	0	0.500		0.507	mg/L	101.4	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	ANTIMONY	1			1.01	mg/L	101.0	
BLA01	Q2359170	NA	ANTIMONY			<	0.00400	mg/L		
CDL01	Q2359221	INORGANIC	ANTIMONY	0.01			0.0148	mg/L	148.0	
ICS-AB	Q2359217	PERKIN ELM	ANTIMONY	0.6			0.631	mg/L	105.2	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	ANTIMONY			<	0.00200	mg/L		
LCS	Q2358863	INORGANIC	ANTIMONY	0.5			0.539	mg/L	107.8	
DUP02	Q2358864	A894272	ANTIMONY	0		BDL		mg/L		
SPI02	Q2358865	A894272	ANTIMONY	0	0.5		0.519	mg/L	103.8	

COPPER ICP SW846-6010B **M112.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	COPPER	0.01			0.0101	mg/L	101.0	
ICV01	Q2359152	PERKIN ELM	COPPER	1			0.982	mg/L	98.2	

HERITAGE ENVIRONMENTAL SERVICES

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COPPER ICP SW846-6010B **M112.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CDL01	Q2359149	INORGANIC	COPPER	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	COPPER	0.500			0.525	mg/L	105.0	
LCCV	Q2359202	INORGANIC	COPPER	0.01			0.0102	mg/L	102.0	
CCV	Q2359188	INORGANIC	COPPER	5.00			4.83	mg/L	96.6	
BLA01	Q2359169	NA	COPPER			<	0.00400	mg/L		
BLA02	Q2358858	NA	COPPER			<	0.00400	mg/L		
LCS	Q2358859	SPEX	COPPER	0.25			0.254	mg/L	101.6	
SER01	Q2359198	A894272	COPPER	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	COPPER	0		BDL		mg/L		
SPI02	Q2358861	A894272	COPPER	0	0.250		0.240	mg/L	96.0	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	COPPER	5.00			4.82	mg/L	96.4	
BLA01	Q2359170	NA	COPPER			<	0.00400	mg/L		
CDL01	Q2359221	INORGANIC	COPPER	0.01			0.00999	mg/L	99.9	
ICS-AB	Q2359217	PERKIN ELM	COPPER	0.500			0.512	mg/L	102.4	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

MAGNESIUM ICP SW846-6010B **M118.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
DUP02	Q2358864	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	MAGNESIUM	0.1			0.0959	mg/L	95.9	
ICV01	Q2359152	PERKIN ELM	MAGNESIUM	20			20.0	mg/L	100.0	
CDL01	Q2359148	INORGANIC	MAGNESIUM	0.1			0.0963	mg/L	96.3	
ICS-A	Q2359150	PERKIN-ELM	MAGNESIUM	500			503	mg/L	100.6	
ICS-AB	Q2359145	PERKIN	MAGNESIUM	500			508	mg/L	101.6	

HERITAGE ENVIRONMENTAL SERVICES

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MAGNESIUM ICP SW846-6010B **M118.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
		ELM								
LCCV	Q2359202	INORGANIC	MAGNESIUM	0.1			0.0956	mg/L	95.6	
CCV	Q2359188	INORGANIC	MAGNESIUM	50.0			48.1	mg/L	96.2	
BLA01	Q2359169	NA	MAGNESIUM			<	0.0400	mg/L		
BLA02	Q2358858	NA	MAGNESIUM			<	0.0400	mg/L		
LCS	Q2358859	SPEX	MAGNESIUM	100			104	mg/L	104.0	
SER01	Q2359198	A894272	MAGNESIUM	41.7			40.4	mg/L		3.2
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	MAGNESIUM	41.7			37.9	mg/L		9.5
SPI02	Q2358861	A894272	MAGNESIUM	41.7	100		137	mg/L	95.3	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	MAGNESIUM	50.0			47.8	mg/L	95.6	
BLA01	Q2359170	NA	MAGNESIUM			<	0.0400	mg/L		
CDL01	Q2359221	INORGANIC	MAGNESIUM	0.1			0.0909	mg/L	90.9	
ICS-A	Q2359222	PERKIN-ELM	MAGNESIUM	500			486	mg/L	97.2	
ICS-AB	Q2359217	PERKIN ELM	MAGNESIUM	500			489	mg/L	97.8	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DUP02	Q2358864	A894272	MAGNESIUM	42.5			41.1	mg/L		3.3

SILVER ICP SW846-6010B **M130.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

HERITAGE ENVIRONMENTAL SERVICES

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SILVER ICP SW846-6010B **M130.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	SILVER	0.0100			0.00974	mg/L	97.4	
ICV01	Q2359152	PERKIN ELM	SILVER	0.5			0.495	mg/L	99.0	
CDL01	Q2359149	INORGANIC	SILVER	2			2.02	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	SILVER	0.2			0.191	mg/L	95.5	
LCCV	Q2359202	INORGANIC	SILVER	0.0100			0.0102	mg/L	102.0	
CCV	Q2359188	INORGANIC	SILVER	1.00			0.988	mg/L	98.8	
BLA01	Q2359169	NA	SILVER			<	0.000800	mg/L		
BLA02	Q2358858	NA	SILVER			<	0.000800	mg/L		
LCS	Q2358859	SPEX	SILVER	0.05			0.0545	mg/L	109.0	
SER01	Q2359198	A894272	SILVER	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	SILVER	0		BDL		mg/L		
SPI02	Q2358861	A894272	SILVER	0	0.050		0.0504	mg/L	100.8	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	SILVER	1.00			0.984	mg/L	98.4	
BLA01	Q2359170	NA	SILVER			<	0.000800	mg/L		
CDL01	Q2359221	INORGANIC	SILVER	0.0100			0.00977	mg/L	97.7	
ICS-AB	Q2359217	PERKIN ELM	SILVER	0.2			0.185	mg/L	92.5	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	SILVER			<	0.000800	mg/L		
LCS	Q2358863	INORGANIC	SILVER	0.05			0.0541	mg/L	108.2	
DUP02	Q2358864	A894272	SILVER	0		BDL		mg/L		
SPI02	Q2358865	A894272	SILVER	0	0.05		0.0531	mg/L	106.2	

VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10 Instrument: GC/MS VOA
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359679		Analysis Date/Time: 28-Sep-10 13:21							
CAL01	Q2359679		BENZENE	0.8825						3.9
CAL01	Q2359679		BROMOBENZENE	1.1044						8
CAL01	Q2359679		BROMOCHLOROMETHANE	0.1115						7.6
CAL01	Q2359679		BROMODICHLOROMETHANE	0.2214						10.5
CAL01	Q2359679		BROMOFORM	0.2683						12.9
CAL01	Q2359679		BROMOMETHANE			QDR				1.000
CAL01	Q2359679		N-BUTYLBENZENE	1.3281						4.6

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VOLATILE ORGANICS SW846-8260B O510.7

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359679		SEC-BUTYLBENZENE	2.9971						3.3
CAL01	Q2359679		TERT-BUTYLBENZENE	1.3746						3.8
CAL01	Q2359679		CARBON TETRACHLORIDE	0.2616						6.1
CAL01	Q2359679		CHLOROBENZENE	1.5436						4.9
CAL01	Q2359679		DIBROMOCHLOROMETHANE	0.4198						7.5
CAL01	Q2359679		CHLOROETHANE			QDR				1.000
CAL01	Q2359679		CHLOROFORM	0.4152						13.9
CAL01	Q2359679		CHLOROMETHANE	0.3473						10.3
CAL01	Q2359679		2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.6514						5.7
CAL01	Q2359679		4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.6457						7.2
CAL01	Q2359679		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1765						10.2
CAL01	Q2359679		1,2-DIBROMOETHANE (EDB)	0.1876						4.5
CAL01	Q2359679		DIBROMOMETHANE	0.1434						4.7
CAL01	Q2359679		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.2686						4.5
CAL01	Q2359679		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.2998						3.9
CAL01	Q2359679		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.3470						6.7
CAL01	Q2359679		DICHLORODIFLUOROMETHANE	0.2257						10.6
CAL01	Q2359679		1,1-DICHLOROETHANE	0.4828						6.9
CAL01	Q2359679		1,2-DICHLOROETHANE	0.4132						6.8
CAL01	Q2359679		1,1-DICHLOROETHENE	0.1988						9.8
CAL01	Q2359679		CIS-1,2-DICHLOROETHENE	0.2381						7
CAL01	Q2359679		TRANS-1,2-DICHLOROETHENE	0.2223						8.4
CAL01	Q2359679		1,2-DICHLOROPROPANE	0.2469						5.2
CAL01	Q2359679		1,3-DICHLOROPROPANE	0.9821						7.9
CAL01	Q2359679		2,2-DICHLOROPROPANE	0.2086						5.2
CAL01	Q2359679		1,1-DICHLOROPROPENE	0.1109						5.9
CAL01	Q2359679		ETHYL BENZENE	0.8742						4.9
CAL01	Q2359679		HEXACHLOROBUTADIENE	0.5651						4.7
CAL01	Q2359679		ISOPROPYLBENZENE (CUMENE)	2.4030						3.8
CAL01	Q2359679		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4775						3.7
CAL01	Q2359679		DICHLOROMETHANE (METHYLENE CHLORIDE)	0.2328						14.8
CAL01	Q2359679		METHYL ETHYL KETONE	0.0321						10.8
CAL01	Q2359679		NAPHTHALENE	2.8211						4.9
CAL01	Q2359679		N-PROPYLBENZENE	0.3506						8.2
CAL01	Q2359679		STYRENE	1.7521						4.7
CAL01	Q2359679		1,1,1,2-TETRACHLOROETHANE	0.5135						5.6
CAL01	Q2359679		1,1,2,2-TETRACHLOROETHANE	0.7933						4.5
CAL01	Q2359679		TETRACHLOROETHENE	0.7147						11.1
CAL01	Q2359679		TOLUENE	0.8756						5.6
CAL01	Q2359679		1,2,3-TRICHLOROBENZENE	0.9916						6.3
CAL01	Q2359679		1,2,4-TRICHLOROBENZENE	1.0026						6
CAL01	Q2359679		1,1,1-TRICHLOROETHANE	0.3303						6.2
CAL01	Q2359679		1,1,2-TRICHLOROETHANE	0.1828						7.3

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359679		TRICHLOROETHENE	0.2386						3.8
CAL01	Q2359679		TRICHLOROFLUOROMETHANE	0.2503						9.6
CAL01	Q2359679		1,2,3-TRICHLOROPROPANE	0.2515						6.9
CAL01	Q2359679		1,2,4-TRIMETHYLBENZENE	2.3584						4.3
CAL01	Q2359679		1,3,5-TRIMETHYLBENZENE	2.3393						4.9
CAL01	Q2359679		VINYL CHLORIDE	0.2420						6.3
CAL01	Q2359679		METHYL-T-BUTYL ETHER (MTBE)	0.7409						4.8
CAL01	Q2359679		N-HEXANE	0.3004						7.7
CAL01	Q2359679		O-XYLENE	1.0436						5.4
CAL01	Q2359679		M/P-XYLENE	1.0753						5.7
CAL01	Q2359679		DICHLOROETHANE-D4	0.3811						1.7
CAL01	Q2359679		TOLUENE-D8	0.9046						3
CAL01	Q2359679		4-BROMOFLUOROBENZENE	0.8167						2.9
CAL01	Q2359679		DIBROMOFLUOROMETHANE	0.2508						1.8
CCVD	Q2361068		Analysis Date/Time: 29-Sep-10 05:38							
CCVD	Q2361068		BENZENE	0.8825			0.8661			1.9
CCVD	Q2361068		BROMOBENZENE	1.1044			0.9940			10
CCVD	Q2361068		BROMOCHLOROMETHANE	0.1115			0.1168			4.8
CCVD	Q2361068		BROMODICHLOROMETHANE	0.2214			0.2514			13.6
CCVD	Q2361068		BROMOFORM	0.2683			0.3303			23.1
CCVD	Q2361068		BROMOMETHANE	10		QDR	10.36			3.6
CCVD	Q2361068		N-BUTYLBENZENE	1.3281			1.2209			8.1
CCVD	Q2361068		SEC-BUTYLBENZENE	2.9971			2.7826			7.2
CCVD	Q2361068		TERT-BUTYLBENZENE	1.3746			1.2751			7.2
CCVD	Q2361068		CARBON TETRACHLORIDE	0.2616			0.2875			9.9
CCVD	Q2361068		CHLOROBENZENE	1.5436			1.4050			9
CCVD	Q2361068		DIBROMOCHLOROMETHANE	0.4198			0.4819			14.8
CCVD	Q2361068		CHLOROETHANE	10		QDR	10.20			2
CCVD	Q2361068		CHLOROFORM	0.4152			0.4029			3
CCVD	Q2361068		CHLOROMETHANE	0.3473			0.3141			9.6
CCVD	Q2361068		2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.6514			0.6183			5.1
CCVD	Q2361068		4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.6457			0.5971			7.5
CCVD	Q2361068		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1765			0.1677			5
CCVD	Q2361068		1,2-DIBROMOETHANE (EDB)	0.1876			0.1698			9.5
CCVD	Q2361068		DIBROMOMETHANE	0.1434			0.1308			8.8
CCVD	Q2361068		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.2686			1.1800			7
CCVD	Q2361068		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.2998			1.2252			5.7
CCVD	Q2361068		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.3470			1.2352			8.3
CCVD	Q2361068		DICHLORODIFLUOROMETHANE	0.2257			0.2009			11
CCVD	Q2361068		1,1-DICHLOROETHANE	0.4828			0.4720			2.2
CCVD	Q2361068		1,2-DICHLOROETHANE	0.4132			0.3905			5.5
CCVD	Q2361068		1,1-DICHLOROETHENE	0.1988			0.1923			3.3
CCVD	Q2361068		CIS-1,2-DICHLOROETHENE	0.2381			0.2381			0
CCVD	Q2361068		TRANS-1,2-DICHLOROETHENE	0.2223			0.2207			0.7

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCVD	Q2361068		1,2-DICHLOROPROPANE	0.2469			0.2335			5.4
CCVD	Q2361068		1,3-DICHLOROPROPANE	0.9821			0.8606			12.4
CCVD	Q2361068		2,2-DICHLOROPROPANE	0.2086			0.2178			4.4
CCVD	Q2361068		1,1-DICHLOROPROPENE	0.1109			0.1091			1.6
CCVD	Q2361068		ETHYL BENZENE	0.8742			0.7832			10.4
CCVD	Q2361068		HEXACHLOROBUTADIENE	0.5651			0.5193			8.1
CCVD	Q2361068		ISOPROPYLBENZENE (CUMENE)	2.4030			2.2703			5.5
CCVD	Q2361068		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4775			2.3020			7.1
CCVD	Q2361068		DICHLOROMETHANE (METHYLENE CHLORIDE)	0.2328			0.2280			2.1
CCVD	Q2361068		METHYL ETHYL KETONE	0.0321			0.0328			2.2
CCVD	Q2361068		NAPHTHALENE	2.8211			2.5461			9.7
CCVD	Q2361068		N-PROPYLBENZENE	0.3506			0.3194			8.9
CCVD	Q2361068		STYRENE	1.7521			1.5924			9.1
CCVD	Q2361068		1,1,1,2-TETRACHLOROETHANE	0.5135			0.5028			2.1
CCVD	Q2361068		1,1,2,2-TETRACHLOROETHANE	0.7933			0.7256			8.5
CCVD	Q2361068		TETRACHLOROETHENE	0.7147			0.6440			9.9
CCVD	Q2361068		TOLUENE	0.8756			0.8171			6.7
CCVD	Q2361068		1,2,3-TRICHLOROBENZENE	0.9916			0.9006			9.2
CCVD	Q2361068		1,2,4-TRICHLOROBENZENE	1.0026			0.9205			8.2
CCVD	Q2361068		1,1,1-TRICHLOROETHANE	0.3303			0.3285			0.5
CCVD	Q2361068		1,1,2-TRICHLOROETHANE	0.1828			0.1621			11.3
CCVD	Q2361068		TRICHLOROETHENE	0.2386			0.2205			7.6
CCVD	Q2361068		TRICHLOROFLUOROMETHANE	0.2503			0.2725			8.9
CCVD	Q2361068		1,2,3-TRICHLOROPROPANE	0.2515			0.2301			8.5
CCVD	Q2361068		1,2,4-TRIMETHYLBENZENE	2.3584			2.1835			7.4
CCVD	Q2361068		1,3,5-TRIMETHYLBENZENE	2.3393			2.1639			7.5
CCVD	Q2361068		VINYL CHLORIDE	0.2420			0.2316			4.3
CCVD	Q2361068		METHYL-T-BUTYL ETHER (MTBE)	0.7409			0.7556			2
CCVD	Q2361068		N-HEXANE	0.3004			0.2852			5.1
CCVD	Q2361068		O-XYLENE	1.0436			0.9899			5.1
CCVD	Q2361068		M/P-XYLENE	1.0753			0.9938			7.6
CCVD	Q2361068		DICHLOROETHANE-D4	0.3811			0.3931			3.1
CCVD	Q2361068		TOLUENE-D8	0.9046			0.8848			2.2
CCVD	Q2361068		4-BROMOFLUOROBENZENE	0.8167			0.7866			3.7
CCVD	Q2361068		DIBROMOFLUOROMETHANE	0.2508			0.2607			3.9
BLA01	Q2361069		Analysis Date/Time: 29-Sep-10 06:02							
BLA01	Q2361069		BENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		BROMOBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		BROMOCHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		BROMODICHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		BROMOFORM			BDL	1.0	ug/L		
BLA01	Q2361069		BROMOMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		N-BUTYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		SEC-BUTYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		TERT-BUTYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		CARBON TETRACHLORIDE			BDL	1.0	ug/L		

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2361069		CHLOROBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		DIBROMOCHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		CHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		CHLOROFORM			BDL	1.0	ug/L		
BLA01	Q2361069		CHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		2-CHLOROTOLUENE (O-CHLOROTOLUENE)			BDL	1.0	ug/L		
BLA01	Q2361069		4-CHLOROTOLUENE (P-CHLOROTOLUENE)			BDL	1.0	ug/L		
BLA01	Q2361069		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			BDL	1.0	ug/L		
BLA01	Q2361069		1,2-DIBROMOETHANE (EDB)			BDL	1.0	ug/L		
BLA01	Q2361069		DIBROMOMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2361069		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2361069		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2361069		DICHLORODIFLUOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,1-DICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,2-DICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,1-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361069		CIS-1,2-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361069		TRANS-1,2-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361069		1,2-DICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,3-DICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2361069		2,2-DICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,1-DICHLOROPROPENE			BDL	1.0	ug/L		
BLA01	Q2361069		ETHYL BENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		HEXACHLOROBUTADIENE			BDL	1.0	ug/L		
BLA01	Q2361069		ISOPROPYLBENZENE (CUMENE)			BDL	1.0	ug/L		
BLA01	Q2361069		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			BDL	1.0	ug/L		
BLA01	Q2361069		DICHLOROMETHANE (METHYLENE CHLORIDE)			BDL	1.0	ug/L		
BLA01	Q2361069		METHYL ETHYL KETONE			BDL	5.0	ug/L		
BLA01	Q2361069		NAPHTHALENE			BDL	1.0	ug/L		
BLA01	Q2361069		N-PROPYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		STYRENE			BDL	1.0	ug/L		
BLA01	Q2361069		1,1,1,2-TETRACHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,1,2,2-TETRACHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		TETRACHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361069		TOLUENE			BDL	1.0	ug/L		
BLA01	Q2361069		1,2,3-TRICHLOROBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		1,2,4-TRICHLOROBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		1,1,1-TRICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,1,2-TRICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		TRICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361069		TRICHLOROFLUOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361069		1,2,3-TRICHLOROPROPANE			BDL	1.0	ug/L		

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2361069		1,2,4-TRIMETHYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		1,3,5-TRIMETHYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361069		VINYL CHLORIDE			BDL	1.0	ug/L		
BLA01	Q2361069		METHYL-T-BUTYL ETHER (MTBE)			BDL	1.0	ug/L		
BLA01	Q2361069		N-HEXANE			BDL	1.0	ug/L		
BLA01	Q2361069		O-XYLENE			BDL	1.0	ug/L		
BLA01	Q2361069		M/P-XYLENE			BDL	2.0	ug/L		
BLA01	Q2361069		DICHLOROETHANE-D4						101	
BLA01	Q2361069		TOLUENE-D8						95	
BLA01	Q2361069		4-BROMOFLUOROBENZENE						100	
BLA01	Q2361069		DIBROMOFLUOROMETHANE						104	
LCS01	Q2361070	METHOD 826	Analysis Date/Time: 29-Sep-10 06:30							
LCS01	Q2361070	METHOD 826	BENZENE	10			9.79	ug/L	97.9	
LCS01	Q2361070	METHOD 826	BROMOBENZENE	10			8.91	ug/L	89.1	
LCS01	Q2361070	METHOD 826	BROMOCHLOROMETHANE	10			10.3	ug/L	103	
LCS01	Q2361070	METHOD 826	BROMODICHLOROMETHANE	10			11.1	ug/L	111	
LCS01	Q2361070	METHOD 826	BROMOFORM	10			11.4	ug/L	114	
LCS01	Q2361070	METHOD 826	BROMOMETHANE	10			8.27	ug/L	82.7	
LCS01	Q2361070	METHOD 826	N-BUTYLBENZENE	10			8.66	ug/L	86.6	
LCS01	Q2361070	METHOD 826	SEC-BUTYLBENZENE	10			8.99	ug/L	89.9	
LCS01	Q2361070	METHOD 826	TERT-BUTYLBENZENE	10			8.88	ug/L	88.8	
LCS01	Q2361070	METHOD 826	CARBON TETRACHLORIDE	10			10.7	ug/L	107	
LCS01	Q2361070	METHOD 826	CHLOROBENZENE	10			8.81	ug/L	88.1	
LCS01	Q2361070	METHOD 826	DIBROMOCHLOROMETHANE	10			11.3	ug/L	113	
LCS01	Q2361070	METHOD 826	CHLOROETHANE	10			8.4	ug/L	84	
LCS01	Q2361070	METHOD 826	CHLOROFORM	10			9.83	ug/L	98.3	
LCS01	Q2361070	METHOD 826	CHLOROMETHANE	10			7.14	ug/L	71.4	
LCS01	Q2361070	METHOD 826	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	10			9.28	ug/L	92.8	
LCS01	Q2361070	METHOD 826	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	10			9.18	ug/L	91.8	
LCS01	Q2361070	METHOD 826	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	10			8.91	ug/L	89.1	
LCS01	Q2361070	METHOD 826	1,2-DIBROMOETHANE (EDB)	10			9.19	ug/L	91.9	
LCS01	Q2361070	METHOD 826	DIBROMOMETHANE	10			9.4	ug/L	94	
LCS01	Q2361070	METHOD 826	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	10			8.84	ug/L	88.4	
LCS01	Q2361070	METHOD 826	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	10			9.02	ug/L	90.2	
LCS01	Q2361070	METHOD 826	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	10			9.04	ug/L	90.4	

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS01	Q2361070	METHOD 826	DICHLORODIFLUOROMETHANE	10			4.48	ug/L	44.8	
LCS01	Q2361070	METHOD 826	1,1-DICHLOROETHANE	10			9.82	ug/L	98.2	
LCS01	Q2361070	METHOD 826	1,2-DICHLOROETHANE	10			9.63	ug/L	96.3	
LCS01	Q2361070	METHOD 826	1,1-DICHLOROETHENE	10			9.48	ug/L	94.8	
LCS01	Q2361070	METHOD 826	CIS-1,2-DICHLOROETHENE	10			9.5	ug/L	95	
LCS01	Q2361070	METHOD 826	TRANS-1,2-DICHLOROETHENE	10			9.92	ug/L	99.2	
LCS01	Q2361070	METHOD 826	1,2-DICHLOROPROPANE	10			9.47	ug/L	94.7	
LCS01	Q2361070	METHOD 826	1,3-DICHLOROPROPANE	10			8.64	ug/L	86.4	
LCS01	Q2361070	METHOD 826	2,2-DICHLOROPROPANE	10			10.1	ug/L	101	
LCS01	Q2361070	METHOD 826	1,1-DICHLOROPROPENE	10			9.95	ug/L	99.5	
LCS01	Q2361070	METHOD 826	ETHYL BENZENE	10			8.97	ug/L	89.7	
LCS01	Q2361070	METHOD 826	HEXACHLOROBUTADIENE	10			8.9	ug/L	89	
LCS01	Q2361070	METHOD 826	ISOPROPYLBENZENE (CUMENE)	10			10.4	ug/L	104	
LCS01	Q2361070	METHOD 826	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	10			9.05	ug/L	90.5	
LCS01	Q2361070	METHOD 826	DICHLOROMETHANE (METHYLENE CHLORIDE)	10			10	ug/L	100	
LCS01	Q2361070	METHOD 826	METHYL ETHYL KETONE	50			41	ug/L	82	
LCS01	Q2361070	METHOD 826	NAPHTHALENE	10			8.62	ug/L	86.2	
LCS01	Q2361070	METHOD 826	N-PROPYLBENZENE	10			9	ug/L	90	
LCS01	Q2361070	METHOD 826	STYRENE	10			8.87	ug/L	88.7	
LCS01	Q2361070	METHOD 826	1,1,1,2-TETRACHLOROETHANE	10			9.42	ug/L	94.2	
LCS01	Q2361070	METHOD 826	1,1,2,2-TETRACHLOROETHANE	10			9.24	ug/L	92.4	
LCS01	Q2361070	METHOD 826	TETRACHLOROETHENE	10			8.86	ug/L	88.6	
LCS01	Q2361070	METHOD 826	TOLUENE	10			9.4	ug/L	94	
LCS01	Q2361070	METHOD 826	1,2,3-TRICHLOROBENZENE	10			8.52	ug/L	85.2	
LCS01	Q2361070	METHOD 826	1,2,4-TRICHLOROBENZENE	10			8.72	ug/L	87.2	
LCS01	Q2361070	METHOD 826	1,1,1-TRICHLOROETHANE	10			9.8	ug/L	98	
LCS01	Q2361070	METHOD 826	1,1,2-TRICHLOROETHANE	10			9.01	ug/L	90.1	
LCS01	Q2361070	METHOD 826	TRICHLOROETHENE	10			8.89	ug/L	88.9	
LCS01	Q2361070	METHOD 826	TRICHLOROFLUOROMETHANE	10			9.12	ug/L	91.2	
LCS01	Q2361070	METHOD 826	1,2,3-TRICHLOROPROPANE	10			7.96	ug/L	79.6	
LCS01	Q2361070	METHOD 826	1,2,4-TRIMETHYLBENZENE	10			8.97	ug/L	89.7	
LCS01	Q2361070	METHOD	1,3,5-TRIMETHYLBENZENE	10			8.94	ug/L	89.4	

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
		826								
LCS01	Q2361070	METHOD 826	VINYL CHLORIDE	10			7.99	ug/L	79.9	
LCS01	Q2361070	METHOD 826	METHYL-T-BUTYL ETHER (MTBE)	10			9.3	ug/L	93	
LCS01	Q2361070	METHOD 826	N-HEXANE	10			12.6	ug/L	126	
LCS01	Q2361070	METHOD 826	O-XYLENE	10			9.08	ug/L	90.8	
LCS01	Q2361070	METHOD 826	M/P-XYLENE	20			18.4	ug/L	92	
SPI01	Q2361071	A894460	Analysis Date/Time: 29-Sep-10 09:33							
SPI01	Q2361071	A894460	BENZENE	0	10		10.2	ug/L	102	
SPI01	Q2361071	A894460	BROMOBENZENE	0	10		8.65	ug/L	86.5	
SPI01	Q2361071	A894460	BROMOCHLOROMETHANE	0	10		10.6	ug/L	106	
SPI01	Q2361071	A894460	BROMODICHLOROMETHANE	0	10		11.4	ug/L	114	
SPI01	Q2361071	A894460	BROMOFORM	0	10		10.7	ug/L	107	
SPI01	Q2361071	A894460	BROMOMETHANE	0	10		6.85	ug/L	68.5	
SPI01	Q2361071	A894460	N-BUTYLBENZENE	0	10		8.46	ug/L	84.6	
SPI01	Q2361071	A894460	SEC-BUTYLBENZENE	0	10		8.89	ug/L	88.9	
SPI01	Q2361071	A894460	TERT-BUTYLBENZENE	0	10		8.47	ug/L	84.7	
SPI01	Q2361071	A894460	CARBON TETRACHLORIDE	0	10		9.32	ug/L	93.2	
SPI01	Q2361071	A894460	CHLOROBENZENE	0	10		9.87	ug/L	98.7	
SPI01	Q2361071	A894460	DIBROMOCHLOROMETHANE	0	10		10.8	ug/L	108	
SPI01	Q2361071	A894460	CHLOROETHANE	0	10		10.2	ug/L	102	
SPI01	Q2361071	A894460	CHLOROFORM	0	10		9.71	ug/L	97.1	
SPI01	Q2361071	A894460	CHLOROMETHANE	0	10		7.34	ug/L	73.4	
SPI01	Q2361071	A894460	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10		9.07	ug/L	90.7	
SPI01	Q2361071	A894460	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10		8.47	ug/L	84.7	
SPI01	Q2361071	A894460	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0	10		10.9	ug/L	109	
SPI01	Q2361071	A894460	1,2-DIBROMOETHANE (EDB)	0	10		9.19	ug/L	91.9	
SPI01	Q2361071	A894460	DIBROMOMETHANE	0	10		9.42	ug/L	94.2	
SPI01	Q2361071	A894460	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	3.29	10		12.8	ug/L	95.1	
SPI01	Q2361071	A894460	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	2.49	10		11.7	ug/L	92.1	
SPI01	Q2361071	A894460	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	4.67	10		14	ug/L	93.3	
SPI01	Q2361071	A894460	DICHLORODIFLUOROMETHANE	0	10		8.05	ug/L	80.5	
SPI01	Q2361071	A894460	1,1-DICHLOROETHANE	0	10		10.1	ug/L	101	
SPI01	Q2361071	A894460	1,2-DICHLOROETHANE	0	10		9.62	ug/L	96.2	
SPI01	Q2361071	A894460	1,1-DICHLOROETHENE	0	10		8.58	ug/L	85.8	
SPI01	Q2361071	A894460	CIS-1,2-DICHLOROETHENE	43.1	10		52.6	ug/L	95	
SPI01	Q2361071	A894460	TRANS-1,2-DICHLOROETHENE	2.96	10		12.9	ug/L	99.4	
SPI01	Q2361071	A894460	1,2-DICHLOROPROPANE	0	10		9.88	ug/L	98.8	
SPI01	Q2361071	A894460	1,3-DICHLOROPROPANE	0	10		8.91	ug/L	89.1	
SPI01	Q2361071	A894460	2,2-DICHLOROPROPANE	0	10		10.3	ug/L	103	
SPI01	Q2361071	A894460	1,1-DICHLOROPROPENE	0	10		9.12	ug/L	91.2	
SPI01	Q2361071	A894460	ETHYL BENZENE	1.15	10		9.76	ug/L	86.1	
SPI01	Q2361071	A894460	HEXACHLOROBUTADIENE	0	10		7.78	ug/L	77.8	

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI01	Q2361071	A894460	ISOPROPYLBENZENE (CUMENE)	1.78	10		10.5	ug/L	87.2	
SPI01	Q2361071	A894460	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10		8.07	ug/L	80.7	
SPI01	Q2361071	A894460	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10		9.77	ug/L	97.7	
SPI01	Q2361071	A894460	METHYL ETHYL KETONE	0	50		57.3	ug/L	114.6	
SPI01	Q2361071	A894460	NAPHTHALENE	2.05	10		12.7	ug/L	106.5	
SPI01	Q2361071	A894460	N-PROPYLBENZENE	1.56	10		10.1	ug/L	85.4	
SPI01	Q2361071	A894460	STYRENE	0	10		2.98	ug/L	29.8	
SPI01	Q2361071	A894460	1,1,1,2-TETRACHLOROETHANE	0	10		9.26	ug/L	92.6	
SPI01	Q2361071	A894460	1,1,2,2-TETRACHLOROETHANE	0	10		10.1	ug/L	101	
SPI01	Q2361071	A894460	TETRACHLOROETHENE	0	10		8.43	ug/L	84.3	
SPI01	Q2361071	A894460	TOLUENE	1.29	10		10.3	ug/L	90.1	
SPI01	Q2361071	A894460	1,2,3-TRICHLOROBENZENE	0	10		9.65	ug/L	96.5	
SPI01	Q2361071	A894460	1,2,4-TRICHLOROBENZENE	1.53	10		10.6	ug/L	90.7	
SPI01	Q2361071	A894460	1,1,1-TRICHLOROETHANE	0	10		10.2	ug/L	102	
SPI01	Q2361071	A894460	1,1,2-TRICHLOROETHANE	0	10		9.1	ug/L	91	
SPI01	Q2361071	A894460	TRICHLOROETHENE	1.03	10		10.5	ug/L	94.7	
SPI01	Q2361071	A894460	TRICHLOROFLUOROMETHANE	0	10		9.95	ug/L	99.5	
SPI01	Q2361071	A894460	1,2,3-TRICHLOROPROPANE	0	10		9.99	ug/L	99.9	
SPI01	Q2361071	A894460	1,2,4-TRIMETHYLBENZENE	1.04	10		9.4	ug/L	83.6	
SPI01	Q2361071	A894460	1,3,5-TRIMETHYLBENZENE	0	10		7.99	ug/L	79.9	
SPI01	Q2361071	A894460	VINYL CHLORIDE	5.15	10		14.7	ug/L	95.5	
SPI01	Q2361071	A894460	METHYL-T-BUTYL ETHER (MTBE)	0	10		10.3	ug/L	103	
SPI01	Q2361071	A894460	N-HEXANE	0	10		8.15	ug/L	81.5	
SPI01	Q2361071	A894460	O-XYLENE	0	10		9.42	ug/L	94.2	
SPI01	Q2361071	A894460	M/P-XYLENE	2.04	20		19.2	ug/L	85.8	
DPS01	Q2361072	A894460	Analysis Date/Time: 29-Sep-10 09:58							
DPS01	Q2361072	A894460	BENZENE	0	10		10.6	ug/L	105.6	3.8
DPS01	Q2361072	A894460	BROMOBENZENE	0	10		8.77	ug/L	87.7	1.4
DPS01	Q2361072	A894460	BROMOCHLOROMETHANE	0	10		11.3	ug/L	112.6	5.7
DPS01	Q2361072	A894460	BROMODICHLOROMETHANE	0	10		11.4	ug/L	114.4	0.4
DPS01	Q2361072	A894460	BROMOFORM	0	10		10.6	ug/L	106.4	0.8
DPS01	Q2361072	A894460	BROMOMETHANE	0	10		6.58	ug/L	65.8	4
DPS01	Q2361072	A894460	N-BUTYLBENZENE	0	10		8.4	ug/L	84	0.7
DPS01	Q2361072	A894460	SEC-BUTYLBENZENE	0	10		8.92	ug/L	89.2	0.3
DPS01	Q2361072	A894460	TERT-BUTYLBENZENE	0	10		8.54	ug/L	85.4	0.8
DPS01	Q2361072	A894460	CARBON TETRACHLORIDE	0	10		9.88	ug/L	98.8	5.8
DPS01	Q2361072	A894460	CHLOROBENZENE	0	10		10	ug/L	100.1	1.4
DPS01	Q2361072	A894460	DIBROMOCHLOROMETHANE	0	10		11	ug/L	110.1	1.6
DPS01	Q2361072	A894460	CHLOROETHANE	0	10		10.5	ug/L	104.9	2.7
DPS01	Q2361072	A894460	CHLOROFORM	0	10		10.1	ug/L	100.8	3.7
DPS01	Q2361072	A894460	CHLOROMETHANE	0	10		7.11	ug/L	71.1	3.2
DPS01	Q2361072	A894460	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10		8.77	ug/L	87.7	3.4
DPS01	Q2361072	A894460	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10		8.91	ug/L	89.1	5.1
DPS01	Q2361072	A894460	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0	10		10.9	ug/L	109	0.5
DPS01	Q2361072	A894460	1,2-DIBROMOETHANE (EDB)	0	10		9.44	ug/L	94.4	2.7

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DPS01	Q2361072	A894460	DIBROMOMETHANE	0	10		9.71	ug/L	97.1	3
DPS01	Q2361072	A894460	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	3.29	10		12.3	ug/L	90	5.3
DPS01	Q2361072	A894460	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	2.49	10		11.3	ug/L	88.3	3.8
DPS01	Q2361072	A894460	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	4.67	10		13.5	ug/L	88.2	5.6
DPS01	Q2361072	A894460	DICHLORODIFLUOROMETHANE	0	10		7.78	ug/L	77.8	3.4
DPS01	Q2361072	A894460	1,1-DICHLOROETHANE	0	10		10.4	ug/L	104.1	3.4
DPS01	Q2361072	A894460	1,2-DICHLOROETHANE	0	10		10.1	ug/L	101	4.9
DPS01	Q2361072	A894460	1,1-DICHLOROETHENE	0	10		8.81	ug/L	88.1	2.6
DPS01	Q2361072	A894460	CIS-1,2-DICHLOROETHENE	43.1	10		58.1	ug/L	150.3	45.3
DPS01	Q2361072	A894460	TRANS-1,2-DICHLOROETHENE	2.96	10		13.4	ug/L	104.2	4.3
DPS01	Q2361072	A894460	1,2-DICHLOROPROPANE	0	10		9.94	ug/L	99.4	0.6
DPS01	Q2361072	A894460	1,3-DICHLOROPROPANE	0	10		9.05	ug/L	90.5	1.6
DPS01	Q2361072	A894460	2,2-DICHLOROPROPANE	0	10		10.7	ug/L	107	3.5
DPS01	Q2361072	A894460	1,1-DICHLOROPROPENE	0	10		9.76	ug/L	97.6	6.8
DPS01	Q2361072	A894460	ETHYL BENZENE	1.15	10		10.1	ug/L	89.4	3.8
DPS01	Q2361072	A894460	HEXACHLOROBUTADIENE	0	10		7.21	ug/L	72.1	7.6
DPS01	Q2361072	A894460	ISOPROPYLBENZENE (CUMENE)	1.78	10		10.2	ug/L	84.6	3.3
DPS01	Q2361072	A894460	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10		7.97	ug/L	79.7	1.2
DPS01	Q2361072	A894460	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10		9.93	ug/L	99.3	1.6
DPS01	Q2361072	A894460	METHYL ETHYL KETONE	0	50		59.4	ug/L	118.8	3.6
DPS01	Q2361072	A894460	NAPHTHALENE	2.05	10		12.1	ug/L	100.8	5.3
DPS01	Q2361072	A894460	N-PROPYLBENZENE	1.56	10		9.8	ug/L	82.4	3.3
DPS01	Q2361072	A894460	STYRENE	0	10		2.67	ug/L	26.7	11
DPS01	Q2361072	A894460	1,1,1,2-TETRACHLOROETHANE	0	10		9.39	ug/L	93.9	1.4
DPS01	Q2361072	A894460	1,1,2,2-TETRACHLOROETHANE	0	10		9.8	ug/L	98	2.8
DPS01	Q2361072	A894460	TETRACHLOROETHENE	0	10		8.76	ug/L	87.6	3.8
DPS01	Q2361072	A894460	TOLUENE	1.29	10		11	ug/L	97.5	7.8
DPS01	Q2361072	A894460	1,2,3-TRICHLOROBENZENE	0	10		9.16	ug/L	91.6	5.2
DPS01	Q2361072	A894460	1,2,4-TRICHLOROBENZENE	1.53	10		10.1	ug/L	86	5
DPS01	Q2361072	A894460	1,1,1-TRICHLOROETHANE	0	10		10.4	ug/L	103.7	1.9
DPS01	Q2361072	A894460	1,1,2-TRICHLOROETHANE	0	10		9.48	ug/L	94.8	4.1
DPS01	Q2361072	A894460	TRICHLOROETHENE	1.03	10		10.6	ug/L	95.8	1
DPS01	Q2361072	A894460	TRICHLOROFLUOROMETHANE	0	10		3.75	ug/L	37.5	90.5
DPS01	Q2361072	A894460	1,2,3-TRICHLOROPROPANE	0	10		9.41	ug/L	94.1	6
DPS01	Q2361072	A894460	1,2,4-TRIMETHYLBENZENE	1.04	10		9.24	ug/L	82	1.9
DPS01	Q2361072	A894460	1,3,5-TRIMETHYLBENZENE	0	10		8.02	ug/L	80.2	0.4
DPS01	Q2361072	A894460	VINYL CHLORIDE	5.15	10		14.2	ug/L	90	5.5
DPS01	Q2361072	A894460	METHYL-T-BUTYL ETHER (MTBE)	0	10		10.5	ug/L	105.3	2.5
DPS01	Q2361072	A894460	N-HEXANE	0	10		8.35	ug/L	83.5	2.4
DPS01	Q2361072	A894460	O-XYLENE	0	10		9.47	ug/L	94.7	0.5
DPS01	Q2361072	A894460	M/P-XYLENE	2.04	20		19.3	ug/L	86.1	0.6
SAMPLE	A894271		Analysis Date/Time: 29-Sep-10 15:21							
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894272		Analysis Date/Time: 29-Sep-10 15:47							
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572546 Analyst: R SHAMP Run Date: 29-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 04-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
Q2359679	Value reported for analytes calibrated by linear (LIN) or									
Q2359679	quadratic (QDR) equations is r2 (Coef. of Determination).									
Q2361068	Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)									
Q2361068	equations is concentration ( ).									
Q2361071	2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery									
Q2361071	possible. Unacidified sample not available.									
Q2361072	2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery									
Q2361072	possible. Unacidified sample not available.									

R572598 Analyst: R SHAMP Run Date: 30-Sep-10 Instrument: GC/MS VOA
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359679		Analysis Date/Time: 28-Sep-10 13:21							
CAL01	Q2359679		BENZENE	0.8825						3.9
CAL01	Q2359679		BROMOBENZENE	1.1044						8
CAL01	Q2359679		BROMOCHLOROMETHANE	0.1115						7.6
CAL01	Q2359679		BROMODICHLOROMETHANE	0.2214						10.5
CAL01	Q2359679		BROMOFORM	0.2683						12.9
CAL01	Q2359679		BROMOMETHANE			QDR				1.000
CAL01	Q2359679		N-BUTYLBENZENE	1.3281						4.6
CAL01	Q2359679		SEC-BUTYLBENZENE	2.9971						3.3
CAL01	Q2359679		TERT-BUTYLBENZENE	1.3746						3.8
CAL01	Q2359679		CARBON TETRACHLORIDE	0.2616						6.1
CAL01	Q2359679		CHLOROBENZENE	1.5436						4.9
CAL01	Q2359679		DIBROMOCHLOROMETHANE	0.4198						7.5
CAL01	Q2359679		CHLOROETHANE			QDR				1.000
CAL01	Q2359679		CHLOROFORM	0.4152						13.9
CAL01	Q2359679		CHLOROMETHANE	0.3473						10.3
CAL01	Q2359679		2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.6514						5.7
CAL01	Q2359679		4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.6457						7.2
CAL01	Q2359679		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1765						10.2
CAL01	Q2359679		1,2-DIBROMOETHANE (EDB)	0.1876						4.5
CAL01	Q2359679		DIBROMOMETHANE	0.1434						4.7
CAL01	Q2359679		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.2686						4.5
CAL01	Q2359679		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.2998						3.9
CAL01	Q2359679		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.3470						6.7
CAL01	Q2359679		DICHLORODIFLUOROMETHANE	0.2257						10.6
CAL01	Q2359679		1,1-DICHLOROETHANE	0.4828						6.9
CAL01	Q2359679		1,2-DICHLOROETHANE	0.4132						6.8
CAL01	Q2359679		1,1-DICHLOROETHENE	0.1988						9.8
CAL01	Q2359679		CIS-1,2-DICHLOROETHENE	0.2381						7
CAL01	Q2359679		TRANS-1,2-DICHLOROETHENE	0.2223						8.4
CAL01	Q2359679		1,2-DICHLOROPROPANE	0.2469						5.2
CAL01	Q2359679		1,3-DICHLOROPROPANE	0.9821						7.9

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572598 Analyst: R SHAMP Run Date: 30-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CAL01	Q2359679		2,2-DICHLOROPROPANE	0.2086						5.2
CAL01	Q2359679		1,1-DICHLOROPROPENE	0.1109						5.9
CAL01	Q2359679		ETHYL BENZENE	0.8742						4.9
CAL01	Q2359679		HEXACHLOROBUTADIENE	0.5651						4.7
CAL01	Q2359679		ISOPROPYLBENZENE (CUMENE)	2.4030						3.8
CAL01	Q2359679		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4775						3.7
CAL01	Q2359679		DICHLOROMETHANE (METHYLENE CHLORIDE)	0.2328						14.8
CAL01	Q2359679		METHYL ETHYL KETONE	0.0321						10.8
CAL01	Q2359679		NAPHTHALENE	2.8211						4.9
CAL01	Q2359679		N-PROPYLBENZENE	0.3506						8.2
CAL01	Q2359679		STYRENE	1.7521						4.7
CAL01	Q2359679		1,1,1,2-TETRACHLOROETHANE	0.5135						5.6
CAL01	Q2359679		1,1,2,2-TETRACHLOROETHANE	0.7933						4.5
CAL01	Q2359679		TETRACHLOROETHENE	0.7147						11.1
CAL01	Q2359679		TOLUENE	0.8756						5.6
CAL01	Q2359679		1,2,3-TRICHLOROBENZENE	0.9916						6.3
CAL01	Q2359679		1,2,4-TRICHLOROBENZENE	1.0026						6
CAL01	Q2359679		1,1,1-TRICHLOROETHANE	0.3303						6.2
CAL01	Q2359679		1,1,2-TRICHLOROETHANE	0.1828						7.3
CAL01	Q2359679		TRICHLOROETHENE	0.2386						3.8
CAL01	Q2359679		TRICHLOROFLUOROMETHANE	0.2503						9.6
CAL01	Q2359679		1,2,3-TRICHLOROPROPANE	0.2515						6.9
CAL01	Q2359679		1,2,4-TRIMETHYLBENZENE	2.3584						4.3
CAL01	Q2359679		1,3,5-TRIMETHYLBENZENE	2.3393						4.9
CAL01	Q2359679		VINYL CHLORIDE	0.2420						6.3
CAL01	Q2359679		METHYL-T-BUTYL ETHER (MTBE)	0.7409						4.8
CAL01	Q2359679		N-HEXANE	0.3004						7.7
CAL01	Q2359679		O-XYLENE	1.0436						5.4
CAL01	Q2359679		M/P-XYLENE	1.0753						5.7
CAL01	Q2359679		DICHLOROETHANE-D4	0.3811						1.7
CAL01	Q2359679		TOLUENE-D8	0.9046						3
CAL01	Q2359679		4-BROMOFLUOROBENZENE	0.8167						2.9
CAL01	Q2359679		DIBROMOFLUOROMETHANE	0.2508						1.8
CCVD	Q2361301		Analysis Date/Time: 30-Sep-10 06:30							
CCVD	Q2361301		BENZENE	0.8825			0.8507			3.6
CCVD	Q2361301		BROMOBENZENE	1.1044			1.0402			5.8
CCVD	Q2361301		BROMOCHLOROMETHANE	0.1115			0.1122			0.6
CCVD	Q2361301		BROMODICHLOROMETHANE	0.2214			0.2735			23.5
CCVD	Q2361301		BROMOFORM	0.2683			0.3584			33.6
CCVD	Q2361301		BROMOMETHANE	10		QDR	10.53			5.3
CCVD	Q2361301		N-BUTYLBENZENE	1.3281			1.3174			0.8
CCVD	Q2361301		SEC-BUTYLBENZENE	2.9971			2.9996			0.1
CCVD	Q2361301		TERT-BUTYLBENZENE	1.3746			1.3596			1.1
CCVD	Q2361301		CARBON TETRACHLORIDE	0.2616			0.3024			15.6
CCVD	Q2361301		CHLOROBENZENE	1.5436			1.4552			5.7
CCVD	Q2361301		DIBROMOCHLOROMETHANE	0.4198			0.5019			19.6

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572598 Analyst: R SHAMP Run Date: 30-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCVD	Q2361301		CHLOROETHANE	10		QDR	11.31			13.1
CCVD	Q2361301		CHLOROFORM	0.4152			0.4011			3.4
CCVD	Q2361301		CHLOROMETHANE	0.3473			0.3417			1.6
CCVD	Q2361301		2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0.6514			0.6396			1.8
CCVD	Q2361301		4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0.6457			0.6404			0.8
CCVD	Q2361301		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0.1765			0.2032			15.1
CCVD	Q2361301		1,2-DIBROMOETHANE (EDB)	0.1876			0.1811			3.5
CCVD	Q2361301		DIBROMOMETHANE	0.1434			0.1410			1.7
CCVD	Q2361301		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	1.2686			1.2699			0.1
CCVD	Q2361301		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	1.2998			1.2859			1.1
CCVD	Q2361301		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	1.3470			1.3272			1.5
CCVD	Q2361301		DICHLORODIFLUOROMETHANE	0.2257			0.1871			17.1
CCVD	Q2361301		1,1-DICHLOROETHANE	0.4828			0.4535			6.1
CCVD	Q2361301		1,2-DICHLOROETHANE	0.4132			0.3941			4.6
CCVD	Q2361301		1,1-DICHLOROETHENE	0.1988			0.1935			2.7
CCVD	Q2361301		CIS-1,2-DICHLOROETHENE	0.2381			0.2363			0.8
CCVD	Q2361301		TRANS-1,2-DICHLOROETHENE	0.2223			0.2181			1.9
CCVD	Q2361301		1,2-DICHLOROPROPANE	0.2469			0.2337			5.3
CCVD	Q2361301		1,3-DICHLOROPROPANE	0.9821			0.8757			10.8
CCVD	Q2361301		2,2-DICHLOROPROPANE	0.2086			0.2244			7.6
CCVD	Q2361301		1,1-DICHLOROPROPENE	0.1109			0.1073			3.2
CCVD	Q2361301		ETHYL BENZENE	0.8742			0.8462			3.2
CCVD	Q2361301		HEXACHLOROBUTADIENE	0.5651			0.5704			0.9
CCVD	Q2361301		ISOPROPYLBENZENE (CUMENE)	2.4030			2.4267			1
CCVD	Q2361301		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	2.4775			2.4346			1.7
CCVD	Q2361301		DICHLOROMETHANE (METHYLENE CHLORIDE)	0.2328			0.2527			8.5
CCVD	Q2361301		METHYL ETHYL KETONE	0.0321			0.0331			3.1
CCVD	Q2361301		NAPHTHALENE	2.8211			3.0222			7.1
CCVD	Q2361301		N-PROPYLBENZENE	0.3506			0.3470			1
CCVD	Q2361301		STYRENE	1.7521			1.6707			4.6
CCVD	Q2361301		1,1,1,2-TETRACHLOROETHANE	0.5135			0.5589			8.8
CCVD	Q2361301		1,1,2,2-TETRACHLOROETHANE	0.7933			0.7697			3
CCVD	Q2361301		TETRACHLOROETHENE	0.7147			0.6686			6.5
CCVD	Q2361301		TOLUENE	0.8756			0.8486			3.1
CCVD	Q2361301		1,2,3-TRICHLOROBENZENE	0.9916			1.0356			4.4
CCVD	Q2361301		1,2,4-TRICHLOROBENZENE	1.0026			1.0385			3.6
CCVD	Q2361301		1,1,1-TRICHLOROETHANE	0.3303			0.3436			4
CCVD	Q2361301		1,1,2-TRICHLOROETHANE	0.1828			0.1736			5
CCVD	Q2361301		TRICHLOROETHENE	0.2386			0.2267			5
CCVD	Q2361301		TRICHLOROFLUOROMETHANE	0.2503			0.2854			14
CCVD	Q2361301		1,2,3-TRICHLOROPROPANE	0.2515			0.2419			3.8
CCVD	Q2361301		1,2,4-TRIMETHYLBENZENE	2.3584			2.3632			0.2
CCVD	Q2361301		1,3,5-TRIMETHYLBENZENE	2.3393			2.3131			1.1

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572598 Analyst: R SHAMP Run Date: 30-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCVD	Q2361301		VINYL CHLORIDE	0.2420			0.2428			0.3
CCVD	Q2361301		METHYL-T-BUTYL ETHER (MTBE)	0.7409			0.7406			0
CCVD	Q2361301		N-HEXANE	0.3004			0.2794			7
CCVD	Q2361301		O-XYLENE	1.0436			1.0491			0.5
CCVD	Q2361301		M/P-XYLENE	1.0753			1.0498			2.4
CCVD	Q2361301		DICHLOROETHANE-D4	0.3811			0.3812			0
CCVD	Q2361301		TOLUENE-D8	0.9046			0.9153			1.2
CCVD	Q2361301		4-BROMOFLUOROBENZENE	0.8167			0.7923			3
CCVD	Q2361301		DIBROMOFLUOROMETHANE	0.2508			0.2614			4.2
BLA01	Q2361309		Analysis Date/Time: 30-Sep-10 06:55							
BLA01	Q2361309		BENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		BROMOBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		BROMOCHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		BROMODICHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		BROMOFORM			BDL	1.0	ug/L		
BLA01	Q2361309		BROMOMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		N-BUTYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		SEC-BUTYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		TERT-BUTYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		CARBON TETRACHLORIDE			BDL	1.0	ug/L		
BLA01	Q2361309		CHLOROBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		DIBROMOCHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		CHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		CHLOROFORM			BDL	1.0	ug/L		
BLA01	Q2361309		CHLOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		2-CHLOROTOLUENE (O-CHLOROTOLUENE)			BDL	1.0	ug/L		
BLA01	Q2361309		4-CHLOROTOLUENE (P-CHLOROTOLUENE)			BDL	1.0	ug/L		
BLA01	Q2361309		1,2-DIBROMO-3-CHLOROPROPANE (DBCP)			BDL	1.0	ug/L		
BLA01	Q2361309		1,2-DIBROMOETHANE (EDB)			BDL	1.0	ug/L		
BLA01	Q2361309		DIBROMOMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2361309		1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2361309		1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)			BDL	1.0	ug/L		
BLA01	Q2361309		DICHLORODIFLUOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,1-DICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,2-DICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,1-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361309		CIS-1,2-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361309		TRANS-1,2-DICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361309		1,2-DICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,3-DICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2361309		2,2-DICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,1-DICHLOROPROPENE			BDL	1.0	ug/L		
BLA01	Q2361309		ETHYL BENZENE			BDL	1.0	ug/L		

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572598 Analyst: R SHAMP Run Date: 30-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2361309		HEXACHLOROBUTADIENE			BDL	1.0	ug/L		
BLA01	Q2361309		ISOPROPYLBENZENE (CUMENE)			BDL	1.0	ug/L		
BLA01	Q2361309		4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)			BDL	1.0	ug/L		
BLA01	Q2361309		DICHLOROMETHANE (METHYLENE CHLORIDE)				1.3	ug/L		
BLA01	Q2361309		METHYL ETHYL KETONE			BDL	5.0	ug/L		
BLA01	Q2361309		NAPHTHALENE			BDL	1.0	ug/L		
BLA01	Q2361309		N-PROPYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		STYRENE			BDL	1.0	ug/L		
BLA01	Q2361309		1,1,1,2-TETRACHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,1,2,2-TETRACHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		TETRACHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361309		TOLUENE			BDL	1.0	ug/L		
BLA01	Q2361309		1,2,3-TRICHLOROBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		1,2,4-TRICHLOROBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		1,1,1-TRICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,1,2-TRICHLOROETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		TRICHLOROETHENE			BDL	1.0	ug/L		
BLA01	Q2361309		TRICHLOROFLUOROMETHANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,2,3-TRICHLOROPROPANE			BDL	1.0	ug/L		
BLA01	Q2361309		1,2,4-TRIMETHYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		1,3,5-TRIMETHYLBENZENE			BDL	1.0	ug/L		
BLA01	Q2361309		VINYL CHLORIDE			BDL	1.0	ug/L		
BLA01	Q2361309		METHYL-T-BUTYL ETHER (MTBE)			BDL	1.0	ug/L		
BLA01	Q2361309		N-HEXANE			BDL	1.0	ug/L		
BLA01	Q2361309		O-XYLENE			BDL	1.0	ug/L		
BLA01	Q2361309		M/P-XYLENE			BDL	2.0	ug/L		
BLA01	Q2361309		DICHLOROETHANE-D4						99	
BLA01	Q2361309		TOLUENE-D8						92	
BLA01	Q2361309		4-BROMOFLUOROBENZENE						93	
BLA01	Q2361309		DIBROMOFLUOROMETHANE						105	
LCS01	Q2361310	METHOD 826	Analysis Date/Time: 30-Sep-10 07:24							
LCS01	Q2361310	METHOD 826	BENZENE	10			9.69	ug/L	96.9	
LCS01	Q2361310	METHOD 826	BROMOBENZENE	10			8.82	ug/L	88.2	
LCS01	Q2361310	METHOD 826	BROMOCHLOROMETHANE	10			10.5	ug/L	105	
LCS01	Q2361310	METHOD 826	BROMODICHLOROMETHANE	10			10.8	ug/L	108	
LCS01	Q2361310	METHOD 826	BROMOFORM	10			11	ug/L	110	
LCS01	Q2361310	METHOD 826	BROMOMETHANE	10			9.51	ug/L	95.1	
LCS01	Q2361310	METHOD 826	N-BUTYLBENZENE	10			9.1	ug/L	91	
LCS01	Q2361310	METHOD 826	SEC-BUTYLBENZENE	10			9.01	ug/L	90.1	
LCS01	Q2361310	METHOD 826	TERT-BUTYLBENZENE	10			9.09	ug/L	90.9	
LCS01	Q2361310	METHOD 826	CARBON TETRACHLORIDE	10			10.8	ug/L	108	

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572598 Analyst: R SHAMP Run Date: 30-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS01	Q2361310	METHOD 826	CHLOROBENZENE	10			8.7	ug/L	87	
LCS01	Q2361310	METHOD 826	DIBROMOCHLOROMETHANE	10			11.1	ug/L	111	
LCS01	Q2361310	METHOD 826	CHLOROETHANE	10			9.56	ug/L	95.6	
LCS01	Q2361310	METHOD 826	CHLOROFORM	10			9.9	ug/L	99	
LCS01	Q2361310	METHOD 826	CHLOROMETHANE	10			7.75	ug/L	77.5	
LCS01	Q2361310	METHOD 826	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	10			9.39	ug/L	93.9	
LCS01	Q2361310	METHOD 826	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	10			9.25	ug/L	92.5	
LCS01	Q2361310	METHOD 826	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	10			9.8	ug/L	98	
LCS01	Q2361310	METHOD 826	1,2-DIBROMOETHANE (EDB)	10			8.57	ug/L	85.7	
LCS01	Q2361310	METHOD 826	DIBROMOMETHANE	10			9.44	ug/L	94.4	
LCS01	Q2361310	METHOD 826	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	10			9.64	ug/L	96.4	
LCS01	Q2361310	METHOD 826	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	10			9.3	ug/L	93	
LCS01	Q2361310	METHOD 826	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	10			9.43	ug/L	94.3	
LCS01	Q2361310	METHOD 826	DICHLORODIFLUOROMETHANE	10			4.64	ug/L	46.4	
LCS01	Q2361310	METHOD 826	1,1-DICHLOROETHANE	10			9.78	ug/L	97.8	
LCS01	Q2361310	METHOD 826	1,2-DICHLOROETHANE	10			9.43	ug/L	94.3	
LCS01	Q2361310	METHOD 826	1,1-DICHLOROETHENE	10			9.25	ug/L	92.5	
LCS01	Q2361310	METHOD 826	CIS-1,2-DICHLOROETHENE	10			9.9	ug/L	99	
LCS01	Q2361310	METHOD 826	TRANS-1,2-DICHLOROETHENE	10			9.81	ug/L	98.1	
LCS01	Q2361310	METHOD 826	1,2-DICHLOROPROPANE	10			9.14	ug/L	91.4	
LCS01	Q2361310	METHOD 826	1,3-DICHLOROPROPANE	10			8.32	ug/L	83.2	
LCS01	Q2361310	METHOD 826	2,2-DICHLOROPROPANE	10			10.5	ug/L	105	
LCS01	Q2361310	METHOD 826	1,1-DICHLOROPROPENE	10			9.26	ug/L	92.6	
LCS01	Q2361310	METHOD 826	ETHYL BENZENE	10			8.84	ug/L	88.4	
LCS01	Q2361310	METHOD 826	HEXACHLOROBUTADIENE	10			9.34	ug/L	93.4	
LCS01	Q2361310	METHOD 826	ISOPROPYLBENZENE (CUMENE)	10			10.7	ug/L	107	
LCS01	Q2361310	METHOD 826	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	10			9.35	ug/L	93.5	
LCS01	Q2361310	METHOD 826	DICHLOROMETHANE (METHYLENE CHLORIDE)	10			11.2	ug/L	112	
LCS01	Q2361310	METHOD 826	METHYL ETHYL KETONE	50			46.6	ug/L	93.2	
LCS01	Q2361310	METHOD 826	NAPHTHALENE	10			10.1	ug/L	101	
LCS01	Q2361310	METHOD 826	N-PROPYLBENZENE	10			8.86	ug/L	88.6	
LCS01	Q2361310	METHOD	STYRENE	10			8.8	ug/L	88	

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572598 Analyst: R SHAMP Run Date: 30-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
		826								
LCS01	Q2361310	METHOD 826	1,1,1,2-TETRACHLOROETHANE	10			9.8	ug/L	98	
LCS01	Q2361310	METHOD 826	1,1,2,2-TETRACHLOROETHANE	10			9.23	ug/L	92.3	
LCS01	Q2361310	METHOD 826	TETRACHLOROETHENE	10			8.76	ug/L	87.6	
LCS01	Q2361310	METHOD 826	TOLUENE	10			9.13	ug/L	91.3	
LCS01	Q2361310	METHOD 826	1,2,3-TRICHLOROBENZENE	10			10.2	ug/L	102	
LCS01	Q2361310	METHOD 826	1,2,4-TRICHLOROBENZENE	10			9.91	ug/L	99.1	
LCS01	Q2361310	METHOD 826	1,1,1-TRICHLOROETHANE	10			10.1	ug/L	101	
LCS01	Q2361310	METHOD 826	1,1,2-TRICHLOROETHANE	10			8.58	ug/L	85.8	
LCS01	Q2361310	METHOD 826	TRICHLOROETHENE	10			9.13	ug/L	91.3	
LCS01	Q2361310	METHOD 826	TRICHLOROFLUOROMETHANE	10			10	ug/L	100	
LCS01	Q2361310	METHOD 826	1,2,3-TRICHLOROPROPANE	10			8.14	ug/L	81.4	
LCS01	Q2361310	METHOD 826	1,2,4-TRIMETHYLBENZENE	10			9.49	ug/L	94.9	
LCS01	Q2361310	METHOD 826	1,3,5-TRIMETHYLBENZENE	10			9.37	ug/L	93.7	
LCS01	Q2361310	METHOD 826	VINYL CHLORIDE	10			8.86	ug/L	88.6	
LCS01	Q2361310	METHOD 826	METHYL-T-BUTYL ETHER (MTBE)	10			9.28	ug/L	92.8	
LCS01	Q2361310	METHOD 826	N-HEXANE	10			11.3	ug/L	113	
LCS01	Q2361310	METHOD 826	O-XYLENE	10			9.29	ug/L	92.9	
LCS01	Q2361310	METHOD 826	M/P-XYLENE	20			18	ug/L	90	
SPI01	Q2361312	A894326	Analysis Date/Time: 30-Sep-10 11:13							
SPI01	Q2361312	A894326	BENZENE	0	10		10.5	ug/L	105	
SPI01	Q2361312	A894326	BROMOBENZENE	0	10		9.88	ug/L	98.8	
SPI01	Q2361312	A894326	BROMOCHLOROMETHANE	0	10		10.9	ug/L	109	
SPI01	Q2361312	A894326	BROMODICHLOROMETHANE	0	10		11.4	ug/L	114	
SPI01	Q2361312	A894326	BROMOFORM	0	10		10.7	ug/L	107	
SPI01	Q2361312	A894326	BROMOMETHANE	0	10		9.18	ug/L	91.8	
SPI01	Q2361312	A894326	N-BUTYLBENZENE	0	10		10.4	ug/L	104	
SPI01	Q2361312	A894326	SEC-BUTYLBENZENE	0	10		10.3	ug/L	103	
SPI01	Q2361312	A894326	TERT-BUTYLBENZENE	0	10		10.4	ug/L	104	
SPI01	Q2361312	A894326	CARBON TETRACHLORIDE	0	10		10.8	ug/L	108	
SPI01	Q2361312	A894326	CHLOROBENZENE	0	10		10	ug/L	100	
SPI01	Q2361312	A894326	DIBROMOCHLOROMETHANE	0	10		11.8	ug/L	118	
SPI01	Q2361312	A894326	CHLOROETHANE	0	10		10.7	ug/L	107	
SPI01	Q2361312	A894326	CHLOROFORM	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	CHLOROMETHANE	0	10		8.56	ug/L	85.6	
SPI01	Q2361312	A894326	2-CHLOROTOLUENE (O-CHLOROTOLUENE)	0	10		10.5	ug/L	105	
SPI01	Q2361312	A894326	4-CHLOROTOLUENE (P-CHLOROTOLUENE)	0	10		10.2	ug/L	102	

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B **O510.7**

R572598 Analyst: R SHAMP Run Date: 30-Sep-10
Analytical Reviewer: H WILLIAMS Review Date: 06-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI01	Q2361312	A894326	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	0	10		10.1	ug/L	101	
SPI01	Q2361312	A894326	1,2-DIBROMOETHANE (EDB)	0	10		10	ug/L	100	
SPI01	Q2361312	A894326	DIBROMOMETHANE	0	10		9.93	ug/L	99.3	
SPI01	Q2361312	A894326	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	0	10		10.6	ug/L	106	
SPI01	Q2361312	A894326	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	0	10		10.7	ug/L	107	
SPI01	Q2361312	A894326	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	0	10		10.6	ug/L	106	
SPI01	Q2361312	A894326	DICHLORODIFLUOROMETHANE	0	10		7.79	ug/L	77.9	
SPI01	Q2361312	A894326	1,1-DICHLOROETHANE	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	1,2-DICHLOROETHANE	0	10		10.3	ug/L	103	
SPI01	Q2361312	A894326	1,1-DICHLOROETHENE	0	10		10.3	ug/L	103	
SPI01	Q2361312	A894326	CIS-1,2-DICHLOROETHENE	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	TRANS-1,2-DICHLOROETHENE	0	10		10.4	ug/L	104	
SPI01	Q2361312	A894326	1,2-DICHLOROPROPANE	0	10		10.1	ug/L	101	
SPI01	Q2361312	A894326	1,3-DICHLOROPROPANE	0	10		9.89	ug/L	98.9	
SPI01	Q2361312	A894326	2,2-DICHLOROPROPANE	0	10		9.74	ug/L	97.4	
SPI01	Q2361312	A894326	1,1-DICHLOROPROPENE	0	10		10.1	ug/L	101	
SPI01	Q2361312	A894326	ETHYL BENZENE	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	HEXACHLOROBUTADIENE	0	10		9.89	ug/L	98.9	
SPI01	Q2361312	A894326	ISOPROPYLBENZENE (CUMENE)	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	4-ISOPROPYLTOLUENE (P-ISOPROPYLTOLUENE)	0	10		10.5	ug/L	105	
SPI01	Q2361312	A894326	DICHLOROMETHANE (METHYLENE CHLORIDE)	0	10		10.6	ug/L	106	
SPI01	Q2361312	A894326	METHYL ETHYL KETONE	0	50		58.9	ug/L	117.8	
SPI01	Q2361312	A894326	NAPHTHALENE	0	10		10.6	ug/L	106	
SPI01	Q2361312	A894326	N-PROPYLBENZENE	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	STYRENE	0	10		8.23	ug/L	82.3	
SPI01	Q2361312	A894326	1,1,1,2-TETRACHLOROETHANE	0	10		10.1	ug/L	101	
SPI01	Q2361312	A894326	1,1,2,2-TETRACHLOROETHANE	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	TETRACHLOROETHENE	0	10		9.6	ug/L	96	
SPI01	Q2361312	A894326	TOLUENE	0	10		10	ug/L	100	
SPI01	Q2361312	A894326	1,2,3-TRICHLOROBENZENE	0	10		10.7	ug/L	107	
SPI01	Q2361312	A894326	1,2,4-TRICHLOROBENZENE	0	10		10.5	ug/L	105	
SPI01	Q2361312	A894326	1,1,1-TRICHLOROETHANE	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	1,1,2-TRICHLOROETHANE	0	10		9.93	ug/L	99.3	
SPI01	Q2361312	A894326	TRICHLOROETHENE	0	10		9.86	ug/L	98.6	
SPI01	Q2361312	A894326	TRICHLOROFLUOROMETHANE	0	10		9.91	ug/L	99.1	
SPI01	Q2361312	A894326	1,2,3-TRICHLOROPROPANE	0	10		9.95	ug/L	99.5	
SPI01	Q2361312	A894326	1,2,4-TRIMETHYLBENZENE	0	10		9.87	ug/L	98.7	
SPI01	Q2361312	A894326	1,3,5-TRIMETHYLBENZENE	0	10		10.1	ug/L	101	
SPI01	Q2361312	A894326	VINYL CHLORIDE	0	10		10.2	ug/L	102	
SPI01	Q2361312	A894326	METHYL-T-BUTYL ETHER (MTBE)	0	10		10.1	ug/L	101	
SPI01	Q2361312	A894326	N-HEXANE	0	10		9.1	ug/L	91	
SPI01	Q2361312	A894326	O-XYLENE	0	10		10.1	ug/L	101	
SPI01	Q2361312	A894326	M/P-XYLENE	0	20		20.2	ug/L	101	
SAMPLE	A894273		Analysis Date/Time: 30-Sep-10 12:49							

HERITAGE ENVIRONMENTAL SERVICES

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VOLATILE ORGANICS SW846-8260B — O510.7

R572598 Analytical — Analyst: R SHAMP — Reviewer: H WILLIAMS — Run Date: 30-Sep-10 — Review Date: 06-Oct-10 — Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		Analysis Date/Time: 30-Sep-10 13:14							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							

Q2359679 Value reported for analytes calibrated by linear (LIN) or
Q2359679 quadratic (QDR) equations is r2 (Coef. of Determination).
Q2361301 Value reported for analytes calibrated by linear (LIN) or quadratic (QDR)
Q2361301 equations is concentration ( ).
Q2361310 No MSD, instrument stopped.
Q2361312 No MSD, instrument stopped.
Q2361312 2-Chloroethyl vinyl ether degrades under acidic conditions. No recovery
Q2361312 possible. Unacidified sample not available.

ARSENIC TRACE ICP SW846-6010B — M103.0
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Prep — Analyst: K KAMARA — Reviewer: S ENDERSEN — Run Date: 27-Sep-10 — Review Date: 27-Sep-10 — Instrument: PREP

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572515							
SAMPLE	A894272	Rep: 0	Analytical Run: R572515							
SAMPLE	A894273	Rep: 0	Analytical Run: R572515							
SAMPLE	A894274	Rep: 0	Analytical Run: R572515							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analytical — Analyst: J KRAMER — Reviewer: S ENDERSEN — Run Date: 27-Sep-10 — Review Date: 28-Sep-10 — Instrument: TRACE ICP

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	ARSENIC			<	0.00400	mg/L		
LCS	Q2358859	SPEX	ARSENIC	2			2.10	mg/L	105.0	
DUP02	Q2358860	A894272	ARSENIC	0.0135		BDL		mg/L		
SPI02	Q2358861	A894272	ARSENIC	0.0135	2		1.99	mg/L	98.8	

R572515 Analytical — Analyst: J KRAMER — Reviewer: S ENDERSEN — Run Date: 01-Oct-10 — Review Date: 02-Oct-10 — Instrument: TRACE ICP

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2360810	PERKIN ELE	ARSENIC	0.01			0.0103	mg/L	103.0	
ICV01	Q2360809	PERKIN ELM	ARSENIC	1			0.981	mg/L	98.1	
LCCV	Q2360811	INORGANIC	ARSENIC	0.01			0.0106	mg/L	106.0	
CDL01	Q2360801	PERKIN	ARSENIC	0.02			0.0193	mg/L	96.5	

HERITAGE ENVIRONMENTAL SERVICES

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ARSENIC TRACE ICP SW846-6010B **M103.0**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572515 Analyst: J KRAMER Run Date: 01-Oct-10
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
		ELM								
ICS-AB	Q2360820	PERKIN ELM	ARSENIC	0.1			0.101	mg/L	101.0	
CCV	Q2360823	INORGANIC	ARSENIC	2			1.99	mg/L	99.5	
BLA01	Q2360814	NA	ARSENIC				0.00226	mg/L		
BLA02	Q2358862	NA	ARSENIC			<	0.00200	mg/L		
LCS	Q2358863	INORGANIC	ARSENIC	2			2.11	mg/L	105.5	
SER01	Q2360833	A894272	ARSENIC	0.00973		CNA	0.0186	mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358864	A894272	ARSENIC	0.00973		CNA	0.00954	mg/L		
SPI02	Q2358865	A894272	ARSENIC	0.00973	2		2.07	mg/L	103.0	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2360824	INORGANIC	ARSENIC	2			2.00	mg/L	100.0	
BLA01	Q2360815	NA	ARSENIC			<	0.00200	mg/L		
SER01	Q2360835	A894781	ARSENIC	0		CNA	0.0107	mg/L		
CDL01	Q2360830	INORGANIC	ARSENIC	0.01			0.00850	mg/L	85.0	
ICS-AB	Q2360821	PERKIN ELM	ARSENIC	0.1			0.0999	mg/L	99.9	

Q2360833 1:5 Dilution.
Q2360835 1:5 Dilution.

CALCIUM ICP SW846-6010B **M109.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
DUP02	Q2358864	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	CALCIUM	0.1			0.0988	mg/L	98.8	
ICV01	Q2359152	PERKIN ELM	CALCIUM	20			20.5	mg/L	102.5	
CDL01	Q2359148	INORGANIC	CALCIUM	0.1			0.0988	mg/L	98.8	
ICS-A	Q2359150	PERKIN-ELM	CALCIUM	500			475	mg/L	95.0	
ICS-AB	Q2359145	PERKIN	CALCIUM	500			479	mg/L	95.8	

HERITAGE ENVIRONMENTAL SERVICES

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CALCIUM ICP SW846-6010B **M109.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
		ELM								
LCCV	Q2359202	INORGANIC	CALCIUM	0.1			0.100	mg/L	100.0	
CCV	Q2359188	INORGANIC	CALCIUM	50.0			49.4	mg/L	98.8	
BLA01	Q2359169	NA	CALCIUM			<	0.0400	mg/L		
BLA02	Q2358858	NA	CALCIUM			<	0.0400	mg/L		
LCS	Q2358859	SPEX	CALCIUM	100			99.9	mg/L	99.9	
SER01	Q2359198	A894272	CALCIUM	119			117	mg/L		1.7
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	CALCIUM	119			108	mg/L		9.7
SPI02	Q2358861	A894272	CALCIUM	119	100		203	mg/L	84.0	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	CALCIUM	50.0			49.2	mg/L	98.4	
BLA01	Q2359170	NA	CALCIUM			<	0.0400	mg/L		
CDL01	Q2359221	INORGANIC	CALCIUM	0.1			0.0948	mg/L	94.8	
ICS-A	Q2359222	PERKIN-ELM	CALCIUM	500			458	mg/L	91.6	
ICS-AB	Q2359217	PERKIN ELM	CALCIUM	500			461	mg/L	92.2	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DUP02	Q2358864	A894272	CALCIUM	119			115	mg/L		3.4

BERYLLIUM ICP SW846-6010B **M105.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

HERITAGE ENVIRONMENTAL SERVICES

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BERYLLIUM ICP SW846-6010B **M105.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	BERYLLIUM	0.004			0.00375	mg/L	93.8	
ICV01	Q2359152	PERKIN ELM	BERYLLIUM	1			0.984	mg/L	98.4	
CDL01	Q2359149	INORGANIC	BERYLLIUM	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	BERYLLIUM	0.500			0.522	mg/L	104.4	
LCCV	Q2359202	INORGANIC	BERYLLIUM	0.004			0.00374	mg/L	93.5	
CCV	Q2359188	INORGANIC	BERYLLIUM	2			2.01	mg/L	100.5	
BLA01	Q2359169	NA	BERYLLIUM			<	0.000800	mg/L		
BLA02	Q2358858	NA	BERYLLIUM			<	0.000800	mg/L		
LCS	Q2358859	SPEX	BERYLLIUM	0.05			0.0542	mg/L	108.4	
SER01	Q2359198	A894272	BERYLLIUM	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	BERYLLIUM	0		BDL		mg/L		
SPI02	Q2358861	A894272	BERYLLIUM	0	0.050		0.0500	mg/L	100.0	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	BERYLLIUM	2			1.99	mg/L	99.5	
BLA01	Q2359170	NA	BERYLLIUM			<	0.000800	mg/L		
CDL01	Q2359221	INORGANIC	BERYLLIUM	0.004			0.00375	mg/L	93.8	
ICS-AB	Q2359217	PERKIN ELM	BERYLLIUM	0.500			0.512	mg/L	102.4	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	BERYLLIUM			<	0.000400	mg/L		
LCS	Q2358863	INORGANIC	BERYLLIUM	0.05			0.0542	mg/L	108.4	
DUP02	Q2358864	A894272	BERYLLIUM	0		BDL		mg/L		
SPI02	Q2358865	A894272	BERYLLIUM	0	0.05		0.0512	mg/L	102.4	

POTASSIUM ICP SW846-6010B **M126.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							

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POTASSIUM ICP SW846-6010B **M126.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	POTASSIUM	0.1			0.0764	mg/L	76.4	
ICV01	Q2359152	PERKIN ELM	POTASSIUM	20			19.3	mg/L	96.5	
CDL01	Q2359148	INORGANIC	POTASSIUM	0.1			0.0780	mg/L	78.0	
LCCV	Q2359202	INORGANIC	POTASSIUM	0.1			0.0786	mg/L	78.6	
CCV	Q2359188	INORGANIC	POTASSIUM	50			48.4	mg/L	96.8	
BLA01	Q2359169	NA	POTASSIUM			<	0.0400	mg/L		
BLA02	Q2358858	NA	POTASSIUM			<	0.0400	mg/L		
LCS	Q2358859	SPEX	POTASSIUM	100			103	mg/L	103.0	
SER01	Q2359198	A894272	POTASSIUM	2.52			2.02	mg/L		22.0
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	POTASSIUM	2.52			2.31	mg/L		8.7
SPI02	Q2358861	A894272	POTASSIUM	2.52	100		104	mg/L	101.5	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	POTASSIUM	50			48.3	mg/L	96.6	
BLA01	Q2359170	NA	POTASSIUM			<	0.0400	mg/L		
CDL01	Q2359221	INORGANIC	POTASSIUM	0.1			0.0748	mg/L	74.8	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

HEXAVALENT CHROMIUM SW846-7196A **M110.6**

R572251 Analyst: J SMITH Run Date: 24-Sep-10
Analytical Reviewer: P SPENCE Review Date: 24-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA01	Q2358586		HEXAVALENT CHROMIUM			BDL	0.01	mg/L		
CDL01	Q2358587		HEXAVALENT CHROMIUM	0.01			0.0075	mg/L	75.0	
ICV01	Q2358588		HEXAVALENT CHROMIUM	0.144			0.146	mg/L	101.4	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
SPI01	Q2358589	A894274	HEXAVALENT CHROMIUM	0	1.00		0.950	mg/L	95.0	
DPS01	Q2358590	A894274	HEXAVALENT CHROMIUM	0	1.00		1.01	mg/L	101.0	6.1
CCV	Q2358591		HEXAVALENT CHROMIUM	0.250			0.275	mg/L	110.0	
BLA01	Q2358592		HEXAVALENT CHROMIUM			BDL	0.01	mg/L		

Q2358589 1:5 Dilution.
Q2358589 Dilution due to suspected matrix interference.
Q2358590 1:5 Dilution.
Q2358590 Dilution due to suspected matrix interference.

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LEAD TRACE ICP SW846-6010B **M116.0**
Prep : FIELD FILTRATION SAS

R572438 Analyst: J KRAMER Run Date: 29-Sep-10 Instrument: TRACE ICP
Analytical Reviewer: S ENDERSEN Review Date: 30-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2360106	PERKIN ELE	LEAD	0.01			0.0112	mg/L	112.0	
ICV01	Q2360105	PERKIN ELM	LEAD	1			0.981	mg/L	98.1	
CDL01	Q2360096	INORGANIC	LEAD	10			9.96	mg/L	99.6	
ICS-AB	Q2360069	PERKIN ELM	LEAD	1.00			0.948	mg/L	94.8	
LCCV	Q2360108	INORGANIC	LEAD	0.01			0.0122	mg/L	122.0	
SER01	Q2360103	A894660	LEAD	0.00525		CNA	0.0154	mg/L		
DUP02	Q2359724	A894660	LEAD	0.00525		CNA	0.00532	mg/L		
SPI02	Q2359725	A894660	LEAD	0.00525	0.500		0.503	mg/L	99.6	
CCV	Q2360078	INORGANIC	LEAD	5.00			4.82	mg/L	96.4	
BLA01	Q2360057	NA	LEAD			<	0.00200	mg/L		
SAMPLE	A894271		See Certificate of Analysis, Rep: 1							
DUP01	Q2360071	A894271	LEAD	0		BDL		mg/L		
SPI01	Q2360090	A894271	LEAD	0	0.500		0.526	mg/L	105.2	
CCV	Q2360079	INORGANIC	LEAD	5.00			4.82	mg/L	96.4	
BLA01	Q2360058	NA	LEAD			<	0.00200	mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 1							
SAMPLE	A894273		See Certificate of Analysis, Rep: 1							
SAMPLE	A894274		See Certificate of Analysis, Rep: 1							
CCV	Q2360080	INORGANIC	LEAD	5.00			4.77	mg/L	95.4	
BLA01	Q2360059	NA	LEAD				0.00201	mg/L		
SER01	Q2360102	A894609	LEAD	0		CNA	0.00785	mg/L		
SPI03	Q2359624	A894550	LEAD	0	2		1.72	mg/L	86.0	
DPS03	Q2359625	A894550	LEAD	0	2		1.81	mg/L	90.5	5.1
CDL01	Q2360095	INORGANIC	LEAD	0.01			0.0117	mg/L	117.0	
ICS-AB	Q2360070	PERKIN ELM	LEAD	1.00			0.923	mg/L	92.3	

Q2359624 1:5 Dilution.
Q2359625 1:5 Dilution.
Q2360102 1:5 Dilution.
Q2360102 There was possible matrix interference for K and Na
Q2360102 as indicated by the serial dilution results.
Q2360103 1:5 Dilution.

CHROMIUM ICP SW846-6010B **M110.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							

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CHROMIUM ICP SW846-6010B **M110.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	CHROMIUM	0.0100			0.00991	mg/L	99.1	
ICV01	Q2359152	PERKIN ELM	CHROMIUM	1			0.977	mg/L	97.7	
CDL01	Q2359149	INORGANIC	CHROMIUM	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	CHROMIUM	0.500			0.483	mg/L	96.6	
LCCV	Q2359202	INORGANIC	CHROMIUM	0.0100			0.00985	mg/L	98.5	
CCV	Q2359188	INORGANIC	CHROMIUM	5.00			4.76	mg/L	95.2	
BLA01	Q2359169	NA	CHROMIUM			<	0.000800	mg/L		
BLA02	Q2358858	NA	CHROMIUM			<	0.000800	mg/L		
LCS	Q2358859	SPEX	CHROMIUM	0.2			0.203	mg/L	101.5	
SER01	Q2359198	A894272	CHROMIUM	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	CHROMIUM	0		BDL		mg/L		
SPI02	Q2358861	A894272	CHROMIUM	0	0.200		0.186	mg/L	93.0	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	CHROMIUM	5.00			4.73	mg/L	94.6	
BLA01	Q2359170	NA	CHROMIUM			<	0.000800	mg/L		
CDL01	Q2359221	INORGANIC	CHROMIUM	0.0100			0.00958	mg/L	95.8	
ICS-AB	Q2359217	PERKIN ELM	CHROMIUM	0.500			0.467	mg/L	93.4	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	CHROMIUM			<	0.000800	mg/L		
LCS	Q2358863	INORGANIC	CHROMIUM	0.2			0.206	mg/L	103.0	
DUP02	Q2358864	A894272	CHROMIUM	0		BDL		mg/L		
SPI02	Q2358865	A894272	CHROMIUM	0	0.2		0.196	mg/L	98.0	

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MERCURY CVAA SW846-7470A **M120.1**
Prep : MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES SW846-7470A

R572328 Analyst: S O'NEAL Run Date: 28-Sep-10 Instrument: PREP
Prep Reviewer: W WATNESS Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LCS	Q2359229	LEEMAN	Analytical Run: R572376							
BLA02	Q2359230	NA	Analytical Run: R572376							
SAMPLE	A894271	Rep: 0	Analytical Run: R572376							
SPI02	Q2359231	A894271	Analytical Run: R572376							
DPS02	Q2359232	A894271	Analytical Run: R572376							
SAMPLE	A894272	Rep: 0	Analytical Run: R572376							
SAMPLE	A894273	Rep: 0	Analytical Run: R572376							
SAMPLE	A894274	Rep: 0	Analytical Run: R572376							

R572376 Analyst: S O'NEAL Run Date: 28-Sep-10 Instrument: CVAA
Analytical Reviewer: S ENDERSEN Review Date: 29-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2359500	LEEMAN	MERCURY	0.002			0.00203	mg/L	101.5	
CCV	Q2359501	SPEX	MERCURY	0.003			0.00295	mg/L	98.3	
BLA01	Q2359512	NA	MERCURY			<	0.000080	mg/L		
CDL01	Q2359521	SPEX	MERCURY	0.0002			0.000205	mg/L	102.5	
LCS	Q2359229	LEEMAN	MERCURY	0.002			0.00196	mg/L	98.0	
BLA02	Q2359230	NA	MERCURY			<	0.000080	mg/L		
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SPI02	Q2359231	A894271	MERCURY	0	0.001		0.000946	mg/L	94.6	
DPS02	Q2359232	A894271	MERCURY	0	0.001		0.000935	mg/L	93.5	1.2
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359502	SPEX	MERCURY	0.003			0.00288	mg/L	96.0	
BLA01	Q2359513	NA	MERCURY			<	0.000080	mg/L		
CDL01	Q2359522	SPEX	MERCURY	0.0002			0.000202	mg/L	101.0	

CYANIDE, TOTAL (AUTOMATED) SW846-9012B **G101.4**
Prep : CYANIDE DISTILLATION SW846-9012B

R572410 Analyst: R YOUNG Run Date: 27-Sep-10 Instrument: AUTO-ANALYZER
Analytical Reviewer: P SPENCE Review Date: 29-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
ICV01	Q2359924		CYANIDE	0.180			0.188	mg/L	104.4	
BLA02	Q2359925		CYANIDE			BDL	0.005	mg/L		
LFB02L	Q2359926		CYANIDE	0.100			0.100	mg/L	100.0	
LFB02H	Q2359927		CYANIDE	0.500			0.514	mg/L	102.8	
SPI02	Q2359928	A894357	CYANIDE	0.009	0.25		0.257	mg/L	99.2	
DPS02	Q2359929	A894357	CYANIDE	0.009	0.25		0.197	mg/L	75.2	27.5
CCV	Q2359930		CYANIDE	0.100			0.0971	mg/L	97.1	
BLA01	Q2359931		CYANIDE			BDL	0.005	mg/L		
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
DUP02	Q2360124	A894274	CYANIDE	0			0	mg/L		0

HERITAGE ENVIRONMENTAL SERVICES

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CYANIDE, TOTAL (AUTOMATED) SW846-9012B **G101.4**
Prep : CYANIDE DISTILLATION SW846-9012B

R572410 Analyst: R YOUNG Run Date: 27-Sep-10
Analytical Reviewer: P SPENCE Review Date: 29-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
CCV	Q2359933		CYANIDE	0.100			0.0971	mg/L	97.1	
BLA01	Q2359934		CYANIDE			BDL	0.005	mg/L		
CDL01	Q2359937		CYANIDE	0.005			0.0056	mg/L	112.0	

Q2359928 Matrix spike and duplicate spike are within acceptable recovery; however
Q2359928 % RPD is high. Results for this sample are estimated.
Q2359929 Matrix spike and duplicate spike are within acceptable recovery; however
Q2359929 % RPD is high. Results for this sample are estimated.

R572432 Analyst: E SOTKIEWICZ Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: P SPENCE Review Date: 30-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2359925		Analytical Run: R572410							
LFB02L	Q2359926		Analytical Run: R572410							
LFB02H	Q2359927		Analytical Run: R572410							
SPI02	Q2359928	A894357	Analytical Run: R572410							
DPS02	Q2359929	A894357	Analytical Run: R572410							
SAMPLE	A894271	Rep: 0	Analytical Run: R572410							
SAMPLE	A894272	Rep: 0	Analytical Run: R572410							
SAMPLE	A894273	Rep: 0	Analytical Run: R572410							
SAMPLE	A894274	Rep: 0	Analytical Run: R572410							
DUP02	Q2360124	A894274	Analytical Run: R572410							

Q2359928 Matrix spike and duplicate spike are within acceptable recovery; however
Q2359928 % RPD is high. Results for this sample are estimated.
Q2359929 Matrix spike and duplicate spike are within acceptable recovery; however
Q2359929 % RPD is high. Results for this sample are estimated.

SELENIUM TRACE ICP SW846-6010B **M128.0**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572515							
SAMPLE	A894272	Rep: 0	Analytical Run: R572515							
SAMPLE	A894273	Rep: 0	Analytical Run: R572515							
SAMPLE	A894274	Rep: 0	Analytical Run: R572515							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: TRACE ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

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SELENIUM TRACE ICP SW846-6010B **M128.0**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572314 Analyst: J KRAMER Run Date: 27-Sep-10
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	SELENIUM			<	0.00400	mg/L		
LCS	Q2358859	SPEX	SELENIUM	2			2.14	mg/L	107.0	
DUP02	Q2358860	A894272	SELENIUM	0		BDL		mg/L		
SPI02	Q2358861	A894272	SELENIUM	0	2		1.98	mg/L	99.0	

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: TRACE ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2360810	PERKIN ELE	SELENIUM	0.01			0.00716	mg/L	71.6	
ICV01	Q2360809	PERKIN ELM	SELENIUM	1			0.976	mg/L	97.6	
LCCV	Q2360811	INORGANIC	SELENIUM	0.01			0.00882	mg/L	88.2	
CDL01	Q2360801	PERKIN ELM	SELENIUM	0.01			0.00836	mg/L	83.6	
ICS-AB	Q2360820	PERKIN ELM	SELENIUM	0.05			0.0495	mg/L	99.0	
CCV	Q2360823	INORGANIC	SELENIUM	2			2.04	mg/L	102.0	
BLA01	Q2360814	NA	SELENIUM				0.00304	mg/L		
BLA02	Q2358862	NA	SELENIUM				0.00250	mg/L		
LCS	Q2358863	INORGANIC	SELENIUM	2			2.19	mg/L	109.5	
SER01	Q2360833	A894272	SELENIUM	0		CNA	0.0150	mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358864	A894272	SELENIUM	0		BDL		mg/L		
SPI02	Q2358865	A894272	SELENIUM	0	2		2.13	mg/L	106.5	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2360824	INORGANIC	SELENIUM	2			2.06	mg/L	103.0	
BLA01	Q2360815	NA	SELENIUM			<	0.00200	mg/L		
SER01	Q2360835	A894781	SELENIUM	0		CNA	0.0203	mg/L		
CDL01	Q2360830	INORGANIC	SELENIUM	0.01			0.0114	mg/L	114.0	
ICS-AB	Q2360821	PERKIN ELM	SELENIUM	0.05			0.0548	mg/L	109.6	

Q2360833 1:5 Dilution.
Q2360835 1:5 Dilution.

ZINC ICP SW846-6010B **M139.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							

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ZINC ICP SW846-6010B **M139.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	ZINC	0.0200			0.0192	mg/L	96.0	
ICV01	Q2359152	PERKIN ELM	ZINC	1			0.972	mg/L	97.2	
CDL01	Q2359149	INORGANIC	ZINC	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	ZINC	1.00			0.946	mg/L	94.6	
LCCV	Q2359202	INORGANIC	ZINC	0.0200			0.0188	mg/L	94.0	
CCV	Q2359188	INORGANIC	ZINC	5.00			4.62	mg/L	92.4	
BLA01	Q2359169	NA	ZINC			<	0.00800	mg/L		
BLA02	Q2358858	NA	ZINC			<	0.00800	mg/L		
LCS	Q2358859	SPEX	ZINC	0.5			0.499	mg/L	99.8	
SER01	Q2359198	A894272	ZINC	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	ZINC	0		BDL		mg/L		
SPI02	Q2358861	A894272	ZINC	0	0.500		0.448	mg/L	89.6	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	ZINC	5.00			4.63	mg/L	92.6	
BLA01	Q2359170	NA	ZINC			<	0.00800	mg/L		
CDL01	Q2359221	INORGANIC	ZINC	0.0200			0.0174	mg/L	87.0	
ICS-AB	Q2359217	PERKIN ELM	ZINC	1.00			0.896	mg/L	89.6	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

VANADIUM ICP SW846-6010B **M138.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
BLA02	Q2358862	NA	Analytical Run: R572515							
LCS	Q2358863	INORGANIC	Analytical Run: R572515							
DUP02	Q2358864	A894272	Analytical Run: R572515							

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VANADIUM ICP SW846-6010B **M138.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI02	Q2358865	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	VANADIUM	0.0100			0.00986	mg/L	98.6	
ICV01	Q2359152	PERKIN ELM	VANADIUM	1			0.981	mg/L	98.1	
CDL01	Q2359149	INORGANIC	VANADIUM	10			10.1	mg/L	101.0	
ICS-AB	Q2359145	PERKIN ELM	VANADIUM	0.500			0.489	mg/L	97.8	
LCCV	Q2359202	INORGANIC	VANADIUM	0.0100			0.0101	mg/L	101.0	
CCV	Q2359188	INORGANIC	VANADIUM	2			1.94	mg/L	97.0	
BLA01	Q2359169	NA	VANADIUM			<	0.000800	mg/L		
BLA02	Q2358858	NA	VANADIUM			<	0.000800	mg/L		
LCS	Q2358859	SPEX	VANADIUM	0.5			0.513	mg/L	102.6	
SER01	Q2359198	A894272	VANADIUM	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	VANADIUM	0		BDL		mg/L		
SPI02	Q2358861	A894272	VANADIUM	0	0.500		0.471	mg/L	94.2	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	VANADIUM	2			1.93	mg/L	96.5	
BLA01	Q2359170	NA	VANADIUM			<	0.000800	mg/L		
CDL01	Q2359221	INORGANIC	VANADIUM	0.0100			0.00949	mg/L	94.9	
ICS-AB	Q2359217	PERKIN ELM	VANADIUM	0.500			0.474	mg/L	94.8	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358862	NA	VANADIUM			<	0.000800	mg/L		
LCS	Q2358863	INORGANIC	VANADIUM	0.5			0.504	mg/L	100.8	
DUP02	Q2358864	A894272	VANADIUM	0		BDL		mg/L		
SPI02	Q2358865	A894272	VANADIUM	0	0.5		0.482	mg/L	96.4	

ALUMINUM ICP SW846-6010B **M101.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10 Instrument: PREP
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
BLA02	Q2358858	NA	Analytical Run: R572314							
LCS	Q2358859	SPEX	Analytical Run: R572314							
DUP02	Q2358860	A894272	Analytical Run: R572314							

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ALUMINUM ICP SW846-6010B **M101.3**
Prep : FAA/ ICP ACID DIGESTION OF AQUEOUS SAMPLES, TOTAL RECOVERABLE SW846-3005A

R572273 Analyst: K KAMARA Run Date: 27-Sep-10
Prep Reviewer: S ENDERSEN Review Date: 27-Sep-10 Continued

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
SPI02	Q2358861	A894272	Analytical Run: R572314							
SAMPLE	A894271	Rep: 0	Analytical Run: R572314							
SAMPLE	A894272	Rep: 0	Analytical Run: R572314							
SAMPLE	A894273	Rep: 0	Analytical Run: R572314							
SAMPLE	A894274	Rep: 0	Analytical Run: R572314							
DUP02	Q2358864	A894272	Analytical Run: R572515							

R572314 Analyst: J KRAMER Run Date: 27-Sep-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 28-Sep-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
LICV01	Q2359153	PERKIN ELE	ALUMINUM	0.0500			0.0475	mg/L	95.0	
ICV01	Q2359152	PERKIN ELM	ALUMINUM	1			0.997	mg/L	99.7	
CDL01	Q2359149	INORGANIC	ALUMINUM	10			10.1	mg/L	101.0	
ICS-A	Q2359150	PERKIN-ELM	ALUMINUM	500			497	mg/L	99.4	
ICS-AB	Q2359145	PERKIN ELM	ALUMINUM	500			502	mg/L	100.4	
LCCV	Q2359202	INORGANIC	ALUMINUM	0.0500			0.0480	mg/L	96.0	
CCV	Q2359188	INORGANIC	ALUMINUM	5.00			4.87	mg/L	97.4	
BLA01	Q2359169	NA	ALUMINUM			<	0.0200	mg/L		
BLA02	Q2358858	NA	ALUMINUM			<	0.0200	mg/L		
LCS	Q2358859	SPEX	ALUMINUM	2			2.11	mg/L	105.5	
SER01	Q2359198	A894272	ALUMINUM	0		BDL		mg/L		
SAMPLE	A894272		See Certificate of Analysis, Rep: 0							
DUP02	Q2358860	A894272	ALUMINUM	0		BDL		mg/L		
SPI02	Q2358861	A894272	ALUMINUM	0	2.00		1.96	mg/L	98.0	
SAMPLE	A894271		See Certificate of Analysis, Rep: 0							
SAMPLE	A894273		See Certificate of Analysis, Rep: 0							
SAMPLE	A894274		See Certificate of Analysis, Rep: 0							
CCV	Q2359189	INORGANIC	ALUMINUM	5.00			4.89	mg/L	97.8	
BLA01	Q2359170	NA	ALUMINUM			<	0.0200	mg/L		
ICS-A	Q2359222	PERKIN-ELM	ALUMINUM	500			487	mg/L	97.4	
ICS-AB	Q2359217	PERKIN ELM	ALUMINUM	500			490	mg/L	98.0	

Q2359198 There was possible matrix interference for K and Na
Q2359198 as indicated by the serial dilution results.

R572515 Analyst: J KRAMER Run Date: 01-Oct-10 Instrument: ICP
Analytical Reviewer: S ENDERSEN Review Date: 02-Oct-10

QC Type	Lab ID	Source	Parameter	True / Sample	Spike Value	RQL	Observed	Units	Rec	RPD
DUP02	Q2358864	A894272	ALUMINUM	0		BDL		mg/L		

RQL	Result Qualifier Definition
!	Outside Lab Generated Control Limits
<	Less Than
BDL	Below Detection Limit
CNA	RPD Calculation Not Applicable, < DL

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	Result Qualifier Definition
LIN	Linear Regression Used
NQR	No QC Result. High Sample Concentration.
QDR	Quadratic Equation Used

QC Type	Definition
LCS	LABORATORY CONTROL SAMPLE PREPPED
SPI03	TCLP MATRIX SPIKE
LFB02H	HIGH LABORATORY FORTIFIED BLANK PREPPED
SPI01	MATRIX SPIKE
LFB02L	LOW LABORATORY FORTIFIED BLANK PREPPED
CDL01	DETECTION LIMIT STANDARD
LICV01	LOW LEVEL CALIBRATION VERIFICATION DIFFERENT SOURCE
ICV01	INITIAL CALIBRATION VERIFICATION DIFFERENT SOURCE
CCV	CONTINUING CALIBRATION VERIFICATION
DUP02	PREPPED DUPLICATE SAMPLE ANALYSIS
BLA01	CALIBRATION (INSTRUMENT) BLANK
ICS-AB	INTERFERENCE CHECK SAMPLE AB
DPS01	DUPLICATE MATRIX SPIKE
DPS03	DUPLICATE TCLP MATRIX SPIKE
LCS01	LABORATORY CONTROL SAMPLE
SPI02	PREPPED MATRIX SPIKE
DPS02	PREPPED DUPLICATE MATRIX SPIKE
SER01	ICP SERIAL DILUTION
DUP01	DUPLICATE SAMPLE ANALYSIS
BLA02	PREPPED (CALIBRATION) BLANK OR METHOD BLANK
ICS-A	INTERFERENCE CHECK SAMPLE A
LCCV	LOW LEVEL CONTINUING CALIBRATION VERIFICATION
CAL01	INITIAL CALIBRATION
CCVD	CONTINUING CALIBRATION VERIFICATION (USING %D)

Scott A Bryan

Approved By : SCOTT BRYAN