Department of Energy

Portsmouth/Paducah Project Office
1017 Majestic Drive, Suite 200
Lexington, Kentucky 40513
(859) 219-4000

JUL 14 2017

Ms. Anita Young, Supervisor
Permit Administration Section
Division of Waste Management, Solid Waste Branch
Kentucky Department for Environmental Protection
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601

PPPO-02-4309540-17A

Dear Ms. Young:

C-746-S&T AND C-746-U SOLID WASTE LANDFILLS SECOND QUARTER CALENDAR YEAR 2017 WASTE QUANTITY AND OPERATING REPORT, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, FPDP-RPT-0085/V2

The U.S. Department of Energy has prepared the second quarter operating report for Calendar Year (CY) 2017 for the C-746-S&T and C-746-U Landfills at the Paducah Gaseous Diffusion Plant. Kentucky Solid Waste Regulation 401 *KAR* 47:190 § 8(1) and Solid Waste Permit SW07300014, SW07300015, SW07300045 require submittal of quarterly reports from operators of solid waste landfills. The contained landfill (C-746-U) is an active landfill. The residential landfill (C-746-S) has been inactive since July 1995 and the inert landfill (C-746-T) has been inactive since June 1992.

This report contains operating information for the second quarter of CY 2017. Per correspondence dated February 8, 2005, from Ron Gruzesky, Manager, Solid Waste Branch, an additional C-746-U Quarterly Waste Quantity Report form is included as a separate report in this submittal.

The groundwater analysis data, surface water data, and methane monitoring results are submitted as separate reports for the C-746-S&T Landfills and C-746-U Landfill.

If you have any questions or require additional information, please contact April Ladd at (270) 441-6843.

Sincerely,

Jennifer Woodard

Jennifer Woodard
Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosures:

1. C-746-S&T and C-746-U Solid Waste Landfill Second Quarter CY 2017 Waste Quantity and Operating Report
2. Waste Quantity Report Form

e-copy w/enclosures:
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FPDP-RPT-0085/V2

C-746-S&T and C-746-U Solid Waste Landfill
Second Quarter Calendar Year 2017
Waste Quantity and Operating Report
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky

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This document is approved for public release per review by:

R.H. Watson — FPDP Classification Support

7-12-17 — Date

FPDP-RPT-0085/V2

C-746-S&T and C-746-U Solid Waste Landfill
Second Quarter Calendar Year 2017
Waste Quantity and Operating Report
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky

Date Issued—July 2017

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
FLUOR FEDERAL SERVICES, INC.,
Paducah Deactivation Project
managing the
Deactivation Project at the
Paducah Gaseous Diffusion Plant
under Task Order DE-DT0007774

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CONTENTS

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REPORT SUMMARY

The information contained herein is submitted in accordance with the requirements of Solid Waste Permit Number SW07300045, SW07300014, SW07300015 and 401 *KAR* 47:190 § 8(1)(a) through (c) and (e), for the second quarter of calendar year 2017 for the Paducah Gaseous Diffusion Plant, McCracken County, Kentucky.

In the second quarter of calendar year 2017, 230.18 tons of industrial waste was disposed of in the C-746-U Contained Landfill. No special waste or spill residue-containing materials were placed in the landfill this quarter. No asbestos-containing materials were a part of the 230.18 total tons of waste dispositioned.

The C-746-S Residential Landfill has been inactive since July 1995, and the C-746-T Inert Landfill has been inactive since June 1992.

Analytical results for surface water, groundwater, and methane monitoring are submitted in separate quarterly Compliance Monitoring Reports for the C-746-U Landfill and C-746-S&T Landfills [401 *KAR* 47:190 § 8(1)(d)].

Leachate Collection and Disposition

On January 4, 2017, the Landfill Manager notified Kentucky Division of Waste Management that leachate would be transported to the C-615 Wastewater Treatment Facility until further notice. A total of 436,200 gal of leachate from the C-746-U Landfill was treated this quarter. Of that amount, a total of 411,300 gal of leachate was transported to the C-615 Wastewater Treatment Facility for treatment and discharge, and the remaining volume of 24,900 gal was treated at the C-746-U15 Leachate Treatment Facility and is awaiting further treatment and disposition during the next quarter. This volume was held because of toxicity source evaluation efforts (see Toxicity Reduction Evaluation Progress Reports for Kentucky Pollutant Discharge Elimination System Permit KY0004049–Outfall 020). Additionally, there were 11,800 gal of leachate from the C-746-S Landfill transported to the C-615 Wastewater Treatment Facility for treatment and discharge this quarter.

Leachate samples were obtained on May 3 and 18, 2017, and June 28, 2017, during this quarter from the leachate transported to the C-615 Wastewater Treatment Facility. Analytical results of the May 3rd sampling event are provided in this report. Analytical results of the May 18th and June 28th sampling events were not available for inclusion in this report by the regulatory deadline; these results will be provided in the next quarterly report. Also included in this report are analytical results of the March sampling event, which were not available for inclusion in the previous report by the regulatory deadline.

The tank volume reported on the leachate log is the volume at the time of measurement. Calculation of the next day tank volume by subtraction of disposal volume may not reflect the measured tank volume because additional leachate has entered the system.

Annual leachate samples were collected on February 27, 2017. Analytical results for the leachate samples were not available for inclusion in the previous quarterly report by the regulatory deadline; these results are provided in this quarterly report.

Construction Activities and Cover Maintenance

There were no construction activities at the C-746-U Landfill [401 *KAR* 47:190 § 8(1)(a)]. The landfill was inspected for subsidence in accordance with the cover requirements [401 *KAR* 48:080 § 9(6)(f)]. No repairs were necessary during the quarter.

There were no construction activities for either the C-746-S or C-746-T Landfills. The landfills were inspected for subsidence in accordance with the cover requirements [401 *KAR* 48:080 § 9(6)(f)]. No repairs were necessary during the quarter.

FACILITY INFORMATION SHEET

Sampling Date: May 3 and 18, 2017, and June 28, 2017

County: McCracken Permit No.: SW07300014; SW07300015; SW07300045

Facility Name: U.S. DOE—Paducah Gaseous Diffusion Plant
(as officially shown on DWM permit face)

Site Address: 5501 Hobbs Road (Street) Kevil, Kentucky (City/State) 42053 (Zip)

Phone No.: (270) 441-6800 Latitude: N 37˚ 07’ 45” Longitude: W 88˚ 47’ 55”

OWNER INFORMATION

Facility Owner: U.S. DOE—Robert E. Edwards III, Manager Phone No.: (859) 227-5020

Contact Person: Myrna E. Redfield Phone No.: (270) 441-5113

Contact Person Title: Director, Environmental Management, Fluor Federal Services, Inc.

Mailing Address: 5511 Hobbs Road (Street) Kevil, Kentucky (City/State) 42053 (Zip)

SAMPLING PERSONNEL
(if other than landfill or laboratory)

Company: GEO Consultants, LLC

Contact Person: Sam Martin Phone No. (270) 441-6755

Mailing Address: 325 Kentucky Avenue (Street) Kevil, Kentucky (City/State) 42053 (Zip)

LABORATORY RECORD #1

Laboratory: GEL Laboratories, LLC Lab ID No.: KY90129

Contact Person: Valerie Davis Phone No.: (843) 769-7391

Mailing Address: P.O. Box 30712 (Street) Charleston, South Carolina (City/State) 29417 (Zip)

LABORATORY RECORD #2

Laboratory: N/A Lab ID No.: N/A

Contact Person: N/A Phone No.: N/A

Mailing Address: N/A (Street) (City/State) (Zip)

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C-746-U LANDFILL
QUARTERLY WASTE QUANTITY REPORT

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Department for Environmental Protection/Division of Waste Management/Solid Waste Branch
Quarterly Waste Quantity Report–DEP 7046Q (Revised 2-05)

WASTE ACTIVITY–CONTAINED LANDFILL

Facility Name: U.S. Department of Energy Permit Number: SW07300045

County where landfill is located: McCracken (PGDP) Agency Interest Number: 3059

Report for the Months of: April, May, June For the Year of: 2017

Waste Source (County and State)	Type of Waste			**Waste Used as Alternate Daily Cover as Approved (Tons Only)
	*Municipal Solid Waste (Tons Only)	*Industrial Waste (Tons Only)	*Special Waste (Tons Only)	
Paducah Gaseous Diffusion Plant (April)	0.00	0.00	0.00	0.00
Paducah Gaseous Diffusion Plant (May)	0.00	206.53	0.00	0.00
Paducah Gaseous Diffusion Plant (June)	0.00	23.65	0.00	0.00
Total for this page	0.00	230.18	0.00	0.00
Grand Total of all pages	0.00	230.18	0.00	0.00

***Grand Total of Municipal, Industrial, and Special from all pages** 230.18

***Does not include waste used as Alternate Daily Cover.**

****Indicate the amount used as Alternate Daily Cover. Please note this requires prior approval by the Cabinet.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

Signature: Phone Number: (270) 441-5113

Name--Please Print: Myrna E. Redfield Date: 7/14/17

Signature: Jennifer Woodard Phone Number: (270) 441-6800

Name--Please Print: Jennifer Woodard Date: 7/14/17

This Certification clause shall be signed by the responsible person(s) described in 401 *KAR* 47:160, Section 6(1), and/or (2) and is required by 401 *KAR* 47:160, Section 6(4).

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C-746-U LANDFILL
COVER LOG

APRIL, MAY, JUNE 2017

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COVER LOG

DEPARTMENT OF ENERGY
COUNTY: McCracken

PERMIT NUMBER: 073-00045
Month & Year: April 2017

Day of Month	Daily Cell Location	Daily Cover Applied?	Interim Cover	Long Term Cover	Final Cap	Temporary Diversion Ditch Yes/No
1						
2						
3						
4						
5						
6						
7						
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9						
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29						
30						
31						

There were no waste disposal or cover activities during the month of April 2017

COVER LOG

DEPARTMENT OF ENERGY PERMIT NUMBER: 073-00045

COUNTY: McCracken Month & Year: May 2017

Day of Month	Daily Cell Location	Daily Cover Applied?	Interim Cover	Long Term Cover	Final Cap	Temporary Diversion Ditch Yes/No
1						
2						
3						
4						
5						
6						
7						
8						
9						
10	D-5	YES	NO	NO	NO	YES
11	D-5	YES	NO	NO	NO	YES
12						
13						
14						
15	D-5	YES	NO	NO	NO	YES
16						
17	D-4 & C-5		YES	YES		
18	C-6 & D-6		YES	YES		
19						
20						
21						
22						
23	D-7		YES	YES		
24						
25						
26						
27						
28						
29						
30	D-5	YES	NO	NO	NO	YES
31	D-5	YES	NO	NO	NO	YES

COVER LOG

DEPARTMENT OF ENERGY **PERMIT NUMBER: 073-00045**

COUNTY: McCracken **Month & Year: June 2017**

Day of Month	Daily Cell Location	Daily Cover Applied?	Interim Cover	Long Term Cover	Final Cap	Temporary Diversion Ditch Yes/No
1	D-5	YES	YES	NO	NO	YES
2						
3						
4						
5						
6						
7						
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LEACHATE LOG

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Month April Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
04-03-17	1,2,3,4,5	F-001		14200	6000	W
04-03-17	1,2,3,4,5	F-002		7700		
04-03-17	1,2,3,4,5	F-007		1500		
04-03-17	1,2,3,4,5	F-008		1500		
04-03-17	1,2,3,4,5	F-009		15500		
04-04-17	1,2,3,4,5	F-001		8200	7700	W
04-04-17	1,2,3,4,5	F-002		10600	4300	W
04-04-17	1,2,3,4,5	F-007		1500		
04-04-17	1,2,3,4,5	F-008		1500		
04-04-17	1,2,3,4,5	F-009		15500		
04-05-17	1,2,3,4,5	F-001		3700		
04-05-17	1,2,3,4,5	F-002		6300	5800	W
04-05-17	1,2,3,4,5	F-007		1500		
04-05-17	1,2,3,4,5	F-008		1500		
04-05-17	1,2,3,4,5	F-009		15500	2800	W
04-06-17	1,2,3,4,5	F-001		6600		
04-06-13	1,2,3,4,5	F-002		500		
04-06-17	1,2,3,4,5	F-007		1500		
04-06-17	1,2,3,4,5	F-008		1500		
04-06-17	1,2,3,4,5	F-009		12700	12200	W
04-10-17	1,2,3,4,5	F-001		14300	4500	W
04-10-17	1,2,3,4,5	F-002		500		
04-10-17	1,2,3,4,5	F-007		1500		
04-10-17	1,2,3,4,5	F-008		1500		
04-10-17	1,2,3,4,5	F-009		500		
04-11-17	1,2,3,4,5	F-001		9800	6000	W
04-11-17	1,2,3,4,5	F-002		3100		

* R – Re-circulated to Working Phase
W – Transported to Wastewater Treatment Facility
L – Disposed at on-site Leachate Treatment Facility

Month April Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
04-11-17	1,2,3,4,5	F-007		1500		
04-11-17	1,2,3,4,5	F-008		1500		
04-11-17	1,2,3,4,5	F-009		500		
04-12-17	1,2,3,4,5	F-001		3800	3300	W
04-12-17	1,2,3,4,5	F-002		5800	5300	W
04-12-17	1,2,3,4,5	F-007		1500		
04-12-17	1,2,3,4,5	F-008		1500		
04-12-17	1,2,3,4,5	F-009		500		
04-17-17	1,2,3,4,5	F-001		15600	4500	W
04-17-17	1,2,3,4,5	F-002		500		
04-17-17	1,2,3,4,5	F-007		1500		
04-17-17	1,2,3,4,5	F-008		1500		
04-17-17	1,2,3,4,5	F-009		500		
04-18-17	1,2,3,4,5	F-001		11100	4500	W
04-18-17	1,2,3,4,5	F-002		10500		
04-18-17	1,2,3,4,5	F-007		1500		
04-18-13	1,2,3,4,5	F-008		1500		
04-18-17	1,2,3,4,5	F-009		500		
04-19-17	1,2,3,4,5	F-001		6600	6100	W
04-19-17	1,2,3,4,5	F-002		15900		
04-19-17	1,2,3,4,5	F-007		1500		
04-19-17	1,2,3,4,5	F-008		1500		
04-19-17	1,2,3,4,5	F-009		500		
04-20-17	1,2,3,4,5	F-001		500		
04-20-17	1,2,3,4,5	F-002		19400	7500	W
04-20-17	1,2,3,4,5	F-007		1500		
04-20-17	1,2,3,4,5	F-008		1500		

* R – Re-circulated to Working Phase
W – Transported to Wastewater Treatment Facility
L – Disposed at on-site Leachate Treatment Facility

Month April Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
04-20-17	1,2,3,4,5	F-009		500		
04-24-17	1,2,3,4,5	F-001		30600	12000	W
04-24-17	1,2,3,4,5	F-002		26000		
04-24-17	1,2,3,4,5	F-007		13000		
04-24-17	1,2,3,4,5	F-008		5500		
04-24-17	1,2,3,4,5	F-009		500		
04-25-17	1,2,3,4,5	F-001		24000	16500	W
04-25-17	1,2,3,4,5	F-002		28100		
04-25-17	1,2,3,4,5	F-007		13000		
04-25-17	1,2,3,4,5	F-008		5500		
04-25-17	1,2,3,4,5	F-009		500		
04-26-17	1,2,3,4,5	F-001		12700	12200	W
04-26-17	1,2,3,4,5	F-002		28100	2800	W
04-26-17	1,2,3,4,5	F-007		13000		
04-26-17	1,2,3,4,5	F-008		5500		
04-26-17	1,2,3,4,5	F-009		3300		
04-27-13	1,2,3,4,5	F-001		12500		
04-27-17	1,2,3,4,5	F-002		25300	16500	W
04-27-17	1,2,3,4,5	F-007		13000		
04-27-17	1,2,3,4,5	F-008		5500		
04-27-17	1,2,3,4,5	F-009		4800		
04-28-17	1,2,3,4,5	F-001		10900	9700	W
04-28-17	1,2,3,4,5	F-002		8800	3800	W
04-28-17	1,2,3,4,5	F-007		13000		
04-28-17	1,2,3,4,5	F-008		5500		
04-28-17	1,2,3,4,5	F-009		8400		
		Tammy Smith 4-28-17				

* R – Re-circulated to Working Phase
W – Transported to Wastewater Treatment Facility
L – Disposed at on-site Leachate Treatment Facility

Month May Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
05-01-17	1,2,3,4,5	F-001		30900	9000	W
05-01-17	1,2,3,4,5	F-002		5000		
05-01-17	1,2,3,4,5	F-007		13000		
05-01-17	1,2,3,4,5	F-008		5500		
05-01-17	1,2,3,4,5	F-009		9600		
05-02-17	1,2,3,4,5	F-001		21900	15000	W
05-02-17	1,2,3,4,5	F-002		17900		
05-02-17	1,2,3,4,5	F-007		13000		
05-02-17	1,2,3,4,5	F-008		5500		
05-02-17	1,2,3,4,5	F-009		9600	2500	W
05-03-17	1,2,3,4,5	F-001		6900	6400	W
05-03-17	1,2,3,4,5	F-002		23400	7100	W
05-03-17	1,2,3,4,5	F-007		13000		
05-03-17	1,2,3,4,5	F-008		5500		
05-03-17	1,2,3,4,5	F-009		7100	2400	W
05-04-17	1,2,3,4,5	F-001		11500		
05-04-17	1,2,3,4,5	F-002		16300	3000	W
05-04-17	1,2,3,4,5	F-007		13000		
05-04-17	1,2,3,4,5	F-008		8200		
05-04-17	1,2,3,4,5	F-009		4700	400	W
05-05-17	1,2,3,4,5	F-001		11500		
05-05-17	1,2,3,4,5	F-002		28600	12000	W
05-05-17	1,2,3,4,5	F-007		13000		
05-05-17	1,2,3,4,5	F-008		8200		
05-05-17	1,2,3,4,5	F-009		12300		
05-08-17	1,2,3,4,5	F-001		26900		
05-08-17	1,2,3,4,5	F-002		16600	4600	W

* R – Re-circulated to Working Phase
W – Transported to Wastewater Treatment Facility
L – Disposed at on-site Leachate Treatment Facility

Permit No. 073-00045 **PGDP SOLID WASTE LANDFILL – LEACHATE LOG** McCracken County, Kentucky

Month May Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
05-08-17	1,2,3,4,5	F-007		13000		
05-08-17	1,2,3,4,5	F-008		8500		
05-08-17	1,2,3,4,5	F-009		12300		
05-09-17	1,2,3,4,5	F-001		26900		
05-09-17	1,2,3,4,5	F-002		15000	10600 3900	W Waiting disposal next quarter
05-09-17	1,2,3,4,5	F-007		13000		
05-09-17	1,2,3,4,5	F-008		8600		
05-09-17	1,2,3,4,5	F-009		14500		
05-10-17	1,2,3,4,5	F-001		28100	3000 8000	W Waiting disposal next quarter
05-10-17	1,2,3,4,5	F-002		7100		
05-10-17	1,2,3,4,5	F-007		13000		
05-10-17	1,2,3,4,5	F-008		8600		
05-10-17	1,2,3,4,5	F-009		14500		
05-11-17	1,2,3,4,5	F-001		17100	10600 6000	W Waiting disposal next quarter
05-11-17	1,2,3,4,5	F-002		13900	4500 2600	W Waiting disposal next quarter
05-11-17	1,2,3,4,5	F-007		13000		
05-11-17	1,2,3,4,5	F-008		8600		
05-11-17	1,2,3,4,5	F-009		14500		
05-15-17	1,2,3,4,5	F-001		20800		
05-15-17	1,2,3,4,5	F-002		6800	6300	W
05-15-17	1,2,3,4,5	F-007		13000		
05-15-17	1,2,3,4,5	F-008		8600	6300 800	W Waiting disposal next quarter
05-15-17	1,2,3,4,5	F-009		14500		
05-16-17	1,2,3,4,5	F-001		24800	500	W
05-16-17	1,2,3,4,5	F-002		500		

* R – Re-circulated to Working Phase
W – Transported to Wastewater Treatment Facility
L – Disposed at on-site Leachate Treatment Facility

Month May Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
05-16-17	1,2,3,4,5	F-007		13000	7900 3600	W Waiting disposal next quarter
05-16-17	1,2,3,4,5	F-008		1500		
05-16-17	1,2,3,4,5	F-009		14500		
05-17-17	1,2,3,4,5	F-001		28200	10500	W
05-17-17	1,2,3,4,5	F-002		500		
05-17-17	1,2,3,4,5	F-007		1500		
05-17-17	1,2,3,4,5	F-008		1500		
05-17-17	1,2,3,4,5	F-009		14500		
05-18-17	1,2,3,4,5	F-001		17700	12000	W
05-18-17	1,2,3,4,5	F-002		5800		
05-18-17	1,2,3,4,5	F-007		1500		
05-18-17	1,2,3,4,5	F-008		1500		
05-18-17	1,2,3,4,5	F-009		14500		
05-22-17	1,2,3,4,5	F-001		5700	5200	W
05-22-17	1,2,3,4,5	F-002		17300		
05-22-17	1,2,3,4,5	F-007		1500		
05-22-17	1,2,3,4,5	F-008		1500		
05-22-17	1,2,3,4,5	F-009		14500	8000	W
05-23-17	1,2,3,4,5	F-001		500		
05-23-17	1,2,3,4,5	F-002		20000		
05-23-17	1,2,3,4,5	F-007		1500		
05-23-17	1,2,3,4,5	F-008		1500		
05-23-17	1,2,3,4,5	F-009		6500		
05-24-17	1,2,3,4,5	F-001		500		
05-24-17	1,2,3,4,5	F-002		22700		
05-24-17	1,2,3,4,5	F-007		1500		
05-24-17	1,2,3,4,5	F-008		1500		

* R – Re-circulated to Working Phase
W – Transported to Wastewater Treatment Facility
L – Disposed at on-site Leachate Treatment Facility

Permit No. 073-00045 **PGDP SOLID WASTE LANDFILL – LEACHATE LOG** McCracken County, Kentucky

Month May Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
05-24-17	1,2,3,4,5	F-009		6500	6000	W
05-25-17	1,2,3,4,5	F-001		3400		
05-25-17	1,2,3,4,5	F-002		22700	6000	W
05-25-17	1,2,3,4,5	F-007		1500		
05-25-17	1,2,3,4,5	F-008		1500		
05-25-17	1,2,3,4,5	F-009		500		
05-30-17	1,2,3,4,5	F-001		16200		
05-30-17	1,2,3,4,5	F-002		16700	8000	W
05-30-17	1,2,3,4,5	F-007		1500		
05-30-17	1,2,3,4,5	F-008		1500		
05-30-17	1,2,3,4,5	F-009		500		
05-31-17	1,2,3,4,5	F-001		17700		
05-31-17	1,2,3,4,5	F-002		8700	8000	W
05-31-17	1,2,3,4,5	F-007		1500		
05-31-17	1,2,3,4,5	F-008		1500		
05-31-17	1,2,3,4,5	F-009		500		

Tammy Smith 5-31-17

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* R – Re-circulated to Working Phase
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Month June Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
06-01-17	1,2,3,4,5	F-001		20400	4500	W
06-01-17	1,2,3,4,5	F-002		700	200	W
06-01-17	1,2,3,4,5	F-007		1500		
06-01-17	1,2,3,4,5	F-008		1500		
06-01-17	1,2,3,4,5	F-009		500		
06-05-17	1,2,3,4,5	F-001		15900	9000	W
06-05-17	1,2,3,4,5	F-002		9400		
06-05-17	1,2,3,4,5	F-007		1500		
06-05-17	1,2,3,4,5	F-008		1500		
06-05-17	1,2,3,4,5	F-009		500		
06-06-17	1,2,3,4,5	F-001		6900	6400	W
06-06-17	1,2,3,4,5	F-002		11900	3500	W
06-06-17	1,2,3,4,5	F-007		1500		
06-06-17	1,2,3,4,5	F-008		1500		
06-06-17	1,2,3,4,5	F-009		500		
06-07-17	1,2,3,4,5	F-001		4300		
06-07-17	1,2,3,4,5	F-002		8400		
06-07-17	1,2,3,4,5	F-007		1500		
06-07-17	1,2,3,4,5	F-008		1500		
06-07-17	1,2,3,4,5	F-009		500		
06-08-17	1,2,3,4,5	F-001		6100		
06-08-17	1,2,3,4,5	F-002		8400	6000	W
06-08-17	1,2,3,4,5	F-007		1500		
06-08-17	1,2,3,4,5	F-008		1500		
06-08-17	1,2,3,4,5	F-009		500		
06-12-17	1,2,3,4,5	F-001		13200		
06-12-17	1,2,3,4,5	F-002		2400		

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Permit No. 073-00045 **PGDP SOLID WASTE LANDFILL – LEACHATE LOG** McCracken County, Kentucky

Month June Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
06-12-17	1,2,3,4,5	F-007		1500		
06-12-17	1,2,3,4,5	F-008		1500		
06-12-17	1,2,3,4,5	F-009		500		
06-13-17	1,2,3,4,5	F-001		14000		
06-13-17	1,2,3,4,5	F-002		2400		
06-13-17	1,2,3,4,5	F-007		1500		
06-13-17	1,2,3,4,5	F-008		1500		
06-13-17	1,2,3,4,5	F-009		500		
06-14-17	1,2,3,4,5	F-001		15700		
06-14-17	1,2,3,4,5	F-002		2400		
06-14-17	1,2,3,4,5	F-007		1500		
06-14-17	1,2,3,4,5	F-008		1500		
06-14-17	1,2,3,4,5	F-009		500		
06-15-17	1,2,3,4,5	F-001		17900	1900	W
06-15-17	1,2,3,4,5	F-002		2400	1100	W
06-15-17	1,2,3,4,5	F-007		1500		
06-15-17	1,2,3,4,5	F-008		1500		
06-15-17	1,2,3,4,5	F-009		500		
06-19-17	1,2,3,4,5	F-001		16000	1500	W
06-19-17	1,2,3,4,5	F-002		7800		
06-19-17	1,2,3,4,5	F-007		1500		
06-19-17	1,2,3,4,5	F-008		1500		
06-19-17	1,2,3,4,5	F-009		500		
06-20-17	1,2,3,4,5	F-001		14500	1500	W
06-20-17	1,2,3,4,5	F-002		9400		
06-20-17	1,2,3,4,5	F-007		1500		
06-20-17	1,2,3,4,5	F-008		1500		

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Permit No. 073-00045 **PGDP SOLID WASTE LANDFILL – LEACHATE LOG** McCracken County, Kentucky

Month June Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
06-20-17	1,2,3,4,5	F-009		500		
06-21-17	1,2,3,4,5	F-001		13000	1500	W
06-21-17	1,2,3,4,5	F-002		11000		
06-21-17	1,2,3,4,5	F-007		1500		
06-21-17	1,2,3,4,5	F-008		1500		
06-21-17	1,2,3,4,5	F-009		500		
06-22-17	1,2,3,4,5	F-001		11500	1500	W
06-22-17	1,2,3,4,5	F-002		12800		
06-22-17	1,2,3,4,5	F-007		1500		
06-22-17	1,2,3,4,5	F-008		1500		
06-22-17	1,2,3,4,5	F-009		500		
06-26-17	1,2,3,4,5	F-001		14900	3000	W
06-26-17	1,2,3,4,5	F-002		22800	7500	W
06-26-17	1,2,3,4,5	F-007		1500		
06-26-17	1,2,3,4,5	F-008		1500		
06-26-17	1,2,3,4,5	F-009		500		
06-27-17	1,2,3,4,5	F-001		11900		
06-27-17	1,2,3,4,5	F-002		15300	14800	W
06-27-17	1,2,3,4,5	F-007		1500		
06-27-17	1,2,3,4,5	F-008		1500		
06-27-17	1,2,3,4,5	F-009		2900		
06-28-17	1,2,3,4,5	F-001		11900	11400	W
06-28-17	1,2,3,4,5	F-002		500		
06-28-17	1,2,3,4,5	F-007		1500		
06-28-17	1,2,3,4,5	F-008		1500		
06-28-17	1,2,3,4,5	F-009		4900		
06-29-17	1,2,3,4,5	F-001		500		

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Permit No. 073-00045 **PGDP SOLID WASTE LANDFILL – LEACHATE LOG** McCracken County, Kentucky

Month June Year 2017

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
06-29-17	1,2,3,4,5	F-002		500		
06-29-17	1,2,3,4,5	F-007		1500		
06-29-17	1,2,3,4,5	F-008		1500		
06-29-17	1,2,3,4,5	F-009		6700	6200	W

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* R – Re-circulated to Working Phase
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LEACHATE DATA

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Paducah OREIS Report for SLS17-01

SLS17-01-01 from: C-746-S on 2/27/2017 Media: WW SmpMethod: GR

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
ANION										
Bromide	0.0945	mg/L	J		0.2			SW846-9056	GEL	S / X /
Chloride	8.6	mg/L	B		0.2			SW846-9056	GEL	/ X /
Fluoride	0.75	mg/L			0.1			SW846-9056	GEL	S / X /
Nitrate as Nitrogen	0.212	mg/L	J		0.5			SW846-9056	GEL	S / X /
Sulfate	53.4	mg/L			2			SW846-9056	GEL	/ X /
FS										
Conductivity	1014	umho/cm						FS	FS	/ /
Dissolved Oxygen	6	mg/L						FS	FS	/ /
pH	6.15	Std Unit						FS	FS	/ /
Redox	377	mV						FS	FS	/ /
Temperature	52.4	deg F						FS	FS	/ /
METAL										
Aluminum	0.05	mg/L	U		0.05			SW846-6020	GEL	/ X /
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic	0.00193	mg/L	J		0.005			SW846-6020	GEL	/ X /
Barium	0.23	mg/L			0.002			SW846-6020	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/ X /
Boron	0.0204	mg/L			0.015			SW846-6020	GEL	S / X /
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Calcium	167	mg/L			2			SW846-6020	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Cobalt	0.000307	mg/L	J		0.001			SW846-6020	GEL	S / X /
Copper	0.000843	mg/L	J		0.001			SW846-6020	GEL	S / X /
Iron	0.0359	mg/L	J		0.1			SW846-6020	GEL	S / X /
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Magnesium	21.8	mg/L			0.03			SW846-6020	GEL	/ X /
Manganese	0.00367	mg/L	J		0.005			SW846-6020	GEL	S / X /
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/ X /
Molybdenum	0.000588	mg/L			0.0005			SW846-6020	GEL	S / X /
Nickel	0.00397	mg/L			0.002			SW846-6020	GEL	S / X /
Phosphorous	0.0845	mg/L			0.05			EPA-365.4	GEL	/ X /
Potassium	1.16	mg/L			0.3			SW846-6020	GEL	/ X /
Rhodium	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Selenium	0.00317	mg/L	J		0.005			SW846-6020	GEL	S / X /
Silver	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Sodium	40.1	mg/L			0.25			SW846-6020	GEL	/ X /
Tantalum	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Thallium	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Tin	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Titanium	0.00277	mg/L	J		0.01			SW846-6020	GEL	S / X /
Uranium	0.0064	mg/L			0.0002			SW846-6020	GEL	/ X /
Vanadium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Zinc	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic, Dissolved	0.00186	mg/L	J		0.005			SW846-6020	GEL	/ X /
Barium, Dissolved	0.167	mg/L			0.002			SW846-6020	GEL	/ X /
Cadmium, Dissolved	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Chromium, Dissolved	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /

*Verification/Validation/Assessment

Cobalt, Dissolved	0.000231	mg/L	J	0.001			SW846-6020	GEL	S / X /
Copper, Dissolved	0.000849	mg/L	J	0.001			SW846-6020	GEL	S / X /
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/ X /
Manganese, Dissolved	0.00307	mg/L	J	0.005			SW846-6020	GEL	S / X /
Nickel, Dissolved	0.00292	mg/L		0.002			SW846-6020	GEL	S / X /
Selenium, Dissolved	0.00301	mg/L	J	0.005			SW846-6020	GEL	S / X /
Silver, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/ X /
Tin, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ X /
Titanium, Dissolved	0.00204	mg/L	J	0.01			SW846-6020	GEL	S / X /
Uranium, Dissolved	0.00435	mg/L		0.0002			SW846-6020	GEL	/ X /
Vanadium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X /
Zinc, Dissolved	0.0115	mg/L		0.01			SW846-6020	GEL	S / X /
OTHOR									
Oil and Grease	1.26	mg/L	J	4.2			EPA-1664A	GEL	S / X /
PPCB									
PCB-1016	0.099	ug/L	UY2	0.099			SW846-8082	GEL	/ X /
PCB-1221	0.099	ug/L	U	0.099			SW846-8082	GEL	/ X /
PCB-1232	0.099	ug/L	U	0.099			SW846-8082	GEL	/ X /
PCB-1242	0.099	ug/L	U	0.099			SW846-8082	GEL	/ X /
PCB-1248	0.099	ug/L	U	0.099			SW846-8082	GEL	/ X /
PCB-1254	0.099	ug/L	U	0.099			SW846-8082	GEL	/ X /
PCB-1260	0.099	ug/L	UY2	0.099			SW846-8082	GEL	/ X /
PCB-1268	0.099	ug/L	U	0.099			SW846-8082	GEL	/ X /
Polychlorinated biphenyl	0.099	ug/L	UY2	0.099			SW846-8082	GEL	/ X /
RADS									
Alpha activity	5.67	pCi/L	U	13.6	7.86	7.92	SW846-9310	GEL	/ X /
Americium-241	-0.102	pCi/L	U	1.18	0.451	0.452	HASL 300, AM-05-RC M	GEL	/ X /
Beta activity	-0.573	pCi/L	U	10.1	5.54	5.54	SW846-9310	GEL	/ X /
Cesium-137	-0.762	pCi/L	U	2.52	1.52	1.56	EPA-901.1	GEL	/ X /
Cobalt-60	-1.78	pCi/L	U	2.2	1.72	1.9	EPA-901.1	GEL	/ X /
Dissolved Alpha	3.19	pCi/L		2.96	1.97	2.04	SW846-9310	GEL	/ X /
Dissolved Beta	3	pCi/L		1.72	1.12	1.24	SW846-9310	GEL	/ X /
Neptunium-237	-0.135	pCi/L	U	1.14	0.407	0.408	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240	-0.329	pCi/L	U	2.26	0.762	0.764	HASL 300, Pu-11-RC M	GEL	/ X /
Radium-226	0.448	pCi/L	U	0.75	0.582	0.582	AN-1418	GEL	/ X /
Strontium-90	1.12	pCi/L	U	4.91	2.77	2.77	EPA-905.0-M	GEL	/ X /
Technetium-99	-3	pCi/L	U	17.9	10.2	10.2	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230	0.666	pCi/L	U	2.32	1.4	1.42	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234	3.12	pCi/L	U	37.4	42.6	42.6	EPA-901.1	GEL	/ X /
Tritium	-38.1	pCi/L	U	216	105	105	EPA-906.0-M	GEL	/ X /
Uranium	4.97	pCi/L		4.16	3.44	3.49	HASL 300, U-02-RC M	GEL	S / X /
Uranium-234	1.98	pCi/L		1.96	2	2.04	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	0.843	pCi/L	U	2.62	1.76	1.77	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	2.15	pCi/L	U	2.57	2.17	2.21	HASL 300, U-02-RC M	GEL	/ X /
RADS-D									
Americium-241, Dissolved	-0.208	pCi/L	U	1.43	0.483	0.484	HASL 300, AM-05-RC M	GEL	/ X /
Cesium-137, Dissolved	-2.3	pCi/L	U	7.45	4.23	4.36	EPA-901.1	GEL	/ X /
Cobalt-60, Dissolved	2.24	pCi/L	U	8.42	3.26	3.42	EPA-901.1	GEL	/ X /
Neptunium-237, Dissolved	0.0521	pCi/L	U	1.14	0.545	0.545	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240, Dissolved	-0.117	pCi/L	U	1.96	0.806	0.807	HASL 300, Pu-11-RC M	GEL	/ X /
Technetium-99, Dissolved	3.52	pCi/L	U	17.7	10.3	10.3	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230, Dissolved	0.217	pCi/L	U	2.02	1.02	1.03	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234, Dissolved	-11.4	pCi/L	U	337	199	199	EPA-901.1	GEL	/ X /
Uranium, Dissolved	6.59	pCi/L		4	3.83	3.94	HASL 300, U-02-RC M	GEL	S / X /
Uranium-234, Dissolved	4.51	pCi/L		2.16	2.88	3.01	HASL 300, U-02-RC M	GEL	/ X /

Uranium-235, Dissolved	1.44	pCi/L	U	2.46	2.06	2.08	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238, Dissolved	0.644	pCi/L	U	2.29	1.45	1.46	HASL 300, U-02-RC M	GEL	/ X /
VOA									
1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,1-Trichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1-Dichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dibromo-3-chloropropane	0.02	ug/L	U	0.02			SW846-8011	GEL	/ X /
1,2-Dibromoethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
2-Butanone	5	ug/L	U	5			EPA-624	GEL	/ X /
2-Hexanone	5	ug/L	UY1	5			EPA-624	GEL	/ X /
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624	GEL	/ X /
Acetone	5	ug/L	UY2	5			EPA-624	GEL	/ X /
Acrolein	5	ug/L	U	5			EPA-624	GEL	/ X /
Acrylonitrile	5	ug/L	U	5			EPA-624	GEL	/ X /
Benzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromodichloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromoform	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromomethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Carbon disulfide	5	ug/L	UY1Y2	5			EPA-624	GEL	/ X /
Carbon tetrachloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Chloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chloroform	1	ug/L	U	1			EPA-624	GEL	/ X /
Chloromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromomethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Ethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Iodomethane	5	ug/L	UY2	5			EPA-624	GEL	/ X /
m,p-Xylene	2	ug/L	U	2			EPA-624	GEL	/ X /
Methylene chloride	2	ug/L	UY2	2			EPA-624	GEL	/ X /
Styrene	1	ug/L	U	1			EPA-624	GEL	/ X /
Tetrachloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
Toluene	1	ug/L	U	1			EPA-624	GEL	/ X /
Total Xylene	3	ug/L	U	3			EPA-624	GEL	/ X /
trans-1,2-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624	GEL	/ X /
Trichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
Trichlorofluoromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Vinyl acetate	5	ug/L	UY2	5			EPA-624	GEL	/ X /
Vinyl chloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
WETCHEM									
Carbonaceous Biochemical Oxygen Demand (CBOD)	2.78	mg/L	X	2			SM-5210 B 17	GEL	/ X /

Chemical Oxygen Demand (COD)	20.1	mg/L	B	20	EPA-410.4	GEL	S / X /
Cyanide	0.2	mg/L	U	0.2	SW846-9012B	GEL	/ X /
Dissolved Solids	537	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	440	mg/L		2	EPA-130.2	GEL	/ X /
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/ X /
Suspended Solids	2.58	mg/L	U	2.58	EPA-160.2	GEL	/ X /
Total Organic Carbon (TOC)	3.96	mg/L		2	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	31.9	ug/L		10	SW846-9020B	GEL	/ X /

SLS17-01-02 from: C-746-S on 2/27/2017 Media: WW SmpMethod: GR

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
ANION										
Bromide	1.06	mg/L			0.2			SW846-9056	GEL	/ X /
Chloride	27.7	mg/L	B		1			SW846-9056	GEL	/ X /
Fluoride	0.301	mg/L			0.1			SW846-9056	GEL	/ X /
Nitrate as Nitrogen	0.5	mg/L	U		0.5			SW846-9056	GEL	/ X /
Sulfate	1.37	mg/L			0.4			SW846-9056	GEL	S / X /
FS										
Conductivity	1263	umho/cm						FS	FS	/ /
Dissolved Oxygen	6.98	mg/L						FS	FS	/ /
pH	6.34	Std Unit						FS	FS	/ /
Redox	177	mV						FS	FS	/ /
Temperature	53.7	deg F						FS	FS	/ /
METAL										
Aluminum	0.05	mg/L	U		0.05			SW846-6020	GEL	/ X /
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic	0.00802	mg/L			0.005			SW846-6020	GEL	/ X /
Barium	0.667	mg/L			0.002			SW846-6020	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/ X /
Boron	0.0405	mg/L			0.015			SW846-6020	GEL	S / X /
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Calcium	133	mg/L			2			SW846-6020	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Cobalt	0.000447	mg/L	J		0.001			SW846-6020	GEL	S / X /
Copper	0.000612	mg/L	J		0.001			SW846-6020	GEL	S / X /
Iron	99.7	mg/L			1			SW846-6020	GEL	/ X /
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Magnesium	24.9	mg/L			0.03			SW846-6020	GEL	/ X /
Manganese	1.88	mg/L			0.05			SW846-6020	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/ X /
Molybdenum	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/ X /
Nickel	0.00318	mg/L			0.002			SW846-6020	GEL	S / X /
Phosphorous	0.32	mg/L			0.05			EPA-365.4	GEL	/ X /
Potassium	5.29	mg/L			0.3			SW846-6020	GEL	/ X /
Rhodium	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Selenium	0.00627	mg/L			0.005			SW846-6020	GEL	/ X /
Silver	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Sodium	42.1	mg/L			0.25			SW846-6020	GEL	/ X /
Tantalum	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Thallium	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Tin	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Titanium	0.00971	mg/L	J		0.01			SW846-6020	GEL	/ X /
Uranium	0.000351	mg/L			0.0002			SW846-6020	GEL	S / X /
Vanadium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Zinc	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic, Dissolved	0.0038	mg/L	J		0.005			SW846-6020	GEL	/ X /
Barium, Dissolved	0.452	mg/L			0.002			SW846-6020	GEL	S / X /
Cadmium, Dissolved	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Chromium, Dissolved	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /

*Verification/Validation/Assessment

Cobalt, Dissolved	0.00042	mg/L	J	0.001			SW846-6020	GEL	S / X /
Copper, Dissolved	0.000819	mg/L	J	0.001			SW846-6020	GEL	S / X /
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/ X /
Manganese, Dissolved	1.87	mg/L		0.05			SW846-6020	GEL	/ X /
Nickel, Dissolved	0.00331	mg/L		0.002			SW846-6020	GEL	S / X /
Selenium, Dissolved	0.00598	mg/L		0.005			SW846-6020	GEL	S / X /
Silver, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/ X /
Tin, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ X /
Titanium, Dissolved	0.00909	mg/L	J	0.01			SW846-6020	GEL	S / X /
Uranium, Dissolved	0.000321	mg/L		0.0002			SW846-6020	GEL	S / X /
Vanadium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X /
Zinc, Dissolved	0.00664	mg/L	J	0.01			SW846-6020	GEL	S / X /
OTHOR									
Oil and Grease	4.27	mg/L	U	4.27			EPA-1664A	GEL	/ X /
PPCB									
PCB-1016	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
PCB-1221	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
PCB-1232	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
PCB-1242	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
PCB-1248	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
PCB-1254	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
PCB-1260	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
PCB-1268	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
Polychlorinated biphenyl	0.0962	ug/L	U	0.0962			SW846-8082	GEL	/ X /
RADS									
Alpha activity	-7.08	pCi/L	U	14	5.15	5.15	SW846-9310	GEL	/ X /
Americium-241	0	pCi/L	U	0.683	0.459	0.46	HASL 300, AM-05-RC M	GEL	/ X /
Beta activity	3.37	pCi/L	U	6.94	4.12	4.16	SW846-9310	GEL	/ X /
Cesium-137	-0.982	pCi/L	U	4.2	2.34	2.38	EPA-901.1	GEL	/ X /
Cobalt-60	-0.925	pCi/L	U	4.41	2.34	2.38	EPA-901.1	GEL	/ X /
Dissolved Alpha	0.127	pCi/L	U	2.99	1.61	1.61	SW846-9310	GEL	/ X /
Dissolved Beta	4.46	pCi/L		1.35	0.983	1.23	SW846-9310	GEL	/ X /
Neptunium-237	-0.0367	pCi/L	U	1.29	0.551	0.551	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240	0.627	pCi/L	U	1.38	0.996	1	HASL 300, Pu-11-RC M	GEL	/ X /
Radium-226	2.15	pCi/L		0.736	1.19	1.19	AN-1418	GEL	S / X /
Strontium-90	-0.72	pCi/L	U	5.49	2.92	2.92	EPA-905.0-M	GEL	/ X /
Technetium-99	6.53	pCi/L	U	18.8	11.1	11.1	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230	-0.26	pCi/L	U	2.15	0.799	0.802	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234	28.4	pCi/L	U	159	168	168	EPA-901.1	GEL	/ X /
Tritium	36.3	pCi/L	U	214	116	116	EPA-906.0-M	GEL	/ X /
Uranium	0.148	pCi/L	U	3.37	1.58	1.59	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	0.134	pCi/L	U	1.91	0.95	0.952	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	-0.0498	pCi/L	U	1.74	0.824	0.828	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	0.0134	pCi/L	U	2.15	0.96	0.961	HASL 300, U-02-RC M	GEL	/ X /
RADS-D									
Americium-241, Dissolved	0.107	pCi/L	U	1.14	0.593	0.594	HASL 300, AM-05-RC M	GEL	/ X /
Cesium-137, Dissolved	6.74	pCi/L	U	9.73	6.8	6.8	EPA-901.1	GEL	/ X /
Cobalt-60, Dissolved	-1.67	pCi/L	U	7.52	4.1	4.17	EPA-901.1	GEL	/ X /
Neptunium-237, Dissolved	0.16	pCi/L	U	1.41	0.719	0.719	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240, Dissolved	0.292	pCi/L	U	1.85	0.997	0.998	HASL 300, Pu-11-RC M	GEL	/ X /
Technetium-99, Dissolved	-8.15	pCi/L	U	18	10	10	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230, Dissolved	0.458	pCi/L	U	2.48	1.34	1.35	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234, Dissolved	-47.5	pCi/L	U	376	217	218	EPA-901.1	GEL	/ X /
Uranium, Dissolved	3.17	pCi/L	U	3.78	3.07	3.09	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234, Dissolved	0.788	pCi/L	U	2.11	1.53	1.54	HASL 300, U-02-RC M	GEL	/ X /

Uranium-235, Dissolved	1.59	pCi/L	U	2.33	2.18	2.2	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238, Dissolved	0.788	pCi/L	U	2.11	1.53	1.54	HASL 300, U-02-RC M	GEL	/ X /
VOA									
1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,1-Trichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1-Dichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dibromo-3-chloropropane	0.0197	ug/L	U	0.0197			SW846-8011	GEL	/ X /
1,2-Dibromoethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,4-Dichlorobenzene	2.8	ug/L		1			EPA-624	GEL	S / X /
2-Butanone	5	ug/L	U	5			EPA-624	GEL	/ X /
2-Hexanone	5	ug/L	UY1	5			EPA-624	GEL	/ X /
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624	GEL	/ X /
Acetone	4.07	ug/L	JY2	5			EPA-624	GEL	S / X /
Acrolein	5	ug/L	U	5			EPA-624	GEL	/ X /
Acrylonitrile	5	ug/L	U	5			EPA-624	GEL	/ X /
Benzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromodichloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromoform	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromomethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Carbon disulfide	5	ug/L	UY1Y2	5			EPA-624	GEL	/ X /
Carbon tetrachloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chlorobenzene	1.4	ug/L		1			EPA-624	GEL	S / X /
Chloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chloroform	1	ug/L	U	1			EPA-624	GEL	/ X /
Chloromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromomethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Ethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Iodomethane	5	ug/L	UY2	5			EPA-624	GEL	/ X /
m,p-Xylene	2	ug/L	U	2			EPA-624	GEL	/ X /
Methylene chloride	2	ug/L	UY2	2			EPA-624	GEL	/ X /
Styrene	1	ug/L	U	1			EPA-624	GEL	/ X /
Tetrachloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
Toluene	1	ug/L	U	1			EPA-624	GEL	/ X /
Total Xylene	3	ug/L	U	3			EPA-624	GEL	/ X /
trans-1,2-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624	GEL	/ X /
Trichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
Trichlorofluoromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Vinyl acetate	5	ug/L	UY2	5			EPA-624	GEL	/ X /
Vinyl chloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
WETCHEM									
Carbonaceous Biochemical Oxygen Demand (CBOD)	15.4	mg/L	X	2			SM-5210 B 17	GEL	/ X /

Chemical Oxygen Demand (COD)	56.3	mg/L	B	20	EPA-410.4	GEL	/ X /
Cyanide	0.2	mg/L	U	0.2	SW846-9012B	GEL	/ X /
Dissolved Solids	533	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	460	mg/L		10	EPA-130.2	GEL	/ X /
Iodide	1.46	mg/L		0.5	EPA-300.0	GEL	S / X /
Suspended Solids	77.6	mg/L		2.5	EPA-160.2	GEL	/ X /
Total Organic Carbon (TOC)	11.5	mg/L		2	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	31.3	ug/L		10	SW846-9020B	GEL	/ X /

FBSLS17-01 from: QC on 2/27/2017 Media: WQ SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
ANION										
Bromide	0.2	mg/L	U		0.2			SW846-9056	GEL	/ X /
Chloride	0.122	mg/L	BJ		0.2			SW846-9056	GEL	/ X /
Fluoride	0.1	mg/L	U		0.1			SW846-9056	GEL	/ X /
Nitrate as Nitrogen	0.1	mg/L	U		0.1			SW846-9056	GEL	/ X /
Sulfate	0.4	mg/L	U		0.4			SW846-9056	GEL	/ X /
METAL										
Aluminum	0.05	mg/L	U		0.05			SW846-6020	GEL	/ X /
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Barium	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/ X /
Boron	0.015	mg/L	U		0.015			SW846-6020	GEL	/ X /
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Calcium	0.132	mg/L	J		0.2			SW846-6020	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Cobalt	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Copper	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Iron	0.1	mg/L	U		0.1			SW846-6020	GEL	/ X /
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Magnesium	0.03	mg/L	U		0.03			SW846-6020	GEL	/ X /
Manganese	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/ X /
Molybdenum	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/ X /
Nickel	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Phosphorous	0.0768	mg/L			0.05			EPA-365.4	GEL	/ X /
Potassium	0.3	mg/L	U		0.3			SW846-6020	GEL	/ X /
Rhodium	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Selenium	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Silver	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Sodium	0.25	mg/L	U		0.25			SW846-6020	GEL	/ X /
Tantalum	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Thallium	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Tin	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Titanium	0.00372	mg/L	J		0.01			SW846-6020	GEL	/ X /
Uranium	0.0002	mg/L	U		0.0002			SW846-6020	GEL	/ X /
Vanadium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Zinc	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
OTHOR										
Oil and Grease	4.1	mg/L	U		4.1			EPA-1664A	GEL	/ X /
PPCB										
PCB-1016	0.0962	ug/L	UY2		0.0962			SW846-8082	GEL	/ X /
PCB-1221	0.0962	ug/L	U		0.0962			SW846-8082	GEL	/ X /
PCB-1232	0.0962	ug/L	U		0.0962			SW846-8082	GEL	/ X /
PCB-1242	0.0962	ug/L	U		0.0962			SW846-8082	GEL	/ X /
PCB-1248	0.0962	ug/L	U		0.0962			SW846-8082	GEL	/ X /
PCB-1254	0.0962	ug/L	U		0.0962			SW846-8082	GEL	/ X /
PCB-1260	0.0962	ug/L	UY2		0.0962			SW846-8082	GEL	/ X /
PCB-1268	0.0962	ug/L	U		0.0962			SW846-8082	GEL	/ X /
Polychlorinated biphenyl	0.0962	ug/L	UY2		0.0962			SW846-8082	GEL	/ X /

*Verification/Validation/Assessment

RADS									
Alpha activity	-1.33	pCi/L	U	7.67	2.69	2.7	SW846-9310	GEL	/ X /
Americium-241	0.135	pCi/L	U	0.854	0.508	0.508	HASL 300, AM-05-RC M	GEL	/ X /
Beta activity	5.61	pCi/L	U	7.21	4.62	4.71	SW846-9310	GEL	/ X /
Cesium-137	0.336	pCi/L	U	2.33	1.29	1.3	EPA-901.1	GEL	/ X /
Cobalt-60	0.153	pCi/L	U	2.36	1.26	1.26	EPA-901.1	GEL	/ X /
Neptunium-237	0.224	pCi/L	U	1.07	0.617	0.618	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240	-0.223	pCi/L	U	1.96	0.755	0.756	HASL 300, Pu-11-RC M	GEL	/ X /
Radium-226	0.184	pCi/L	U	1.05	0.56	0.56	AN-1418	GEL	/ X /
Strontium-90	-1.07	pCi/L	U	4.45	2.15	2.15	EPA-905.0-M	GEL	/ X /
Technetium-99	-2.18	pCi/L	U	17.6	10	10	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230	0.011	pCi/L	U	1.22	0.554	0.556	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234	0	pCi/L	UX	149	161	179	EPA-901.1	GEL	/ X /
Tritium	61	pCi/L	U	216	121	122	EPA-906.0-M	GEL	/ X /
Uranium	1.26	pCi/L	U	3.46	2.21	2.22	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	-0.0525	pCi/L	U	1.84	0.869	0.874	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	-0.0649	pCi/L	U	2.27	1.07	1.08	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	1.26	pCi/L	U	1.84	1.72	1.74	HASL 300, U-02-RC M	GEL	/ X /
VOA									
1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,1-Trichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1-Dichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dibromo-3-chloropropane	0.0198	ug/L	U	0.0198			SW846-8011	GEL	/ X /
1,2-Dibromoethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
2-Butanone	5	ug/L	U	5			EPA-624	GEL	/ X /
2-Hexanone	5	ug/L	UY1	5			EPA-624	GEL	/ X /
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624	GEL	/ X /
Acetone	8.23	ug/L	Y2	5			EPA-624	GEL	/ X /
Acrolein	5	ug/L	U	5			EPA-624	GEL	/ X /
Acrylonitrile	5	ug/L	U	5			EPA-624	GEL	/ X /
Benzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromodichloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromoform	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromomethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Carbon disulfide	5	ug/L	UY1Y2	5			EPA-624	GEL	/ X /
Carbon tetrachloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chlorobenzene	0.48	ug/L	J	1			EPA-624	GEL	/ X /
Chloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chloroform	0.4	ug/L	J	1			EPA-624	GEL	/ X /
Chloromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromomethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Ethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Iodomethane	5	ug/L	UY2	5			EPA-624	GEL	/ X /

m,p-Xylene	2	ug/L	U	2	EPA-624	GEL	/ X /
Methylene chloride	2	ug/L	UY2	2	EPA-624	GEL	/ X /
Styrene	1	ug/L	U	1	EPA-624	GEL	/ X /
Tetrachloroethene	1	ug/L	U	1	EPA-624	GEL	/ X /
Toluene	1	ug/L	U	1	EPA-624	GEL	/ X /
Total Xylene	3	ug/L	U	3	EPA-624	GEL	/ X /
trans-1,2-Dichloroethene	1	ug/L	UY2	1	EPA-624	GEL	/ X /
trans-1,3-Dichloropropene	1	ug/L	U	1	EPA-624	GEL	/ X /
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5	EPA-624	GEL	/ X /
Trichloroethene	1	ug/L	U	1	EPA-624	GEL	/ X /
Trichlorofluoromethane	1	ug/L	UY2	1	EPA-624	GEL	/ X /
Vinyl acetate	5	ug/L	UY2	5	EPA-624	GEL	/ X /
Vinyl chloride	1	ug/L	UY2	1	EPA-624	GEL	/ X /
WETCHEM							
Chemical Oxygen Demand (COD)	11.5	mg/L	BJ	20	EPA-410.4	GEL	/ X /
Hardness - Total as CaCO3	5.52	mg/L		2	EPA-130.2	GEL	/ X /
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/ X /
Total Organic Carbon (TOC)	1.29	mg/L	J	2	SW846-9060A	GEL	/ X /

Paducah OREIS Report for SLS17-01

TBSLS17-01 from: QC on 2/27/2017 Media: WQ SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
VOA										
1,1,1,2-Tetrachloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,1,1-Trichloroethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
1,1,2,2-Tetrachloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,1,2-Trichloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,1-Dichloroethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
1,1-Dichloroethene	1	ug/L	UY2		1			EPA-624	GEL	/ X /
1,2,3-Trichloropropane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dibromo-3-chloropropane	0.02	ug/L	U		0.02			SW846-8011	GEL	/ X /
1,2-Dibromoethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dichlorobenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dichloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dichloropropane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dimethylbenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
1,4-Dichlorobenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
2-Butanone	1.71	ug/L	J		5			EPA-624	GEL	/ X /
2-Hexanone	5	ug/L	UY1		5			EPA-624	GEL	/ X /
4-Methyl-2-pentanone	5	ug/L	U		5			EPA-624	GEL	/ X /
Acetone	8.07	ug/L	Y2		5			EPA-624	GEL	/ X /
Acrolein	5	ug/L	U		5			EPA-624	GEL	/ X /
Acrylonitrile	5	ug/L	U		5			EPA-624	GEL	/ X /
Benzene	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromochloromethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromodichloromethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromoform	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromomethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Carbon disulfide	5	ug/L	UY1Y2		5			EPA-624	GEL	/ X /
Carbon tetrachloride	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Chlorobenzene	0.58	ug/L	J		1			EPA-624	GEL	/ X /
Chloroethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Chloroform	1	ug/L	U		1			EPA-624	GEL	/ X /
Chloromethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
cis-1,2-Dichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
cis-1,3-Dichloropropene	1	ug/L	U		1			EPA-624	GEL	/ X /
Dibromochloromethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Dibromomethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Ethylbenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
Iodomethane	5	ug/L	UY2		5			EPA-624	GEL	/ X /
m,p-Xylene	2	ug/L	U		2			EPA-624	GEL	/ X /
Methylene chloride	2	ug/L	UY2		2			EPA-624	GEL	/ X /
Styrene	1	ug/L	U		1			EPA-624	GEL	/ X /
Tetrachloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
Toluene	1	ug/L	U		1			EPA-624	GEL	/ X /
Total Xylene	3	ug/L	U		3			EPA-624	GEL	/ X /
trans-1,2-Dichloroethene	1	ug/L	UY2		1			EPA-624	GEL	/ X /
trans-1,3-Dichloropropene	1	ug/L	U		1			EPA-624	GEL	/ X /
Trans-1,4-Dichloro-2-butene	5	ug/L	U		5			EPA-624	GEL	/ X /
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
Trichlorofluoromethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Vinyl acetate	5	ug/L	UY2		5			EPA-624	GEL	/ X /
Vinyl chloride	1	ug/L	UY2		1			EPA-624	GEL	/ X /

*Verification/Validation/Assessment

Paducah OREIS Report for ULS17-01

ULS17-01-01 from: C-746-U on 2/27/2017 Media: WW SmpMethod: GR

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
ANION										
Bromide	0.27	mg/L			0.2			SW846-9056	GEL	/ X /
Chloride	47.8	mg/L	B		1			SW846-9056	GEL	/ X /
Fluoride	0.637	mg/L			0.1			SW846-9056	GEL	/ X /
Nitrate as Nitrogen	3.29	mg/L			0.5			SW846-9056	GEL	/ X /
Sulfate	231	mg/L			8			SW846-9056	GEL	/ X /
FS										
Conductivity	1301	umho/cm						FS	FS	/ /
Dissolved Oxygen	6.51	mg/L						FS	FS	/ /
pH	7.1	Std Unit						FS	FS	/ /
Redox	165	mV						FS	FS	/ /
Temperature	58	deg F						FS	FS	/ /
METAL										
Aluminum	9.76	mg/L			0.05			SW846-6020	GEL	/ X /
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic	0.0079	mg/L			0.005			SW846-6020	GEL	/ X /
Barium	0.205	mg/L			0.002			SW846-6020	GEL	S / X /
Beryllium	0.00532	mg/L			0.0005			SW846-6020	GEL	I / X /
Boron	0.961	mg/L			0.15			SW846-6020	GEL	/ X /
Cadmium	0.000413	mg/L	J		0.001			SW846-6020	GEL	S / X /
Calcium	154	mg/L			2			SW846-6020	GEL	/ X /
Chromium	0.011	mg/L			0.01			SW846-6020	GEL	/ X /
Cobalt	0.012	mg/L	E		0.001			SW846-6020	GEL	/ X /
Copper	0.01	mg/L			0.001			SW846-6020	GEL	/ X /
Iron	8.3	mg/L	E		0.1			SW846-6020	GEL	/ X /
Lead	0.00758	mg/L			0.002			SW846-6020	GEL	/ X /
Magnesium	36.3	mg/L	E		0.03			SW846-6020	GEL	/ X /
Manganese	0.65	mg/L	E		0.005			SW846-6020	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/ X /
Molybdenum	0.000543	mg/L			0.0005			SW846-6020	GEL	S / X /
Nickel	0.0237	mg/L			0.002			SW846-6020	GEL	/ X /
Phosphorous	0.917	mg/L			0.05			EPA-365.4	GEL	/ X /
Potassium	4.65	mg/L			0.3			SW846-6020	GEL	/ X /
Rhodium	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Selenium	0.00387	mg/L	J		0.005			SW846-6020	GEL	S / X /
Silver	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Sodium	107	mg/L			2.5			SW846-6020	GEL	/ X /
Tantalum	0.005	mg/L	UN		0.005			SW846-6020	GEL	/ X / U,J
Thallium	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Tin	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Titanium	0.0899	mg/L			0.01			SW846-6020	GEL	/ X /
Uranium	0.145	mg/L			0.002			SW846-6020	GEL	I / X /
Vanadium	0.0221	mg/L			0.01			SW846-6020	GEL	/ X /
Zinc	0.185	mg/L			0.1			SW846-6020	GEL	/ X /
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic, Dissolved	0.00239	mg/L	J		0.005			SW846-6020	GEL	/ X /
Barium, Dissolved	0.118	mg/L			0.002			SW846-6020	GEL	/ X /
Cadmium, Dissolved	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Chromium, Dissolved	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /

*Verification/Validation/Assessment

Cobalt, Dissolved	0.00083	mg/L	JE	0.001			SW846-6020	GEL	S / X /
Copper, Dissolved	0.00157	mg/L		0.001			SW846-6020	GEL	S / X /
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/ X /
Manganese, Dissolved	0.0241	mg/L	E	0.005			SW846-6020	GEL	/ X /
Nickel, Dissolved	0.00573	mg/L		0.002			SW846-6020	GEL	S / X /
Selenium, Dissolved	0.0033	mg/L	J	0.005			SW846-6020	GEL	S / X /
Silver, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/ X /
Tin, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ X /
Titanium, Dissolved	0.00259	mg/L	J	0.01			SW846-6020	GEL	S / X /
Uranium, Dissolved	0.137	mg/L		0.002			SW846-6020	GEL	/ X /
Vanadium, Dissolved	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X /
Zinc, Dissolved	0.00804	mg/L	J	0.01			SW846-6020	GEL	S / X /
OTHOR									
Oil and Grease	4.1	mg/L	XU	4.1			EPA-1664A	GEL	/ X / R-C.?
PPCB									
PCB-1016	0.0962	ug/L	SUY2	0.0962			SW846-8082	GEL	/ X /
PCB-1221	0.0962	ug/L	SU	0.0962			SW846-8082	GEL	/ X /
PCB-1232	0.0962	ug/L	SU	0.0962			SW846-8082	GEL	/ X /
PCB-1242	0.0962	ug/L	SU	0.0962			SW846-8082	GEL	/ X /
PCB-1248	0.0962	ug/L	SU	0.0962			SW846-8082	GEL	/ X /
PCB-1254	0.0962	ug/L	SU	0.0962			SW846-8082	GEL	/ X /
PCB-1260	0.0962	ug/L	SUY2	0.0962			SW846-8082	GEL	/ X /
PCB-1268	0.0962	ug/L	SU	0.0962			SW846-8082	GEL	/ X /
Polychlorinated biphenyl	0.0962	ug/L	SUY2	0.0962			SW846-8082	GEL	/ X /
RADS									
Alpha activity	92.6	pCi/L		14.6	20.2	25.2	SW846-9310	GEL	I / X /
Americium-241	0	pCi/L	U	0.602	0.404	0.405	HASL 300, AM-05-RC M	GEL	/ X /
Beta activity	64.7	pCi/L		5.64	7.79	13.5	SW846-9310	GEL	/ X /
Cesium-137	-0.326	pCi/L	U	1.82	1.03	1.04	EPA-901.1	GEL	/ X /
Cobalt-60	-1.64	pCi/L	U	1.91	1.47	1.65	EPA-901.1	GEL	/ X /
Dissolved Alpha	72.1	pCi/L		2.87	5.21	12.9	SW846-9310	GEL	/ X /
Dissolved Beta	20	pCi/L		1.95	1.67	3.72	SW846-9310	GEL	/ X /
Neptunium-237	-0.261	pCi/L	U	1.34	0.42	0.421	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240	0.317	pCi/L	U	1.51	0.872	0.873	HASL 300, Pu-11-RC M	GEL	/ X /
Radium-226	0.878	pCi/L	U	0.932	0.812	0.813	AN-1418	GEL	/ X /
Strontium-90	30	pCi/L		2.23	3.73	6	EPA-905.0-M	GEL	S / X /
Technetium-99	22.8	pCi/L		21.1	13.1	13.3	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230	0.737	pCi/L	U	2.12	1.31	1.33	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234	31.2	pCi/L	U	90.5	110	110	EPA-901.1	GEL	/ X /
Tritium	88.4	pCi/L	U	224	129	130	EPA-906.0-M	GEL	/ X /
Uranium	77	pCi/L		3.73	12.5	17.9	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	15.7	pCi/L		2.4	5.65	6.52	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	1.26	pCi/L	U	1.89	2.14	2.16	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	60	pCi/L		2.14	10.9	16.6	HASL 300, U-02-RC M	GEL	/ X /
RADS-D									
Americium-241, Dissolved	-0.0512	pCi/L	U	1.02	0.441	0.442	HASL 300, AM-05-RC M	GEL	/ X /
Cesium-137, Dissolved	0.0124	pCi/L	U	7.7	3.9	3.9	EPA-901.1	GEL	/ X /
Cobalt-60, Dissolved	-0.141	pCi/L	U	9.67	4.73	4.73	EPA-901.1	GEL	/ X /
Neptunium-237, Dissolved	0.159	pCi/L	U	1.39	0.713	0.713	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240, Dissolved	-0.06	pCi/L	U	2.1	0.901	0.902	HASL 300, Pu-11-RC M	GEL	/ X /
Technetium-99, Dissolved	32.6	pCi/L		20.7	13.3	13.7	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230, Dissolved	0.436	pCi/L	U	2.11	1.17	1.18	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234, Dissolved	126	pCi/L	U	315	365	366	EPA-901.1	GEL	/ X /
Uranium, Dissolved	54.5	pCi/L		3.35	8.85	12	HASL 300, U-02-RC M	GEL	S / X /
Uranium-234, Dissolved	10.7	pCi/L		1.96	3.96	4.4	HASL 300, U-02-RC M	GEL	/ X /

Uranium-235, Dissolved	0.341	pCi/L	U	2.11	1.26	1.26	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238, Dissolved	43.4	pCi/L		1.71	7.82	11.1	HASL 300, U-02-RC M	GEL	/ X /
VOA									
1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,1-Trichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1-Dichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dibromo-3-chloropropane	0.0197	ug/L	U	0.0197			SW846-8011	GEL	/ X /
1,2-Dibromoethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
2-Butanone	5	ug/L	U	5			EPA-624	GEL	/ X /
2-Hexanone	5	ug/L	UY1	5			EPA-624	GEL	/ X /
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624	GEL	/ X /
Acetone	5	ug/L	UY2	5			EPA-624	GEL	/ X /
Acrolein	5	ug/L	U	5			EPA-624	GEL	/ X /
Acrylonitrile	5	ug/L	U	5			EPA-624	GEL	/ X /
Benzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromodichloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromoform	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromomethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Carbon disulfide	5	ug/L	UY1Y2	5			EPA-624	GEL	/ X /
Carbon tetrachloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Chloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chloroform	1	ug/L	U	1			EPA-624	GEL	/ X /
Chloromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromomethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Ethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Iodomethane	5	ug/L	UY2	5			EPA-624	GEL	/ X /
m,p-Xylene	2	ug/L	U	2			EPA-624	GEL	/ X /
Methylene chloride	2	ug/L	UY2	2			EPA-624	GEL	/ X /
Styrene	1	ug/L	U	1			EPA-624	GEL	/ X /
Tetrachloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
Toluene	1	ug/L	U	1			EPA-624	GEL	/ X /
Total Xylene	3	ug/L	U	3			EPA-624	GEL	/ X /
trans-1,2-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624	GEL	/ X /
Trichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
Trichlorofluoromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Vinyl acetate	5	ug/L	UY2	5			EPA-624	GEL	/ X /
Vinyl chloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
WETCHEM									
Carbonaceous Biochemical Oxygen Demand (CBOD)	93.3	mg/L	JX	120			SM-5210 B 17	GEL	/ X /

Chemical Oxygen Demand (COD)	40.8	mg/L	B	20	EPA-410.4	GEL	/ X /
Cyanide	0.005	mg/L	U	0.005	SW846-9012B	GEL	/ X /
Dissolved Solids	841	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	506	mg/L		2	EPA-130.2	GEL	/ X /
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/ X /
Suspended Solids	764	mg/L		25	EPA-160.2	GEL	/ X /
Total Organic Carbon (TOC)	8.97	mg/L		5	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	61.2	ug/L		10	SW846-9020B	GEL	/ X /

Paducah OREIS Report for ULS17-01

FBULS17-01 from: QC on 2/27/2017 Media: WQ SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
ANION										
Bromide	0.2	mg/L	U		0.2			SW846-9056	GEL	/ X /
Chloride	0.0855	mg/L	BJ		0.2			SW846-9056	GEL	/ X /
Fluoride	0.1	mg/L	U		0.1			SW846-9056	GEL	/ X /
Nitrate as Nitrogen	0.1	mg/L	U		0.1			SW846-9056	GEL	/ X /
Sulfate	0.4	mg/L	U		0.4			SW846-9056	GEL	/ X /
METAL										
Aluminum	0.05	mg/L	U		0.05			SW846-6020	GEL	/ X /
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/ X /
Arsenic	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Barium	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/ X /
Boron	0.015	mg/L	U		0.015			SW846-6020	GEL	/ X /
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Calcium	0.133	mg/L	J		0.2			SW846-6020	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Cobalt	0.001	mg/L	UE		0.001			SW846-6020	GEL	/ X /
Copper	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Iron	0.1	mg/L	UE		0.1			SW846-6020	GEL	/ X /
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Magnesium	0.03	mg/L	UE		0.03			SW846-6020	GEL	/ X /
Manganese	0.005	mg/L	UE		0.005			SW846-6020	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/ X /
Molybdenum	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/ X /
Nickel	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Phosphorous	0.0814	mg/L			0.05			EPA-365.4	GEL	/ X /
Potassium	0.3	mg/L	U		0.3			SW846-6020	GEL	/ X /
Rhodium	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Selenium	0.00219	mg/L	J		0.005			SW846-6020	GEL	/ X /
Silver	0.001	mg/L	U		0.001			SW846-6020	GEL	/ X /
Sodium	0.25	mg/L	U		0.25			SW846-6020	GEL	/ X /
Tantalum	0.005	mg/L	UN		0.005			SW846-6020	GEL	/ X /
Thallium	0.002	mg/L	U		0.002			SW846-6020	GEL	/ X /
Tin	0.005	mg/L	U		0.005			SW846-6020	GEL	/ X /
Titanium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Uranium	0.0002	mg/L	U		0.0002			SW846-6020	GEL	/ X /
Vanadium	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
Zinc	0.01	mg/L	U		0.01			SW846-6020	GEL	/ X /
OTHOR										
Oil and Grease	4.13	mg/L	U		4.13			EPA-1664A	GEL	/ X /
PPCB										
PCB-1016	0.0971	ug/L	UY2		0.0971			SW846-8082	GEL	/ X /
PCB-1221	0.0971	ug/L	U		0.0971			SW846-8082	GEL	/ X /
PCB-1232	0.0971	ug/L	U		0.0971			SW846-8082	GEL	/ X /
PCB-1242	0.0971	ug/L	U		0.0971			SW846-8082	GEL	/ X /
PCB-1248	0.0971	ug/L	U		0.0971			SW846-8082	GEL	/ X /
PCB-1254	0.0971	ug/L	U		0.0971			SW846-8082	GEL	/ X /
PCB-1260	0.0971	ug/L	UY2		0.0971			SW846-8082	GEL	/ X /
PCB-1268	0.0971	ug/L	U		0.0971			SW846-8082	GEL	/ X /
Polychlorinated biphenyl	0.0971	ug/L	UY2		0.0971			SW846-8082	GEL	/ X /

*Verification/Validation/Assessment

RADS									
Alpha activity	-2.34	pCi/L	U	9.97	3.85	3.85	SW846-9310	GEL	/ X /
Americium-241	-0.0978	pCi/L	U	1.13	0.432	0.433	HASL 300, AM-05-RC M	GEL	/ X /
Beta activity	-3.76	pCi/L	U	11.4	5.7	5.7	SW846-9310	GEL	/ X /
Cesium-137	0.413	pCi/L	U	2.18	1.19	1.2	EPA-901.1	GEL	/ X /
Cobalt-60	-0.448	pCi/L	U	2.81	2.12	2.13	EPA-901.1	GEL	/ X /
Neptunium-237	-0.135	pCi/L	U	1.15	0.408	0.408	Alpha Spectroscopy	GEL	/ X /
Plutonium-239/240	-0.259	pCi/L	U	2.99	1.15	1.15	HASL 300, Pu-11-RC M	GEL	/ X /
Radium-226	0.355	pCi/L	U	0.928	0.591	0.591	AN-1418	GEL	/ X /
Strontium-90	-0.704	pCi/L	U	4.64	2.26	2.26	EPA-905.0-M	GEL	/ X /
Technetium-99	-12.8	pCi/L	U	17.7	9.68	9.68	HASL 300, Tc-02-RC M	GEL	/ X /
Thorium-230	0.661	pCi/L	U	2.09	1.26	1.28	HASL 300, Th-01-RC M	GEL	/ X /
Thorium-234	155	pCi/L	U	181	191	207	EPA-901.1	GEL	/ X /
Tritium	161	pCi/L	U	223	140	143	EPA-906.0-M	GEL	/ X /
Uranium	2.56	pCi/L	U	4.6	3.14	3.15	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	1.14	pCi/L	U	2.98	1.99	2	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	0.544	pCi/L	U	2.6	1.73	1.73	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	0.88	pCi/L	U	2.35	1.71	1.72	HASL 300, U-02-RC M	GEL	/ X /
VOA									
1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,1-Trichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,1-Dichloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,1-Dichloroethene	1	ug/L	UY2	1			EPA-624	GEL	/ X /
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dibromo-3-chloropropane	0.0198	ug/L	U	0.0198			SW846-8011	GEL	/ X /
1,2-Dibromoethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloroethane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dichloropropane	1	ug/L	U	1			EPA-624	GEL	/ X /
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
2-Butanone	5	ug/L	U	5			EPA-624	GEL	/ X /
2-Hexanone	5	ug/L	UY1	5			EPA-624	GEL	/ X /
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624	GEL	/ X /
Acetone	8.16	ug/L	Y2	5			EPA-624	GEL	/ X /
Acrolein	5	ug/L	U	5			EPA-624	GEL	/ X /
Acrylonitrile	5	ug/L	U	5			EPA-624	GEL	/ X /
Benzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromodichloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromoform	1	ug/L	U	1			EPA-624	GEL	/ X /
Bromomethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Carbon disulfide	5	ug/L	UY1Y2	5			EPA-624	GEL	/ X /
Carbon tetrachloride	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chlorobenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Chloroethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
Chloroform	0.36	ug/L	J	1			EPA-624	GEL	/ X /
Chloromethane	1	ug/L	UY2	1			EPA-624	GEL	/ X /
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624	GEL	/ X /
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromochloromethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Dibromomethane	1	ug/L	U	1			EPA-624	GEL	/ X /
Ethylbenzene	1	ug/L	U	1			EPA-624	GEL	/ X /
Iodomethane	5	ug/L	UY2	5			EPA-624	GEL	/ X /

m,p-Xylene	2	ug/L	U	2	EPA-624	GEL	/ X /
Methylene chloride	2	ug/L	UY2	2	EPA-624	GEL	/ X /
Styrene	1	ug/L	U	1	EPA-624	GEL	/ X /
Tetrachloroethene	1	ug/L	U	1	EPA-624	GEL	/ X /
Toluene	1	ug/L	U	1	EPA-624	GEL	/ X /
Total Xylene	3	ug/L	U	3	EPA-624	GEL	/ X /
trans-1,2-Dichloroethene	1	ug/L	UY2	1	EPA-624	GEL	/ X /
trans-1,3-Dichloropropene	1	ug/L	U	1	EPA-624	GEL	/ X /
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5	EPA-624	GEL	/ X /
Trichloroethene	1	ug/L	U	1	EPA-624	GEL	/ X /
Trichlorofluoromethane	1	ug/L	UY2	1	EPA-624	GEL	/ X /
Vinyl acetate	5	ug/L	UY2	5	EPA-624	GEL	/ X /
Vinyl chloride	1	ug/L	UY2	1	EPA-624	GEL	/ X /
WETCHEM							
Chemical Oxygen Demand (COD)	14.9	mg/L	BJ	20	EPA-410.4	GEL	/ X /
Hardness - Total as CaCO3	1.84	mg/L	J	2	EPA-130.2	GEL	/ X /
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/ X /
Total Organic Carbon (TOC)	1.12	mg/L	J	2	SW846-9060A	GEL	/ X /

Paducah OREIS Report for ULS17-01

TBULS17-01 from: QC on 2/27/2017 Media: WQ SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
VOA										
1,1,1,2-Tetrachloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,1,1-Trichloroethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
1,1,2,2-Tetrachloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,1,2-Trichloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,1-Dichloroethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
1,1-Dichloroethene	1	ug/L	UY2		1			EPA-624	GEL	/ X /
1,2,3-Trichloropropane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dibromo-3-chloropropane	0.0196	ug/L	U		0.0196			SW846-8011	GEL	/ X /
1,2-Dibromoethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dichlorobenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dichloroethane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dichloropropane	1	ug/L	U		1			EPA-624	GEL	/ X /
1,2-Dimethylbenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
1,4-Dichlorobenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
2-Butanone	5	ug/L	U		5			EPA-624	GEL	/ X /
2-Hexanone	5	ug/L	UY1		5			EPA-624	GEL	/ X /
4-Methyl-2-pentanone	5	ug/L	U		5			EPA-624	GEL	/ X /
Acetone	7.58	ug/L	Y2		5			EPA-624	GEL	/ X /
Acrolein	5	ug/L	U		5			EPA-624	GEL	/ X /
Acrylonitrile	5	ug/L	U		5			EPA-624	GEL	/ X /
Benzene	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromochloromethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromodichloromethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromoform	1	ug/L	U		1			EPA-624	GEL	/ X /
Bromomethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Carbon disulfide	5	ug/L	UY1Y2		5			EPA-624	GEL	/ X /
Carbon tetrachloride	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Chlorobenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
Chloroethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Chloroform	1	ug/L	U		1			EPA-624	GEL	/ X /
Chloromethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
cis-1,2-Dichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
cis-1,3-Dichloropropene	1	ug/L	U		1			EPA-624	GEL	/ X /
Dibromochloromethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Dibromomethane	1	ug/L	U		1			EPA-624	GEL	/ X /
Ethylbenzene	1	ug/L	U		1			EPA-624	GEL	/ X /
Iodomethane	5	ug/L	UY2		5			EPA-624	GEL	/ X /
m,p-Xylene	2	ug/L	U		2			EPA-624	GEL	/ X /
Methylene chloride	2	ug/L	UY2		2			EPA-624	GEL	/ X /
Styrene	1	ug/L	U		1			EPA-624	GEL	/ X /
Tetrachloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
Toluene	1	ug/L	U		1			EPA-624	GEL	/ X /
Total Xylene	3	ug/L	U		3			EPA-624	GEL	/ X /
trans-1,2-Dichloroethene	1	ug/L	UY2		1			EPA-624	GEL	/ X /
trans-1,3-Dichloropropene	1	ug/L	U		1			EPA-624	GEL	/ X /
Trans-1,4-Dichloro-2-butene	5	ug/L	U		5			EPA-624	GEL	/ X /
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
Trichlorofluoromethane	1	ug/L	UY2		1			EPA-624	GEL	/ X /
Vinyl acetate	5	ug/L	UY2		5			EPA-624	GEL	/ X /
Vinyl chloride	1	ug/L	UY2		1			EPA-624	GEL	/ X /

*Verification/Validation/Assessment

Paducah OREIS Report for UL17-LH-01

UL17-LH-01 from: C-746-U on 3/23/2017 Media: SmpMethod:

Comments: C-746-U Landfill Leachate WID 120970 Tank F002 Leachate water. Operators at the landfill started circulating F002 Tank this morning on 3-23-17. CB 3-23-17

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
FS										
Conductivity	1341	umho/cm						FS	FS	/ /
Dissolved Oxygen	8.99	mg/L						FS	FS	/ /
pH	7.18	Std Unit						FS	FS	/ /
Redox	416	mV						FS	FS	/ /
Temperature	57.7	deg F						FS	FS	/ /
Turbidity	10.8	NTU						FS	FS	/ /
METAL										
Antimony	0.003	mg/L	U		0.003			EPA-200.8	GEL	/ X /
Arsenic	0.00221	mg/L	J		0.005			EPA-200.8	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			EPA-200.8	GEL	/ X /
Cadmium	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			EPA-200.8	GEL	/ X /
Copper	0.00142	mg/L			0.001			EPA-200.8	GEL	/ X /
Iron	0.467	mg/L			0.1			EPA-200.8	GEL	/ X /
Lead	0.002	mg/L	U		0.002			EPA-200.8	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			EPA-245.2	GEL	/ X /
Nickel	0.00586	mg/L			0.002			EPA-200.8	GEL	/ X /
Phosphorous	0.029	mg/L	BJ		0.05			EPA-365.4	GEL	/ X /
Selenium	0.005	mg/L	U		0.005			EPA-200.8	GEL	/ X /
Silver	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Thallium	0.00127	mg/L	J		0.002			EPA-200.8	GEL	/ X /
Uranium	0.195	mg/L			0.001			EPA-200.8	GEL	/ X /
Zinc	0.0146	mg/L			0.01			EPA-200.8	GEL	/ X /
OTHOR										
Oil and Grease	4.07	mg/L	U		4.07			EPA-1664A	GEL	/ X /
PPCB										
PCB-1016	0.0952	ug/L	UY2		0.0952			EPA-608	GEL	/ X /
PCB-1221	0.0952	ug/L	U		0.0952			EPA-608	GEL	/ X /
PCB-1232	0.0952	ug/L	U		0.0952			EPA-608	GEL	/ X /
PCB-1242	0.0952	ug/L	U		0.0952			EPA-608	GEL	/ X /
PCB-1248	0.0952	ug/L	U		0.0952			EPA-608	GEL	/ X /
PCB-1254	0.0952	ug/L	U		0.0952			EPA-608	GEL	/ X /
PCB-1260	0.0952	ug/L	UY2		0.0952			EPA-608	GEL	/ X /
PCB-1268	0.0952	ug/L	U		0.0952			EPA-608	GEL	/ X /
Polychlorinated biphenyl	0.0952	ug/L	UY2		0.0952			EPA-608	GEL	/ X /
RADS										
Alpha activity	75.6	pCi/L			15	18.4	22.3	SW846-9310	GEL	/ X /
Beta activity	33.2	pCi/L			6.43	6.8	9.09	SW846-9310	GEL	/ X /
Technetium-99	22.2	pCi/L			10.2	6.46	6.91	HASL 300, Tc-02-RC M	GEL	/ X /
Total Uranium	75.8	pCi/L			3.87	10.6	13.3	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	14.3	pCi/L			2.41	4.6	5.01	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	4.97	pCi/L			1.36	3.08	3.15	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	56.5	pCi/L			2.7	8.99	11.9	HASL 300, U-02-RC M	GEL	/ X /
VOA										
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
WETCHEM										
Carbonaceous Biochemical Oxygen Demand (CBOD)	2	mg/L	UX		2			SM-5210 B 17	GEL	/ X /

*Verification/Validation/Assessment

Hardness - Total as CaCO3	513	mg/L	2	SM-2340 C 17	GEL	/ X /

Paducah OREIS Report for UL17-LH-01

UL17-LH-01D from: C-746-U on 3/23/2017 Media: SmpMethod:

Comments: C-746-U Landfill Leachate WID 120970 Tank F002, Field Duplicate. Leachate water. Operators at the landfill started circulating F002 Tank this morning on 3-23-17. CB 3-23-17

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
FS										
Conductivity	1341	umho/cm						FS	FS	/ /
Dissolved Oxygen	8.99	mg/L						FS	FS	/ /
pH	7.18	Std Unit						FS	FS	/ /
Redox	416	mV						FS	FS	/ /
Temperature	57.7	deg F						FS	FS	/ /
Turbidity	10.8	NTU						FS	FS	/ /
METAL										
Antimony	0.003	mg/L	U		0.003			EPA-200.8	GEL	/ X /
Arsenic	0.00274	mg/L	J		0.005			EPA-200.8	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			EPA-200.8	GEL	/ X /
Cadmium	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			EPA-200.8	GEL	/ X /
Copper	0.00149	mg/L			0.001			EPA-200.8	GEL	/ X /
Iron	0.468	mg/L			0.1			EPA-200.8	GEL	/ X /
Lead	0.002	mg/L	U		0.002			EPA-200.8	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			EPA-245.2	GEL	/ X /
Nickel	0.00584	mg/L			0.002			EPA-200.8	GEL	/ X /
Phosphorous	0.0488	mg/L	J		0.05			EPA-365.4	GEL	/ X /
Selenium	0.005	mg/L	U		0.005			EPA-200.8	GEL	/ X /
Silver	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Thallium	0.002	mg/L	U		0.002			EPA-200.8	GEL	/ X /
Uranium	0.19	mg/L			0.001			EPA-200.8	GEL	/ X /
Zinc	0.0129	mg/L			0.01			EPA-200.8	GEL	/ X /
OTHOR										
Oil and Grease	4.2	mg/L	U		4.2			EPA-1664A	GEL	/ X /
PPCB										
PCB-1016	0.0943	ug/L	UY2		0.0943			EPA-608	GEL	/ X /
PCB-1221	0.0943	ug/L	U		0.0943			EPA-608	GEL	/ X /
PCB-1232	0.0943	ug/L	U		0.0943			EPA-608	GEL	/ X /
PCB-1242	0.0943	ug/L	U		0.0943			EPA-608	GEL	/ X /
PCB-1248	0.0943	ug/L	U		0.0943			EPA-608	GEL	/ X /
PCB-1254	0.0943	ug/L	U		0.0943			EPA-608	GEL	/ X /
PCB-1260	0.0943	ug/L	UY2		0.0943			EPA-608	GEL	/ X /
PCB-1268	0.0943	ug/L	U		0.0943			EPA-608	GEL	/ X /
Polychlorinated biphenyl	0.0943	ug/L	UY2		0.0943			EPA-608	GEL	/ X /
RADS										
Alpha activity	86.6	pCi/L			14.7	19	23.9	SW846-9310	GEL	/ X /
Beta activity	38	pCi/L			6.07	6.77	9.53	SW846-9310	GEL	/ X /
Technetium-99	27.2	pCi/L			10	6.5	7.16	HASL 300, Tc-02-RC M	GEL	/ X /
Total Uranium	61.7	pCi/L			4.17	9.71	12	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	10.5	pCi/L			3.18	4.17	4.43	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	1.4	pCi/L			1.4	1.85	1.86	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	49.7	pCi/L			2.31	8.57	11	HASL 300, U-02-RC M	GEL	/ X /
VOA										
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
WETCHEM										
Carbonaceous Biochemical Oxygen Demand (CBOD)	1.56	mg/L	J		2			SM-5210 B 17	GEL	/ X /

*Verification/Validation/Assessment

Hardness - Total as CaCO3	474	mg/L		2		SM-2340 C 17	GEL	/ X /

UL17-LH-01-BT from: QC on 3/23/2017 Media: WQ SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
VOA										
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /

*Verification/Validation/Assessment

Paducah OREIS Report for UL17-LH-02

UL17-LH-03 from: C-746-S on 5/3/2017 Media: SmpMethod:

Comments: C-746-S Landfill Leachate WID 121011 Cell #2. Clear water. Purged 1/2 gallon of water from cell prior to sampling. CH 5-3-17

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
FS										
Conductivity	841	umho/cm						FS	FS	/ /
Dissolved Oxygen	8.1	mg/L						FS	FS	/ /
pH	6.67	Std Unit						FS	FS	/ /
Redox	339	mV						FS	FS	/ /
Temperature	62.8	deg F						FS	FS	/ /
Turbidity	4.2	NTU						FS	FS	/ /
METAL										
Antimony	0.003	mg/L	U		0.003			EPA-200.8	GEL	/ X /
Arsenic	0.005	mg/L	U		0.005			EPA-200.8	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			EPA-200.8	GEL	/ X /
Cadmium	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			EPA-200.8	GEL	/ X /
Copper	0.000352	mg/L	J		0.001			EPA-200.8	GEL	/ X /
Iron	0.291	mg/L			0.1			EPA-200.8	GEL	/ X /
Lead	0.002	mg/L	U		0.002			EPA-200.8	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			EPA-245.2	GEL	/ X /
Nickel	0.00154	mg/L	J		0.002			EPA-200.8	GEL	/ X /
Phosphorous	0.05	mg/L	U		0.05			EPA-365.4	GEL	/ X /
Selenium	0.005	mg/L	U		0.005			EPA-200.8	GEL	/ X /
Silver	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Thallium	0.002	mg/L	U		0.002			EPA-200.8	GEL	/ X /
Uranium	0.00454	mg/L			0.0002			EPA-200.8	GEL	/ X /
Zinc	0.01	mg/L	U		0.01			EPA-200.8	GEL	/ X /
OTHOR										
Oil and Grease	4.46	mg/L	U		4.46			EPA-1664A	GEL	/ X /
PPCB										
PCB-1016	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
PCB-1221	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
PCB-1232	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
PCB-1242	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
PCB-1248	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
PCB-1254	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
PCB-1260	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
PCB-1268	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
Polychlorinated biphenyl	0.0962	ug/L	U		0.0962			EPA-608	GEL	/ X /
RADS										
Alpha activity	12.1	pCi/L	U		12.9	8.93	9.16	SW846-9310	GEL	/ X /
Beta activity	4.12	pCi/L	U		8.69	5.15	5.19	SW846-9310	GEL	/ X /
Technetium-99	-0.0107	pCi/L	U		11.4	6.6	6.6	HASL 300, Tc-02-RC M	GEL	/ X /
Total Uranium	4.62	pCi/L			2.63	2.41	2.45	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	2.05	pCi/L			1.77	1.59	1.62	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	0.522	pCi/L	U		1.42	1.03	1.03	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	2.04	pCi/L			1.33	1.5	1.53	HASL 300, U-02-RC M	GEL	/ X /
VOA										
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
WETCHEM										
Carbonaceous Biochemical Oxygen Demand (CBOD)	34.4	mg/L	J		60			SM-5210 B	GEL	/ X /

*Verification/Validation/Assessment

Hardness - Total as CaCO3	356	mg/L	2	SM-2340 C 17	GEL	/ X /

Paducah OREIS Report for UL17-LH-02

UL17-LH-02 from: C-746-U on 5/3/2017 Media: SmpMethod:

Comments: C-746-U Landfill Leachate WID 120970 Tank F002. Sample valve next to HV-012. Clear water. Samples were collected while tank was in circulation . Purged 1/2 gallon of water through sample port prior to collection. CH 5-3-17

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
FS										
Conductivity	1181	umho/cm						FS	FS	/ /
Dissolved Oxygen	8.03	mg/L						FS	FS	/ /
pH	6.56	Std Unit						FS	FS	/ /
Redox	344	mV						FS	FS	/ /
Temperature	63.1	deg F						FS	FS	/ /
Turbidity	2.6	NTU						FS	FS	/ /
METAL										
Antimony	0.003	mg/L	U		0.003			EPA-200.8	GEL	/ X /
Arsenic	0.00247	mg/L	J		0.005			EPA-200.8	GEL	/ X /
Beryllium	0.0005	mg/L	U		0.0005			EPA-200.8	GEL	/ X /
Cadmium	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Chromium	0.01	mg/L	U		0.01			EPA-200.8	GEL	/ X /
Copper	0.00109	mg/L			0.001			EPA-200.8	GEL	/ X /
Iron	0.104	mg/L			0.1			EPA-200.8	GEL	/ X /
Lead	0.002	mg/L	U		0.002			EPA-200.8	GEL	/ X /
Mercury	0.0002	mg/L	U		0.0002			EPA-245.2	GEL	/ X /
Nickel	0.00646	mg/L			0.002			EPA-200.8	GEL	/ X /
Phosphorous	0.0225	mg/L	J		0.05			EPA-365.4	GEL	/ X /
Selenium	0.005	mg/L	U		0.005			EPA-200.8	GEL	/ X /
Silver	0.001	mg/L	U		0.001			EPA-200.8	GEL	/ X /
Thallium	0.002	mg/L	U		0.002			EPA-200.8	GEL	/ X /
Uranium	0.321	mg/L			0.0002			EPA-200.8	GEL	/ X /
Zinc	0.0258	mg/L			0.01			EPA-200.8	GEL	/ X /
OTHOR										
Oil and Grease	3.91	mg/L	U		3.91			EPA-1664A	GEL	/ X /
PPCB										
PCB-1016	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
PCB-1221	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
PCB-1232	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
PCB-1242	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
PCB-1248	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
PCB-1254	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
PCB-1260	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
PCB-1268	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
Polychlorinated biphenyl	0.1	ug/L	U		0.1			EPA-608	GEL	/ X /
RADS										
Alpha activity	139	pCi/L			13.6	23.6	32.9	SW846-9310	GEL	/ X /
Beta activity	33.8	pCi/L			8.9	7.51	9.41	SW846-9310	GEL	/ X /
Technetium-99	45.9	pCi/L			12.3	8.37	9.79	HASL 300, Tc-02-RC M	GEL	/ X /
Total Uranium	170	pCi/L			3.73	15.4	29.2	HASL 300, U-02-RC M	GEL	/ X /
Uranium-234	32.1	pCi/L			2.17	6.69	8.82	HASL 300, U-02-RC M	GEL	/ X /
Uranium-235	2.97	pCi/L			2.11	2.45	2.51	HASL 300, U-02-RC M	GEL	/ X /
Uranium-238	135	pCi/L			2.17	13.6	27.7	HASL 300, U-02-RC M	GEL	/ X /
VOA										
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /
WETCHEM										
Carbonaceous Biochemical Oxygen Demand (CBOD)	3.09	mg/L		X	2			SM-5210 B	GEL	/ X /

*Verification/Validation/Assessment

Hardness - Total as CaCO3	433	mg/L		2		SM-2340 C 17	GEL	/ X /

UL17-LH-02-BT from: QC on 5/3/2017 Media: WQ SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
VOA										
Trichloroethene	1	ug/L	U		1			EPA-624	GEL	/ X /

*Verification/Validation/Assessment

Department for Environmental Protection/Division of Waste Management/Solid Waste Branch
Quarterly Waste Quantity Report–DEP 7046Q (Revised 2-05)

WASTE ACTIVITY–CONTAINED LANDFILL

Facility Name: U.S. Department of Energy Permit Number: SW07300045

County where landfill is located: McCracken (PGDP) Agency Interest Number: 3059

Report for the Months of: April, May, June For the Year of: 2017

Waste Source (County and State)	Type of Waste			**Waste Used as Alternate Daily Cover as Approved (Tons Only)
	*Municipal Solid Waste (Tons Only)	*Industrial Waste (Tons Only)	*Special Waste (Tons Only)	
Paducah Gaseous Diffusion Plant (April)	0.00	0.00	0.00	0.00
Paducah Gaseous Diffusion Plant (May)	0.00	206.53	0.00	0.00
Paducah Gaseous Diffusion Plant (June)	0.00	23.65	0.00	0.00
Total for this page	0.00	230.18	0.00	0.00
Grand Total of all pages	0.00	230.18	0.00	0.00

***Grand Total of Municipal, Industrial, and Special from all pages** 230.18

***Does not include waste used as Alternate Daily Cover.**

****Indicate the amount used as Alternate Daily Cover. Please note this requires prior approval by the Cabinet.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

Signature: [signature] Phone Number: (270) 441-5113

Name—Please Print: Myrna E. Redfield Date: 7/14/17

Signature: Jennifer Woodard Phone Number: (270) 441-6800

Name—Please Print: Jennifer Woodard Date: 7/14/17

This Certification clause shall be signed by the responsible person(s) described in 401 *KAR* 47:160, Section 6(1), and/or (2) and is required by 401 *KAR* 47:160, Section 6(4).

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