



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

April 15, 2021

Ms. Jamie Nielsen, 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-02-10010238-21B

Dear Ms. Nielsen:

**C-746-S&T AND C-746-U SOLID WASTE LANDFILLS FIRST QUARTER
CALENDAR YEAR 2021 WASTE OPERATING REPORT PADUCAH GASEOUS
DIFFUSION PLANT, PADUCAH, KENTUCKY, FRNP-RPT-0183/V1, SOLID WASTE
PERMIT NO. SW07300014, SW07300015, SW07300045, AGENCY INTEREST NO. 3059**

The U.S. Department of Energy has prepared the first quarter operating report for calendar year 2021 for the C-746-S&T Landfills and C-746-U Landfill at the Paducah Gaseous Diffusion Plant. Kentucky Solid Waste Regulation 401 KAR 47:190 § 8(1) and Solid Waste Permit No. SW07300014, SW07300015, SW07300045, Permit Condition ACTV0006, Special Condition 10, require submittal of quarterly reports from operators of solid waste landfills.

The groundwater 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 David Dollins at (270) 441-6819.

Sincerely,

A handwritten signature in cursive script that reads "Jennifer Woodard".

Jennifer Woodard
Paducah Site Lead
Portsmouth/Paducah Project Office

Enclosures:

1. Certification Page
2. *C-746-S&T and C-746-U Solid Waste Landfill First Quarter Calendar Year 2021 Waste Operating Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, FRNP-RPT-0183/V1*

cc w/enclosures:

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Enclosure 1


Certification Page

CERTIFICATION

Document Identification: *C-746-S&T and C-746-U Solid Waste Landfills First Quarter Calendar Year 2021 Waste Operating Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, FRNP-RPT-0183/V1, Solid Waste Permit SW07300014, SW07300015, SW07300045, Agency Interest No. 3059, April 2021*

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.

Four Rivers Nuclear Partnership, LLC
Permittee (Operator)



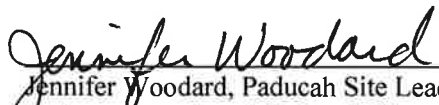
Myrna E. Redfield, Program Manager
Four Rivers Nuclear Partnership, LLC



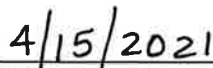
Date Signed

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.

U.S. Department of Energy



Jennifer Woodard, Paducah Site Lead
Portsmouth/Paducah Project Office
U.S. Department of Energy



Date Signed

Enclosure 2

C-746-S&T and C-746-U Solid Waste Landfills First Quarter Calendar Year 2021 Waste Operating Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, FRNP-RPT-0183/V1

**C-746-S&T and C-746-U Solid Waste Landfills
First Quarter Calendar Year 2021
Waste Operating Report
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**



This document is approved for public release per review by:

jackie thompson

FRNP Classification Support

04-14-2021

Date

**C-746-S&T and C-746-U Solid Waste Landfills
First Quarter Calendar Year 2021
Waste Operating Report
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**

Date Issued—April 2021

U.S. DEPARTMENT OF ENERGY
Office of Environmental Management

Prepared by
FOUR RIVERS NUCLEAR PARTNERSHIP, LLC,
managing the
Deactivation and Remediation Project at the
Paducah Gaseous Diffusion Plant
under Contract DE-EM0004895

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REPORT SUMMARY

The information contained herein is submitted in accordance with the requirements of Solid Waste Permit Number SW07300014, SW07300015, SW07300045, and 401 *KAR* 47:190 § 8(1)(a) through (c) and (e), for the first quarter of calendar year 2021 for the Paducah Gaseous Diffusion Plant, McCracken County, Kentucky.

In the first quarter of calendar year 2021, a total of 1,396.79 tons of industrial waste was disposed of in the C-746-U Contained Landfill. There were 1.17 tons of asbestos-containing materials disposed of as part of the 1396.79 total tons of waste dispositioned. No special waste or spill-residue-containing materials were disposed of in the landfill this quarter. As directed by the Cabinet, the Waste Quantity Report, DEP-7046-Q, is submitted as a separate report.

Analytical results for surface water monitoring, groundwater monitoring, 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)].

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.

Leachate Collection and Disposition

The leachate is stored in five permitted holding tanks (F-001, F-002, F-007, F-008, and F-009) with a total capacity of 104,200 gal. Tank F-004 is a 2,500-gal surge tank for the leachate treatment system. Tanks F-005 and F-006 were removed in 2014. 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 had entered the system. A total of 351,900 gal of leachate from the C-746-U Landfill was treated at the C-746-U15 Leachate Treatment Facility this quarter. No leachate from the C-746-S Landfill was treated at the C-746-U15 Leachate Treatment Facility this quarter. There was no leachate transported to the other treatment facilities.

Annual leachate analytical results are included in this report. Leachate samples were collected from the C-746-S Landfill and the C-746-U Landfill on February 10, 2021. The concentration of the leachate was determined using the appropriate parameters in 401 *KAR* 48:300 § 10(3) for Contained Landfills, and the conditions listed in the Solid Waste Permit.

Construction Activities and Cover Maintenance

There were no construction activities associated with the C-746-S&T Landfills [401 *KAR* 47:190 § 8(1)(a)]. The C-746-S&T 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.

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.

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FACILITY INFORMATION SHEET

Sampling Date: N/A

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

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

Site Address: 5501 Hobbs Road Kevil, Kentucky 42053
Street City/State 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: Gary Hines Phone No.: (270) 816-4164

Contact Person Title: Landfill Manager,
Four Rivers Nuclear Partnership, LLC

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

SAMPLING PERSONNEL (if other than landfill or laboratory)

Company: GEO Consultants, LLC

Contact Person: Jason Boulton Phone No.: (270) 441-6756

Mailing Address: 325 Kentucky Avenue Kevil, Kentucky 42053
Street City/State 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 Charleston, South Carolina 29417
Street City/State 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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COVER LOG

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CP3-WM-0017-F02 - COVER LOG

DEPARTMENT OF ENERGY
 COUNTY: McCracken

PERMIT NUMBER: 073-00045
 Month & Year: January 2021

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	D-3	YES	NO	NO	NO	YES
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20	D-3	YES	NO	NO	NO	YES
21	D-3	YES	NO	NO	NO	YES
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

CP3-WM-0017-F02 - COVER LOG

DEPARTMENT OF ENERGY
 COUNTY: McCracken

PERMIT NUMBER: 073-00045
 Month & Year: February 2021

Day of Month	Daily Cell Location	Daily Cover Applied?	Interim Cover	Long Term Cover	Final Cap	Temporary Diversion Ditch Yes/No
1						
2						
3	D-3	YES	NO	NO	NO	YES
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
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16						
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30						
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CP3-WM-0017-F02 - COVER LOG

DEPARTMENT OF ENERGY
 COUNTY: McCracken

PERMIT NUMBER: 073-00045
 Month & Year: March 2021

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

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LEACHATE LOG

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CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month January Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
1-04-21	1,2,3,4,5	F-001		18200		
1-04-21	1,2,3,4,5	F-002		30100	10800	L
1-04-21	1,2,3,4,5	F-007		1200		
1-04-21	1,2,3,4,5	F-008		1200		
1-04-21	1,2,3,4,5	F-009		700		
1-05-21	1,2,3,4,5	F-001		21800		
1-05-21	1,2,3,4,5	F-002		19300	9100	L
1-05-21	1,2,3,4,5	F-007		1200		
1-05-21	1,2,3,4,5	F-008		1200		
1-05-21	1,2,3,4,5	F-009		700		
1-06-21	1,2,3,4,5	F-001		23700	9500	L
1-06-21	1,2,3,4,5	F-002		11900		
1-06-21	1,2,3,4,5	F-007		1200		
1-06-21	1,2,3,4,5	F-008		1200		
1-06-21	1,2,3,4,5	F-009		700		
1-07-21	1,2,3,4,5	F-001		14200	10100	L
1-07-21	1,2,3,4,5	F-002		15300		
1-07-21	1,2,3,4,5	F-007		1200		
1-07-21	1,2,3,4,5	F-008		1200		
1-07-21	1,2,3,4,5	F-009		700		
1-11-21	1,2,3,4,5	F-001		13600		
1-11-21	1,2,3,4,5	F-002		16500	9500	L
1-11-21	1,2,3,4,5	F-007		1200		
1-11-21	1,2,3,4,5	F-008		1200		
1-11-21	1,2,3,4,5	F-009		700		
1-12-21	1,2,3,4,5	F-001		15300		
1-12-21	1,2,3,4,5	F-002		7000	5600	L

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month January Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
1-12-21	1,2,3,4,5	F-007		1200		
1-12-21	1,2,3,4,5	F-008		1200		
1-12-21	1,2,3,4,5	F-009		700		
1-13-21	1,2,3,4,5	F-001		16200	10700	L
1-13-21	1,2,3,4,5	F-002		3000		
1-13-21	1,2,3,4,5	F-007		1200		
1-13-21	1,2,3,4,5	F-008		1200		
1-13-21	1,2,3,4,5	F-009		700		
1-14-21	1,2,3,4,5	F-001		5500	4100	L
1-14-21	1,2,3,4,5	F-002		4800		
1-14-21	1,2,3,4,5	F-007		1200		
1-14-21	1,2,3,4,5	F-008		1200		
1-14-21	1,2,3,4,5	F-009		700		
1-19-21	1,2,3,4,5	F-001		1400		
1-19-21	1,2,3,4,5	F-002		13300	10700	L
1-19-21	1,2,3,4,5	F-007		1200		
1-19-21	1,2,3,4,5	F-008		1200		
1-19-21	1,2,3,4,5	F-009		700		
1-20-21	1,2,3,4,5	F-001		3000	1600	L
1-20-21	1,2,3,4,5	F-002		2600		
1-20-21	1,2,3,4,5	F-007		1200		
1-20-21	1,2,3,4,5	F-008		1200		
1-20-21	1,2,3,4,5	F-009		700		
1-21-21	1,2,3,4,5	F-001		1400		
1-21-21	1,2,3,4,5	F-002		4300	2900	L
1-21-21	1,2,3,4,5	F-007		1200		
1-21-21	1,2,3,4,5	F-008		1200		

No measurements were taken on 1/18/21 due to company holiday

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month January Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
1-21-21	1,2,3,4,5	F-009		700		
1-25-21	1,2,3,4,5	F-001		7300		
1-25-21	1,2,3,4,5	F-002		1400		
1-25-21	1,2,3,4,5	F-007		1200		
1-25-21	1,2,3,4,5	F-008		1200		
1-25-21	1,2,3,4,5	F-009		700		
1-26-21	1,2,3,4,5	F-001		17900	10900	L
1-26-21	1,2,3,4,5	F-002		1400		
1-26-21	1,2,3,4,5	F-007		1200		
1-26-21	1,2,3,4,5	F-008		1200		
1-26-21	1,2,3,4,5	F-009		700		
1-27-21	1,2,3,4,5	F-001		7000		
1-27-21	1,2,3,4,5	F-002		5300		
1-27-21	1,2,3,4,5	F-007		1200		
1-27-21	1,2,3,4,5	F-008		1200		
1-27-21	1,2,3,4,5	F-009		700		
1-28-21	1,2,3,4,5	F-001		7000	5800	L
1-28-21	1,2,3,4,5	F-002		10800		
1-28-21	1,2,3,4,5	F-007		1200		
1-28-21	1,2,3,4,5	F-008		1200		
1-28-21	1,2,3,4,5	F-009		700		

Jimmy Smith 1-28-21

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

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month February Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
02-01-21	1,2,3,4,5	F-001		1200		
02-01-21	1,2,3,4,5	F-002		26800	10900	L
02-01-21	1,2,3,4,5	F-007		1200		
02-01-21	1,2,3,4,5	F-008		1200		
02-01-21	1,2,3,4,5	F-009		700		
02-02-21	1,2,3,4,5	F-001		5500		
02-02-21	1,2,3,4,5	F-002		15900	10900	L
02-02-21	1,2,3,4,5	F-007		1200		
02-02-21	1,2,3,4,5	F-008		1200		
02-02-21	1,2,3,4,5	F-009		700		
02-03-21	1,2,3,4,5	F-001		10000	8600	L
02-03-21	1,2,3,4,5	F-002		5000		
02-03-21	1,2,3,4,5	F-007		1200		
02-03-21	1,2,3,4,5	F-008		1200		
02-03-21	1,2,3,4,5	F-009		700		
02-04-21	1,2,3,4,5	F-001		1400		
02-04-21	1,2,3,4,5	F-002		8600	7200	L
02-04-21	1,2,3,4,5	F-007		1200		
02-04-21	1,2,3,4,5	F-008		1200		
02-04-21	1,2,3,4,5	F-009		700		
02-08-21	1,2,3,4,5	F-001		14200	10100	L
02-08-21	1,2,3,4,5	F-002		1400		
02-08-21	1,2,3,4,5	F-007		1200		
02-08-21	1,2,3,4,5	F-008		1200		
02-08-21	1,2,3,4,5	F-009		700		
02-09-21	1,2,3,4,5	F-001		4100	2900	L
02-09-21	1,2,3,4,5	F-002		4100		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month February Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
02-09-21	1,2,3,4,5	F-007		1200		
02-09-21	1,2,3,4,5	F-008		1200		
02-09-21	1,2,3,4,5	F-009		700		
02-10-21	1,2,3,4,5	F-001		1200		
02-10-21	1,2,3,4,5	F-002		7500		
02-10-21	1,2,3,4,5	F-007		1200		
02-10-21	1,2,3,4,5	F-008		1200		
02-10-21	1,2,3,4,5	F-009		700		
02-11-21	1,2,3,4,5	F-001		1200		
02-11-21	1,2,3,4,5	F-002		11400		
02-11-21	1,2,3,4,5	F-007		1200		
02-11-21	1,2,3,4,5	F-008		1200		
02-11-21	1,2,3,4,5	F-009		700		
02-15-21	1,2,3,4,5	F-001		1200		
02-15-21	1,2,3,4,5	F-002		15900	4900	L
02-15-21	1,2,3,4,5	F-007		1200		
02-15-21	1,2,3,4,5	F-008		1200		
02-15-21	1,2,3,4,5	F-009		700		
02-16-21	1,2,3,4,5	F-001		7500		
02-16-21	1,2,3,4,5	F-002		11000		
02-16-21	1,2,3,4,5	F-007		1200		
02-16-21	1,2,3,4,5	F-008		1200		
02-16-21	1,2,3,4,5	F-009		700		
02-17-21	1,2,3,4,5	F-001		7500		
02-17-21	1,2,3,4,5	F-002		11000		
02-17-21	1,2,3,4,5	F-007		1200		
02-17-21	1,2,3,4,5	F-008		1200		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month February Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
02-17-21	1,2,3,4,5	F-009		700		
02-18-21	1,2,3,4,5	F-001		7500		
02-18-21	1,2,3,4,5	F-002		11000	9500	L
02-18-21	1,2,3,4,5	F-007		1200		
02-18-21	1,2,3,4,5	F-008		1200		
02-18-21	1,2,3,4,5	F-009		700		
02-22-21	1,2,3,4,5	F-001		17300	10300	L
02-22-21	1,2,3,4,5	F-002		1500		
02-22-21	1,2,3,4,5	F-007		1200		
02-22-21	1,2,3,4,5	F-008		1200		
02-22-21	1,2,3,4,5	F-009		700		
02-23-21	1,2,3,4,5	F-001		7000	5800	L
02-23-21	1,2,3,4,5	F-002		11900		
02-23-21	1,2,3,4,5	F-007		1200		
02-23-21	1,2,3,4,5	F-008		1200		
02-23-21	1,2,3,4,5	F-009		700		
02-24-21	1,2,3,4,5	F-001		1400		
02-24-21	1,2,3,4,5	F-002		16500	10000	L
02-24-21	1,2,3,4,5	F-007		1200		
02-24-21	1,2,3,4,5	F-008		1200		
02-24-21	1,2,3,4,5	F-009		700		
02-25-21	1,2,3,4,5	F-001		4800		
02-25-21	1,2,3,4,5	F-002		6500	5100	L
02-25-21	1,2,3,4,5	F-007		1200		
02-25-21	1,2,3,4,5	F-008		1200		
02-25-21	1,2,3,4,5	F-009		700		
		<i>Jimmy Smith</i>		<i>2-25-21</i>		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month March Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
03-01-21	1,2,3,4,5	F-001		24200	10300	L
03-01-21	1,2,3,4,5	F-002		1400		
03-01-21	1,2,3,4,5	F-007		1200		
03-01-21	1,2,3,4,5	F-008		1200		
03-01-21	1,2,3,4,5	F-009		700		
03-02-21	1,2,3,4,5	F-001		13900	12200	L
03-02-21	1,2,3,4,5	F-002		7500		
03-02-21	1,2,3,4,5	F-007		1200		
03-02-21	1,2,3,4,5	F-008		1200		
03-02-21	1,2,3,4,5	F-009		700		
03-03-21	1,2,3,4,5	F-001		1700		
03-03-21	1,2,3,4,5	F-002		14800	8800	L
03-03-21	1,2,3,4,5	F-007		1200		
03-03-21	1,2,3,4,5	F-008		1200		
03-03-21	1,2,3,4,5	F-009		700		
03-04-21	1,2,3,4,5	F-001		7500	6100	L
03-04-21	1,2,3,4,5	F-002		6000		
03-04-21	1,2,3,4,5	F-007		1200		
03-04-21	1,2,3,4,5	F-008		1200		
03-04-21	1,2,3,4,5	F-009		700		
03-08-21	1,2,3,4,5	F-001		1400		
03-08-21	1,2,3,4,5	F-002		21500	10700	L
03-08-21	1,2,3,4,5	F-007		1200		
03-08-21	1,2,3,4,5	F-008		1200		
03-08-21	1,2,3,4,5	F-009		700		
03-09-21	1,2,3,4,5	F-001		4800		
03-09-21	1,2,3,4,5	F-002		10800	8900	L

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month March Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
03-09-21	1,2,3,4,5	F-007		1200		
03-09-21	1,2,3,4,5	F-008		1200		
03-09-21	1,2,3,4,5	F-009		700		
03-10-21	1,2,3,4,5	F-001		7300	5900	L
03-10-21	1,2,3,4,5	F-002		1900		
03-10-21	1,2,3,4,5	F-007		1200		
03-10-21	1,2,3,4,5	F-008		1200		
03-10-21	1,2,3,4,5	F-009		700		
03-11-21	1,2,3,4,5	F-001		1400		
03-11-21	1,2,3,4,5	F-002		4300	2900	L
03-11-21	1,2,3,4,5	F-007		1200		
03-11-21	1,2,3,4,5	F-008		1200		
03-11-21	1,2,3,4,5	F-009		700		
03-15-21	1,2,3,4,5	F-001		19900	10200	L
03-15-21	1,2,3,4,5	F-002		1400		
03-15-21	1,2,3,4,5	F-007		1200		
03-15-21	1,2,3,4,5	F-008		1200		
03-15-21	1,2,3,4,5	F-009		700		
03-16-21	1,2,3,4,5	F-001		9700	4900	L
03-16-21	1,2,3,4,5	F-002		7000		
03-16-21	1,2,3,4,5	F-007		1200		
03-16-21	1,2,3,4,5	F-008		1200		
03-16-21	1,2,3,4,5	F-009		700		
03-17-21	1,2,3,4,5	F-001		4800		
03-17-21	1,2,3,4,5	F-002		12800	9100	L
03-17-21	1,2,3,4,5	F-007		1200		
03-17-21	1,2,3,4,5	F-008		1200		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month March Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
03-17-21	1,2,3,4,5	F-009		700		
03-18-21	1,2,3,4,5	F-001		12500	11500	L
03-18-21	1,2,3,4,5	F-002		3700		
03-18-21	1,2,3,4,5	F-007		1200		
03-18-21	1,2,3,4,5	F-008		1200		
03-18-21	1,2,3,4,5	F-009		700		
03-22-21	1,2,3,4,5	F-001		1000		
03-22-21	1,2,3,4,5	F-002		29500	11000	L
03-22-21	1,2,3,4,5	F-007		1200		
03-22-21	1,2,3,4,5	F-008		1200		
03-22-21	1,2,3,4,5	F-009		700		
03-23-21	1,2,3,4,5	F-001		6500		
03-23-21	1,2,3,4,5	F-002		18500	9100	L
03-23-21	1,2,3,4,5	F-007		1200		
03-23-21	1,2,3,4,5	F-008		1200		
03-23-21	1,2,3,4,5	F-009		700		
03-24-21	1,2,3,4,5	F-001		10200		
03-24-21	1,2,3,4,5	F-002		9400	8000	L
03-24-21	1,2,3,4,5	F-007		1200		
03-24-21	1,2,3,4,5	F-008		1200		
03-24-21	1,2,3,4,5	F-009		700		
03-25-21	1,2,3,4,5	F-001		13600	12100	L
03-25-21	1,2,3,4,5	F-002		1400		
03-25-21	1,2,3,4,5	F-007		1200		
03-25-21	1,2,3,4,5	F-008		1200		
03-25-21	1,2,3,4,5	F-009		700		
03-29-21	1,2,3,4,5	F-001		1500		

CP3-WM-0018-F01 - PGDP SOLID WASTE LANDFILL – LEACHATE LOG

Permit No. 073-00045

McCracken County, Kentucky

Month March Year 2021

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
03-29-21	1,2,3,4,5	F-002		13300	10900	L
03-29-21	1,2,3,4,5	F-007		1200		
03-29-21	1,2,3,4,5	F-008		1200		
03-29-21	1,2,3,4,5	F-009		700		
03-30-21	1,2,3,4,5	F-001		3200	1800	L
03-30-21	1,2,3,4,5	F-002		2400		
03-30-21	1,2,3,4,5	F-007		1200		
03-30-21	1,2,3,4,5	F-008		1200		
03-30-21	1,2,3,4,5	F-009		700		
03-31-21	1,2,3,4,5	F-001		1400		
03-31-21	1,2,3,4,5	F-002		5300		
03-31-21	1,2,3,4,5	F-007		1200		
03-31-21	1,2,3,4,5	F-008		1200		
03-31-21	1,2,3,4,5	F-009		700		

LEACHATE ANALYTICAL DATA

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Paducah OREIS Report for SLS21-01

SLS21-01-01

from: C-746-S

on 2/10/2021

Media: WW

SmpMethod: GR

Comments:

Murky liquid. CB 2-10-21 Due to a weather related delay (ice storm), FedEx did not deliver samples until 2-12-21. HLN 2-15-21. Leachate Cell 2 sample

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU**	Method	LabCode	V/V/A*
ANION										
Bromide	0.17	mg/L	JW		0.2			SW846-9056	GEL	/X/
Chloride	9.62	mg/L			1			SW846-9056	GEL	/X/
Fluoride	0.727	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	0.178	mg/L	HJ		0.5			SW846-9056	GEL	T/X/BL-T,J
Sulfate	25.9	mg/L			2			SW846-9056	GEL	/X/
FS										
Conductivity	1234	umho/cm						FS	FS	//
Dissolved Oxygen	5.52	mg/L						FS	FS	//
pH	6.98	Std Unit						FS	FS	//
Redox	430	mV						FS	FS	//
Temperature	44.3	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	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Barium	0.293	mg/L			0.004			SW846-6020	GEL	/X/
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/X/
Boron	0.0337	mg/L			0.015			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	176	mg/L			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	0.000517	mg/L	J		0.002			SW846-6020	GEL	/X/
Iron	0.0671	mg/L	J		0.1			SW846-6020	GEL	/X/
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Magnesium	24.4	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	0.0144	mg/L			0.005			SW846-6020	GEL	/X/
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/X/
Molybdenum	0.000626	mg/L	BJ		0.001			SW846-6020	GEL	/X/
Nickel	0.00149	mg/L	J		0.002			SW846-6020	GEL	/X/
Phosphorous	0.0666	mg/L			0.05			EPA-365.4	GEL	/X/
Potassium	1.09	mg/L			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	38.4	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	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Uranium	0.00416	mg/L			0.0002			SW846-6020	GEL	/X/
Vanadium	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.294	mg/L			0.004			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/

Paducah OREIS Report for SLS21-01

Cobalt, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/X/
Copper, Dissolved	0.000866	mg/L	J	0.002			SW846-6020	GEL	/X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/X/
Manganese, Dissolved	0.0113	mg/L		0.005			SW846-6020	GEL	/X/
Nickel, Dissolved	0.00169	mg/L	J	0.002			SW846-6020	GEL	/X/
Selenium, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/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	0.01	mg/L	U	0.01			SW846-6020	GEL	/X/
Uranium, Dissolved	0.0041	mg/L		0.0002			SW846-6020	GEL	/X/
Vanadium, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/X/
Zinc, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/X/

OTHOR

Oil and Grease	4.39	mg/L	U	4.39			EPA-1664A	GEL	/X/
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PCCB

PCB-1016	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
PCB-1221	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
PCB-1232	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
PCB-1242	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
PCB-1248	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
PCB-1254	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
PCB-1260	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
PCB-1268	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0477	ug/L	U	0.0477			SW846-8082	GEL	/X/

RADS

Alpha activity	4.44	pCi/L	U	9.39	5.58	5.63	SW846-9310	GEL	/X/
Americium-241	0.482	pCi/L	U	1.56	0.959	0.961	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	7.61	pCi/L	U	11.4	7.03	7.17	SW846-9310	GEL	/X/
Cesium-137	0.0467	pCi/L	U	1.15	0.647	0.647	EPA-901.1	GEL	/X/
Cobalt-60	-0.357	pCi/L	U	1.04	0.592	0.614	EPA-901.1	GEL	/X/
Dissolved Alpha	2.77	pCi/L		1.59	1.16	1.25	SW846-9310	GEL	/X/
Dissolved Beta	2.5	pCi/L		1.2	0.777	0.886	SW846-9310	GEL	/X/
Neptunium-237	-0.131	pCi/L	U	2.14	0.862	0.863	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	0.563	pCi/L	U	1.24	0.895	0.899	HASL 300, Am-05-RC M	GEL	/X/
Radium-226	0.829	pCi/L	U	1.85	1.33	1.33	AN-1418	GEL	/X/
Radium-228	-0.555	pCi/L	U	4.55	2.27	2.27	EPA-904-M	GEL	/X/
Strontium-90	-0.154	pCi/L	U	6.02	3.24	3.24	EPA-905.0-M	GEL	/X/
Technetium-99	0.312	pCi/L	U	17.2	9.9	9.9	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	-0.0257	pCi/L	U	1.3	0.569	0.57	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	-0.139	pCi/L	U	1.04	0.356	0.357	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	-24.8	pCi/L	U	38.4	36.5	38.6	EPA-901.1	GEL	/X/
Tritium	-76.4	pCi/L	U	209	117	117	EPA-906.0-M	GEL	/X/
Uranium	4.7	pCi/L		3.08	2.82	2.88	HASL 300, U-02-RC M	GEL	S/X/
Uranium-234	2.48	pCi/L		2.17	1.99	2.04	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	0.34	pCi/L	U	1.7	1.11	1.11	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	1.87	pCi/L		1.38	1.66	1.69	HASL 300, U-02-RC M	GEL	/X/

RADS-D

Americium-241, Dissolved	0.00962	pCi/L	U	1.58	0.713	0.714	HASL 300, Am-05-RC M	GEL	/X/
Cesium-137, Dissolved	0.921	pCi/L	U	10.9	4.98	5	EPA-901.1	GEL	/X/
Cobalt-60, Dissolved	3.43	pCi/L	U	14.8	5.37	5.6	EPA-901.1	GEL	/X/
Neptunium-237, Dissolved	-0.446	pCi/L	U	1.35	0.376	0.377	ASTM-1475-00M	GEL	/X/
Plutonium-239/240, Dissolved	0.313	pCi/L	U	1.48	0.825	0.826	HASL 300, Am-05-RC M	GEL	/X/
Technetium-99, Dissolved	-3.75	pCi/L	U	17.2	9.75	9.75	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230, Dissolved	5.26	pCi/L		1.57	2.01	2.14	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234, Dissolved	0	pCi/L	UX	641	723	768	EPA-901.1	GEL	/X/

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Uranium, Dissolved	4.24	pCi/L		2.04	1.95	1.99	HASL 300, U-02-RC M	GEL	/ X/
Uranium-234, Dissolved	1.69	pCi/L		1.41	1.23	1.26	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235, Dissolved	0.426	pCi/L	U	0.639	0.73	0.732	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238, Dissolved	2.12	pCi/L		1.33	1.33	1.36	HASL 300, U-02-RC M	GEL	/ X/

VOA

1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,1-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dibromo-3-chloropropane	0.0189	ug/L	U	0.0189			SW846-8011	GEL	/ X/
1,2-Dibromoethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
2-Butanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
2-Hexanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acetone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrolein	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrylonitrile	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Benzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromodichloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromoform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Carbon disulfide	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Carbon tetrachloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Ethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Iodomethane	5	ug/L	U	5			EPA-624.1	GEL	/ X/
m,p-Xylene	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Methylene chloride	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Styrene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Tetrachloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Toluene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Total Xylene	3	ug/L	U	3			EPA-624.1	GEL	/ X/
trans-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Trichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trichlorofluoromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Vinyl acetate	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Vinyl chloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/

WETCHEM

Paducah OREIS Report for SLS21-01

Carbonaceous Biochemical Oxygen Demand (CBOD)	2	mg/L	HUX	2	SM-5210 B	GEL	T / X / BL-T, J
Chemical Oxygen Demand (COD)	10	mg/L	JN	20	EPA-410.4	GEL	S / X /
Cyanide	0.2	mg/L	U	0.2	SW846-9012B	GEL	/ X /
Dissolved Solids	590	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	443	mg/L	N	2	EPA-130.2	GEL	/ X /
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/ X /
Suspended Solids	0.6	mg/L	J	2.5	EPA-160.2	GEL	S / X /
Total Organic Carbon (TOC)	3.45	mg/L		2	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	4.8	ug/L	J	10	SW846-9020B	GEL	S / X /

Paducah OREIS Report for SLS21-01

SLS21-01-02

from: C-746-S

on 2/10/2021

Media: WW

SmpMethod: GR

Comments:

Due to a weather related delay (ice storm), FedEx did not deliver samples until 2-12-21. HLN 2-15-21. Leachate Cell 3 sample

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU**	Method	LabCode	V/V/A*
ANION										
Bromide	0.796	mg/L	W		0.2			SW846-9056	GEL	/X/
Chloride	26.6	mg/L			1			SW846-9056	GEL	/X/
Fluoride	0.318	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	0.5	mg/L	HU		0.5			SW846-9056	GEL	T/X/BL-T,J
Sulfate	25.5	mg/L			2			SW846-9056	GEL	/X/
FS										
Conductivity	1409	umho/cm						FS	FS	//
Dissolved Oxygen	3.74	mg/L						FS	FS	//
pH	6.48	Std Unit						FS	FS	//
Redox	161	mV						FS	FS	//
Temperature	46	deg F						FS	FS	//
METAL										
Aluminum	0.05	mg/L	J		0.05			SW846-6020	GEL	/X/
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic	0.00616	mg/L			0.005			SW846-6020	GEL	/X/
Barium	0.543	mg/L			0.004			SW846-6020	GEL	/X/
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/X/
Boron	0.0311	mg/L			0.015			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	130	mg/L			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	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Iron	70.3	mg/L			1			SW846-6020	GEL	/X/
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Magnesium	26.8	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	1.13	mg/L			0.05			SW846-6020	GEL	/X/
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/X/
Molybdenum	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Nickel	0.000807	mg/L	J		0.002			SW846-6020	GEL	/X/
Phosphorous	0.34	mg/L			0.05			EPA-365.4	GEL	/X/
Potassium	4.34	mg/L			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	33.6	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	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Uranium	0.000942	mg/L			0.0002			SW846-6020	GEL	/X/
Vanadium	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.0147	mg/L	J		0.02			SW846-6020	GEL	/X/
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.232	mg/L			0.004			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/

Paducah OREIS Report for SLS21-01

Cobalt, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/X/
Copper, Dissolved	0.000524	mg/L	J	0.002			SW846-6020	GEL	/X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/X/
Manganese, Dissolved	1.09	mg/L		0.05			SW846-6020	GEL	/X/
Nickel, Dissolved	0.00107	mg/L	J	0.002			SW846-6020	GEL	/X/
Selenium, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/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	0.01	mg/L	U	0.01			SW846-6020	GEL	/X/
Uranium, Dissolved	0.000783	mg/L		0.0002			SW846-6020	GEL	/X/
Vanadium, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/X/
Zinc, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/X/

OTHOR

Oil and Grease	4.24	mg/L	U	4.24			EPA-1664A	GEL	/X/
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PCCB

PCB-1016	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
PCB-1221	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
PCB-1232	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
PCB-1242	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
PCB-1248	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
PCB-1254	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
PCB-1260	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
PCB-1268	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0481	ug/L	U	0.0481			SW846-8082	GEL	/X/

RADS

Alpha activity	2.51	pCi/L	U	7.82	4.26	4.28	SW846-9310	GEL	/X/
Americium-241	0.626	pCi/L	U	1.09	0.902	0.907	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	6.09	pCi/L	U	7.08	4.6	4.71	SW846-9310	GEL	/X/
Cesium-137	-0.126	pCi/L	U	1.16	0.653	0.656	EPA-901.1	GEL	/X/
Cobalt-60	-0.0362	pCi/L	U	1.24	0.713	0.713	EPA-901.1	GEL	/X/
Dissolved Alpha	1.9	pCi/L		1.68	1.15	1.19	SW846-9310	GEL	/X/
Dissolved Beta	11.3	pCi/L		3.27	2.26	2.92	SW846-9310	GEL	/X/
Neptunium-237	-0.377	pCi/L	U	2.14	0.663	0.664	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	0.0665	pCi/L	U	1.45	0.695	0.696	HASL 300, Am-05-RC M	GEL	/X/
Radium-226	0.785	pCi/L	U	0.833	0.726	0.727	AN-1418	GEL	/X/
Radium-228	4.69	pCi/L		4.35	2.89	3.13	EPA-904-M	GEL	/X/
Strontium-90	-0.816	pCi/L	U	4.92	2.57	2.57	EPA-905.0-M	GEL	/X/
Technetium-99	4.69	pCi/L	U	18.4	10.7	10.8	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	1.24	pCi/L	U	1.38	1.07	1.08	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	-0.169	pCi/L	U	1.05	0.344	0.345	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	6.01	pCi/L	U	36.5	40.8	40.9	EPA-901.1	GEL	/X/
Tritium	-68.7	pCi/L	U	226	128	128	EPA-906.0-M	GEL	/X/
Uranium	3.24	pCi/L	U	3.66	2.71	2.74	HASL 300, U-02-RC M	GEL	/X/
Uranium-234	1.55	pCi/L	U	2.45	1.79	1.82	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	1.15	pCi/L	U	2.05	1.67	1.68	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	0.541	pCi/L	U	1.8	1.17	1.18	HASL 300, U-02-RC M	GEL	/X/

RADS-D

Americium-241, Dissolved	0.035	pCi/L	U	2.22	1.05	1.05	HASL 300, Am-05-RC M	GEL	/X/
Cesium-137, Dissolved	-1.59	pCi/L	U	20.9	10.5	10.5	EPA-901.1	GEL	/X/
Cobalt-60, Dissolved	1.07	pCi/L	U	24.3	9.87	9.88	EPA-901.1	GEL	/X/
Neptunium-237, Dissolved	-0.272	pCi/L	U	1.48	0.533	0.533	ASTM-1475-00M	GEL	/X/
Plutonium-239/240, Dissolved	0.132	pCi/L	U	0.835	0.496	0.497	HASL 300, Am-05-RC M	GEL	/X/
Technetium-99, Dissolved	6.23	pCi/L	U	17.8	10.5	10.5	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230, Dissolved	4.84	pCi/L		1.89	2.08	2.2	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234, Dissolved	630	pCi/L	U	734	719	734	EPA-901.1	GEL	/X/

Paducah OREIS Report for SLS21-01

Uranium, Dissolved	0.701	pCi/L	U	2.88	1.51	1.51	HASL 300, U-02-RC M	GEL	/ X/
Uranium-234, Dissolved	-0.152	pCi/L	U	1.91	0.791	0.792	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235, Dissolved	0.468	pCi/L	U	1.28	0.92	0.923	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238, Dissolved	0.232	pCi/L	U	1.74	0.897	0.897	HASL 300, U-02-RC M	GEL	/ X/

VOA

1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,1-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dibromo-3-chloropropane	0.0188	ug/L	U	0.0188			SW846-8011	GEL	/ X/
1,2-Dibromoethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,4-Dichlorobenzene	1.77	ug/L		1			EPA-624.1	GEL	/ X/
2-Butanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
2-Hexanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acetone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrolein	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrylonitrile	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Benzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromodichloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromoform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Carbon disulfide	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Carbon tetrachloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chlorobenzene	1.16	ug/L		1			EPA-624.1	GEL	/ X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Ethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Iodomethane	5	ug/L	U	5			EPA-624.1	GEL	/ X/
m,p-Xylene	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Methylene chloride	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Styrene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Tetrachloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Toluene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Total Xylene	3	ug/L	U	3			EPA-624.1	GEL	/ X/
trans-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Trichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trichlorofluoromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Vinyl acetate	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Vinyl chloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/

WETCHEM

Paducah OREIS Report for SLS21-01

Carbonaceous Biochemical Oxygen Demand (CBOD)	4.96	mg/L	H	2	SM-5210 B	GEL	T / X / BL-T, J
Chemical Oxygen Demand (COD)	39.3	mg/L	N	20	EPA-410.4	GEL	/ X /
Cyanide	0.2	mg/L	U	0.2	SW846-9012B	GEL	/ X /
Dissolved Solids	556	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	400	mg/L		2.5	EPA-130.2	GEL	/ X /
Iodide	1.41	mg/L		0.5	EPA-300.0	GEL	/ X /
Suspended Solids	96	mg/L		25	EPA-160.2	GEL	/ X /
Total Organic Carbon (TOC)	10.2	mg/L		2	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	10.7	ug/L		10	SW846-9020B	GEL	/ X /

Paducah OREIS Report for SLS21-01

FBSLS21-01

from: QC

on 2/10/2021

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	UW		0.2			SW846-9056	GEL	/X/
Chloride	0.164	mg/L	J		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	HU		0.1			SW846-9056	GEL	/X/
Sulfate	0.135	mg/L	J		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	0.004	mg/L	U		0.004			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	0.2	mg/L	U		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	0.002	mg/L	U		0.002			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	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Nickel	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Phosphorous	0.103	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	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Uranium	0.0002	mg/L	U		0.0002			SW846-6020	GEL	/X/
Vanadium	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
OTHOR										
Oil and Grease	4.42	mg/L	U		4.42			EPA-1664A	GEL	/X/
PPCB										
PCB-1016	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
PCB-1221	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
PCB-1232	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
PCB-1242	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
PCB-1248	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
PCB-1254	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
PCB-1260	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
PCB-1268	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.049	ug/L	U		0.049			SW846-8082	GEL	/X/

Paducah OREIS Report for SLS21-01

RADS

Alpha activity	-0.0751	pCi/L	U	5.47	2.15	2.15	SW846-9310	GEL	/X/
Americium-241	0.502	pCi/L	U	1.62	0.998	1	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	3.73	pCi/L	U	10.1	5.85	5.88	SW846-9310	GEL	/X/
Cesium-137	0.739	pCi/L	U	1.82	0.957	1.02	EPA-901.1	GEL	/X/
Cobalt-60	-0.799	pCi/L	U	1.64	1	1.07	EPA-901.1	GEL	/X/
Neptunium-237	0.675	pCi/L	U	2.33	1.4	1.4	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	-0.345	pCi/L	U	1.88	0.676	0.677	HASL 300, Am-05-RC M	GEL	/X/
Radium-226	0.117	pCi/L	U	0.534	0.295	0.295	AN-1418	GEL	/X/
Radium-228	1.94	pCi/L	U	4.59	2.67	2.72	EPA-904-M	GEL	/X/
Strontium-90	4.96	pCi/L	U	5.73	3.63	3.71	EPA-905.0-M	GEL	/X/
Technetium-99	-5.02	pCi/L	U	19.4	11	11	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	0.78	pCi/L	U	1.53	0.983	0.993	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	0.294	pCi/L	U	1.05	0.626	0.627	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	54.9	pCi/L		26.4	39.8	41.8	EPA-901.1	GEL	/X/
Tritium	38.7	pCi/L	U	220	128	128	EPA-906.0-M	GEL	/X/
Uranium	0.544	pCi/L	U	4.74	2.32	2.33	HASL 300, U-02-RC M	GEL	/X/
Uranium-234	0.156	pCi/L	U	3.23	1.52	1.53	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	0.388	pCi/L	U	2.61	1.51	1.51	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	-0.181	pCi/L	U	2.29	0.884	0.889	HASL 300, U-02-RC M	GEL	/X/

VOA

1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1,1-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dibromo-3-chloropropane	0.0192	ug/L	U	0.0192			SW846-8011	GEL	/X/
1,2-Dibromoethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
2-Butanone	5	ug/L	U	5			EPA-624.1	GEL	/X/
2-Hexanone	5	ug/L	U	5			EPA-624.1	GEL	/X/
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624.1	GEL	/X/
Acetone	5	ug/L	U	5			EPA-624.1	GEL	/X/
Acrolein	5	ug/L	U	5			EPA-624.1	GEL	/X/
Acrylonitrile	5	ug/L	U	5			EPA-624.1	GEL	/X/
Benzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromodichloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromoform	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromomethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Carbon disulfide	5	ug/L	U	5			EPA-624.1	GEL	/X/
Carbon tetrachloride	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloroform	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/X/
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/X/
Dibromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Dibromomethane	1	ug/L	U	1			EPA-624.1	GEL	/X/

Paducah OREIS Report for SLS21-01

Ethylbenzene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Iodomethane	5	ug/L	U	5	EPA-624.1	GEL	/X/
m,p-Xylene	2	ug/L	U	2	EPA-624.1	GEL	/X/
Methylene chloride	2	ug/L	U	2	EPA-624.1	GEL	/X/
Styrene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Tetrachloroethene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Toluene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Total Xylene	3	ug/L	U	3	EPA-624.1	GEL	/X/
trans-1,2-Dichloroethene	1	ug/L	U	1	EPA-624.1	GEL	/X/
trans-1,3-Dichloropropene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5	EPA-624.1	GEL	/X/
Trichloroethene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Trichlorofluoromethane	1	ug/L	U	1	EPA-624.1	GEL	/X/
Vinyl acetate	5	ug/L	U	5	EPA-624.1	GEL	/X/
Vinyl chloride	1	ug/L	U	1	EPA-624.1	GEL	/X/
WETCHEM							
Chemical Oxygen Demand (COD)	20	mg/L	NU	20	EPA-410.4	GEL	/X/
Hardness - Total as CaCO3	13.7	mg/L	N	2	EPA-130.2	GEL	/X/
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/X/
Total Organic Carbon (TOC)	0.409	mg/L	J	2	SW846-9060A	GEL	/X/

Paducah OREIS Report for SLS21-01

TBSLS21-01

from: QC

on 2/10/2021

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-624.1	GEL	/X/
1,1,1-Trichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1,2,2-Tetrachloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1,2-Trichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1-Dichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2,3-Trichloropropane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dibromo-3-chloropropane	0.0189	ug/L	U		0.0189			SW846-8011	GEL	/X/
1,2-Dibromoethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichloropropane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dimethylbenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,4-Dichlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
2-Butanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
2-Hexanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
4-Methyl-2-pentanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acetone	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acrolein	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acrylonitrile	5	ug/L	U		5			EPA-624.1	GEL	/X/
Benzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromochloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromodichloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromoform	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromomethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Carbon disulfide	5	ug/L	U		5			EPA-624.1	GEL	/X/
Carbon tetrachloride	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroform	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
cis-1,2-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
cis-1,3-Dichloropropene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Dibromochloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Dibromomethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Ethylbenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Iodomethane	5	ug/L	U		5			EPA-624.1	GEL	/X/
m,p-Xylene	2	ug/L	U		2			EPA-624.1	GEL	/X/
Methylene chloride	2	ug/L	U		2			EPA-624.1	GEL	/X/
Styrene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Tetrachloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Toluene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Total Xylene	3	ug/L	U		3			EPA-624.1	GEL	/X/
trans-1,2-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
trans-1,3-Dichloropropene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U		5			EPA-624.1	GEL	/X/
Trichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Trichlorofluoromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Vinyl acetate	5	ug/L	U		5			EPA-624.1	GEL	/X/
Vinyl chloride	1	ug/L	U		1			EPA-624.1	GEL	/X/

*Verification/Validation/Assessment ** TPUs reported at 1.96 sigma

Paducah OREIS Report for ULS21-01

ULS21-01-01

from: C-746-U

on 2/10/2021

Media: WW

SmpMethod: GR

Comments:

Sample collected from F002 Tank. CB 2-10-21. Due to a weather related delay (ice storm), FedEx did not deliver samples until 2-12-21. HLN 2-15-21

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU**	Method	LabCode	V/V/A*
ANION										
Bromide	0.209	mg/L	W		0.2			SW846-9056	GEL	/X/
Chloride	34.8	mg/L			4			SW846-9056	GEL	/X/
Fluoride	0.589	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	4.34	mg/L	H		0.1			SW846-9056	GEL	T/X/BL-TJ
Sulfate	187	mg/L			8			SW846-9056	GEL	/X/
FS										
Conductivity	1442	umho/cm						FS	FS	//
Dissolved Oxygen	9.95	mg/L						FS	FS	//
pH	7.7	Std Unit						FS	FS	//
Redox	142	mV						FS	FS	//
Temperature	56.9	deg F						FS	FS	//
METAL										
Aluminum	0.0779	mg/L			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	0.109	mg/L			0.004			SW846-6020	GEL	/X/
Beryllium	0.000221	mg/L	J		0.0005			SW846-6020	GEL	S/X/
Boron	0.849	mg/L			0.15			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	132	mg/L			2			SW846-6020	GEL	/X/
Chromium	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Cobalt	0.000651	mg/L	J		0.001			SW846-6020	GEL	/X/
Copper	0.00116	mg/L	J		0.002			SW846-6020	GEL	/X/
Iron	0.0809	mg/L	J		0.1			SW846-6020	GEL	/X/
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Magnesium	40.7	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	0.0283	mg/L			0.005			SW846-6020	GEL	/X/
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/X/
Molybdenum	0.00166	mg/L	B		0.001			SW846-6020	GEL	/X/
Nickel	0.00333	mg/L			0.002			SW846-6020	GEL	/X/
Phosphorous	0.0976	mg/L			0.05			EPA-365.4	GEL	/X/
Potassium	4.07	mg/L			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	79.5	mg/L			2.5			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	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Uranium	0.121	mg/L	N		0.0002			SW846-6020	GEL	I/X/
Vanadium	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.0113	mg/L	J		0.02			SW846-6020	GEL	/X/
METAL-D										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.005	mg/L	U		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.11	mg/L			0.004			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/

Paducah OREIS Report for ULS21-01

Cobalt, Dissolved	0.000576	mg/L	J	0.001			SW846-6020	GEL	/ X/
Copper, Dissolved	0.00136	mg/L	J	0.002			SW846-6020	GEL	/ X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/ X/
Manganese, Dissolved	0.023	mg/L		0.005			SW846-6020	GEL	/ X/
Nickel, Dissolved	0.00366	mg/L		0.002			SW846-6020	GEL	/ X/
Selenium, Dissolved	0.005	mg/L	U	0.005			SW846-6020	GEL	/ 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	0.01	mg/L	U	0.01			SW846-6020	GEL	/ X/
Uranium, Dissolved	0.122	mg/L	N	0.0002			SW846-6020	GEL	/ X/
Vanadium, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/ X/
Zinc, Dissolved	0.00762	mg/L	J	0.02			SW846-6020	GEL	/ X/

OTHOR

Oil and Grease	4.03	mg/L	U	4.03			EPA-1664A	GEL	/ X/
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PCCB

PCB-1016	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
PCB-1221	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
PCB-1232	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
PCB-1242	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
PCB-1248	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
PCB-1254	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
PCB-1260	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
PCB-1268	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/
Polychlorinated biphenyl	0.05	ug/L	U	0.05			SW846-8082	GEL	/ X/

RADS

Alpha activity	33.1	pCi/L		13.2	12.3	13.5	SW846-9310	GEL	/ X/
Americium-241	0.201	pCi/L	U	1.27	0.753	0.754	HASL 300, Am-05-RC M	GEL	/ X/
Beta activity	44	pCi/L		11.7	10	12.4	SW846-9310	GEL	/ X/
Cesium-137	-0.0173	pCi/L	U	1.38	0.904	0.904	EPA-901.1	GEL	/ X/
Cobalt-60	0.0118	pCi/L	U	1.39	0.769	0.769	EPA-901.1	GEL	/ X/
Dissolved Alpha	21.9	pCi/L		1.44	2.42	4.32	SW846-9310	GEL	/ X/
Dissolved Beta	17.5	pCi/L		1.28	1.23	3.31	SW846-9310	GEL	/ X/
Neptunium-237	-0.265	pCi/L	U	1.77	0.575	0.575	ASTM-1475-00M	GEL	/ X/
Plutonium-239/240	-0.0987	pCi/L	U	1.66	0.682	0.682	HASL 300, Pu-11-RC M	GEL	/ X/
Radium-226	0.252	pCi/L	U	0.723	0.464	0.465	AN-1418	GEL	/ X/
Radium-228	0.666	pCi/L	U	4.86	2.65	2.66	EPA-904-M	GEL	/ X/
Strontium-90	1.16	pCi/L	U	5.67	3.14	3.15	EPA-905.0-M	GEL	/ X/
Technetium-99	7.96	pCi/L	U	20.2	12	12	HASL 300, Tc-02-RC M	GEL	/ X/
Thorium-230	0.432	pCi/L	U	1.36	0.805	0.811	HASL 300, Th-01-RC M	GEL	/ X/
Thorium-232	0.104	pCi/L	U	0.848	0.47	0.47	HASL 300, Th-01-RC M	GEL	/ X/
Thorium-234	0	pCi/L	UX	21.9	29.6	30.3	EPA-901.1	GEL	/ X/
Tritium	48.5	pCi/L	U	224	131	131	EPA-906.0-M	GEL	/ X/
Uranium	41.7	pCi/L		3.49	7.32	9.34	HASL 300, U-02-RC M	GEL	/ X/
Uranium-234	8.56	pCi/L		2.08	3.36	3.69	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235	0.677	pCi/L	U	1.91	1.35	1.35	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238	32.5	pCi/L		2.06	6.36	8.47	HASL 300, U-02-RC M	GEL	/ X/

RADS-D

Americium-241, Dissolved	1.33	pCi/L	U	1.93	1.42	1.43	HASL 300, Am-05-RC M	GEL	/ X/
Cesium-137, Dissolved	-1.89	pCi/L	U	11.6	6.91	6.96	EPA-901.1	GEL	/ X/
Cobalt-60, Dissolved	2.33	pCi/L	U	20.1	9.01	9.07	EPA-901.1	GEL	/ X/
Neptunium-237, Dissolved	-0.582	pCi/L	U	1.61	0.439	0.44	ASTM-1475-00M	GEL	/ X/
Plutonium-239/240, Dissolved	0.852	pCi/L	U	1.85	1.26	1.27	HASL 300, Pu-11-RC M	GEL	/ X/
Technetium-99, Dissolved	13.7	pCi/L	U	17.6	10.7	10.8	HASL 300, Tc-02-RC M	GEL	/ X/
Thorium-230, Dissolved	2.23	pCi/L	U	2.25	1.76	1.8	HASL 300, Th-01-RC M	GEL	/ X/
Thorium-234, Dissolved	115	pCi/L	U	830	742	744	EPA-901.1	GEL	/ X/

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Uranium, Dissolved	41.4	pCi/L		1.76	4.76	6.34	HASL 300, U-02-RC M	GEL	/ X/
Uranium-234, Dissolved	9.23	pCi/L		1.17	2.28	2.57	HASL 300, U-02-RC M	GEL	/ X/
Uranium-235, Dissolved	0.26	pCi/L	U	0.949	0.598	0.599	HASL 300, U-02-RC M	GEL	/ X/
Uranium-238, Dissolved	31.9	pCi/L		0.913	4.14	5.77	HASL 300, U-02-RC M	GEL	/ X/

VOA

1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,1-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,1-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dibromo-3-chloropropane	0.0189	ug/L	U	0.0189			SW846-8011	GEL	/ X/
1,2-Dibromoethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
2-Butanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
2-Hexanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acetone	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrolein	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Acrylonitrile	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Benzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromodichloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromoform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Bromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Carbon disulfide	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Carbon tetrachloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloroform	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Chloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Dibromomethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Ethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Iodomethane	5	ug/L	U	5			EPA-624.1	GEL	/ X/
m,p-Xylene	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Methylene chloride	2	ug/L	U	2			EPA-624.1	GEL	/ X/
Styrene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Tetrachloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Toluene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Total Xylene	3	ug/L	U	3			EPA-624.1	GEL	/ X/
trans-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
trans-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Trichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Trichlorofluoromethane	1	ug/L	U	1			EPA-624.1	GEL	/ X/
Vinyl acetate	5	ug/L	U	5			EPA-624.1	GEL	/ X/
Vinyl chloride	1	ug/L	U	1			EPA-624.1	GEL	/ X/

WETCHEM

Paducah OREIS Report for ULS21-01

Carbonaceous Biochemical Oxygen Demand (CBOD)	2	mg/L	HUX	2	SM-5210 B	GEL	T / X / BL-T,J
Chemical Oxygen Demand (COD)	20	mg/L	NU	20	EPA-410.4	GEL	/ X /
Cyanide	0.005	mg/L	U	0.005	SW846-9012B	GEL	/ X /
Dissolved Solids	729	mg/L		14.3	EPA-160.1	GEL	/ X /
Hardness - Total as CaCO3	440	mg/L	N	2	EPA-130.2	GEL	/ X /
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/ X /
Suspended Solids	1.48	mg/L	J	4.63	EPA-160.2	GEL	/ X /
Total Organic Carbon (TOC)	6.18	mg/L		2	SW846-9060A	GEL	/ X /
Total Organic Halides (TOX)	21.9	ug/L		10	SW846-9020B	GEL	/ X /

Paducah OREIS Report for ULS21-01

FBULS21-01

from: QC

on 2/10/2021

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	UW		0.2			SW846-9056	GEL	/X/
Chloride	0.304	mg/L			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	HU		0.1			SW846-9056	GEL	/X/
Sulfate	0.136	mg/L	J		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	0.004	mg/L	U		0.004			SW846-6020	GEL	/X/
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/X/
Boron	0.0065	mg/L	J		0.015			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	0.2	mg/L	U		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	0.002	mg/L	U		0.002			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	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Nickel	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Phosphorous	0.141	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	0.01	mg/L	U		0.01			SW846-6020	GEL	/X/
Uranium	0.0002	mg/L	UN		0.0002			SW846-6020	GEL	/X/
Vanadium	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
OTHOR										
Oil and Grease	4.39	mg/L	U		4.39			EPA-1664A	GEL	/X/
PPCB										
PCB-1016	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
PCB-1221	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
PCB-1232	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
PCB-1242	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
PCB-1248	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
PCB-1254	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
PCB-1260	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
PCB-1268	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0547	ug/L	U		0.0547			SW846-8082	GEL	/X/

Paducah OREIS Report for ULS21-01

RADS									
Alpha activity	-0.81	pCi/L	U	9.26	4.34	4.34	SW846-9310	GEL	/X/
Americium-241	0.173	pCi/L	U	1.09	0.65	0.651	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	2.53	pCi/L	U	7.9	4.51	4.53	SW846-9310	GEL	/X/
Cesium-137	0.0127	pCi/L	U	1.67	0.915	0.915	EPA-901.1	GEL	/X/
Cobalt-60	0.46	pCi/L	U	1.9	1.03	1.05	EPA-901.1	GEL	/X/
Neptunium-237	0.0804	pCi/L	U	1.71	0.816	0.817	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	-0.426	pCi/L	U	1.79	0.536	0.537	HASL 300, Pu-11-RC M	GEL	/X/
Radium-226	0.214	pCi/L	U	0.873	0.528	0.528	AN-1418	GEL	/X/
Radium-228	1.35	pCi/L	U	3.55	2.03	2.06	EPA-904-M	GEL	/X/
Strontium-90	1.05	pCi/L	U	4.15	2.29	2.29	EPA-905.0-M	GEL	/X/
Technetium-99	0.479	pCi/L	U	17.7	10.2	10.2	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	0.412	pCi/L	U	1.69	0.944	0.95	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	0.124	pCi/L	U	0.973	0.544	0.544	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	23.5	pCi/L	U	26.8	38.6	39	EPA-901.1	GEL	/X/
Tritium	-9.4	pCi/L	U	221	127	127	EPA-906.0-M	GEL	/X/
Uranium	2.16	pCi/L	U	5.71	3.25	3.29	HASL 300, U-02-RC M	GEL	/X/
Uranium-234	0.079	pCi/L	U	3.46	1.59	1.59	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	-0.288	pCi/L	U	3.64	1.41	1.42	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	2.08	pCi/L	U	2.71	2.47	2.51	HASL 300, U-02-RC M	GEL	/X/

VOA									
1,1,1,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1,1-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1,2,2-Tetrachloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1,2-Trichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,1-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2,3-Trichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dibromo-3-chloropropane	0.0191	ug/L	U	0.0191			SW846-8011	GEL	/X/
1,2-Dibromoethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dichloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dichloropropane	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,2-Dimethylbenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
1,4-Dichlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
2-Butanone	5	ug/L	U	5			EPA-624.1	GEL	/X/
2-Hexanone	5	ug/L	U	5			EPA-624.1	GEL	/X/
4-Methyl-2-pentanone	5	ug/L	U	5			EPA-624.1	GEL	/X/
Acetone	5	ug/L	U	5			EPA-624.1	GEL	/X/
Acrolein	5	ug/L	U	5			EPA-624.1	GEL	/X/
Acrylonitrile	5	ug/L	U	5			EPA-624.1	GEL	/X/
Benzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromodichloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromoform	1	ug/L	U	1			EPA-624.1	GEL	/X/
Bromomethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Carbon disulfide	5	ug/L	U	5			EPA-624.1	GEL	/X/
Carbon tetrachloride	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chlorobenzene	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloroform	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
cis-1,2-Dichloroethene	1	ug/L	U	1			EPA-624.1	GEL	/X/
cis-1,3-Dichloropropene	1	ug/L	U	1			EPA-624.1	GEL	/X/
Dibromochloromethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Dibromomethane	1	ug/L	U	1			EPA-624.1	GEL	/X/

Paducah OREIS Report for ULS21-01

Ethylbenzene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Iodomethane	5	ug/L	U	5	EPA-624.1	GEL	/X/
m,p-Xylene	2	ug/L	U	2	EPA-624.1	GEL	/X/
Methylene chloride	2	ug/L	U	2	EPA-624.1	GEL	/X/
Styrene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Tetrachloroethene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Toluene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Total Xylene	3	ug/L	U	3	EPA-624.1	GEL	/X/
trans-1,2-Dichloroethene	1	ug/L	U	1	EPA-624.1	GEL	/X/
trans-1,3-Dichloropropene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U	5	EPA-624.1	GEL	/X/
Trichloroethene	1	ug/L	U	1	EPA-624.1	GEL	/X/
Trichlorofluoromethane	1	ug/L	U	1	EPA-624.1	GEL	/X/
Vinyl acetate	5	ug/L	U	5	EPA-624.1	GEL	/X/
Vinyl chloride	1	ug/L	U	1	EPA-624.1	GEL	/X/
WETCHEM							
Chemical Oxygen Demand (COD)	20	mg/L	NU	20	EPA-410.4	GEL	/X/
Hardness - Total as CaCO3	8.99	mg/L	N	2	EPA-130.2	GEL	/X/
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/X/
Total Organic Carbon (TOC)	2	mg/L	U	2	SW846-9060A	GEL	/X/

Paducah OREIS Report for ULS21-01

TBULS21-01

from: QC

on 2/10/2021

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-624.1	GEL	/X/
1,1,1-Trichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1,2,2-Tetrachloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1,2-Trichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1-Dichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,1-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2,3-Trichloropropane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dibromo-3-chloropropane	0.0191	ug/L	U		0.0191			SW846-8011	GEL	/X/
1,2-Dibromoethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dichloropropane	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,2-Dimethylbenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
1,4-Dichlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
2-Butanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
2-Hexanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
4-Methyl-2-pentanone	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acetone	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acrolein	5	ug/L	U		5			EPA-624.1	GEL	/X/
Acrylonitrile	5	ug/L	U		5			EPA-624.1	GEL	/X/
Benzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromochloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromodichloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromoform	1	ug/L	U		1			EPA-624.1	GEL	/X/
Bromomethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Carbon disulfide	5	ug/L	U		5			EPA-624.1	GEL	/X/
Carbon tetrachloride	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chlorobenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroform	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
cis-1,2-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
cis-1,3-Dichloropropene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Dibromochloromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Dibromomethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Ethylbenzene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Iodomethane	5	ug/L	U		5			EPA-624.1	GEL	/X/
m,p-Xylene	2	ug/L	U		2			EPA-624.1	GEL	/X/
Methylene chloride	2	ug/L	U		2			EPA-624.1	GEL	/X/
Styrene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Tetrachloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Toluene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Total Xylene	3	ug/L	U		3			EPA-624.1	GEL	/X/
trans-1,2-Dichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
trans-1,3-Dichloropropene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Trans-1,4-Dichloro-2-butene	5	ug/L	U		5			EPA-624.1	GEL	/X/
Trichloroethene	1	ug/L	U		1			EPA-624.1	GEL	/X/
Trichlorofluoromethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Vinyl acetate	5	ug/L	U		5			EPA-624.1	GEL	/X/
Vinyl chloride	1	ug/L	U		1			EPA-624.1	GEL	/X/

*Verification/Validation/Assessment ** TPUs reported at 1.96 sigma



Department of Energy

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

April 26, 2021

Ms. Myrna Redfield, Program Manager
Four Rivers Nuclear Partnership, LLC
5511 Hobbs Road
Kevil, Kentucky 42053

PPPO-02-10010237-21B

Dear Ms. Redfield:

DE-EM0004895: REVIEW OF FINAL C-746-U SOLID WASTE LANDFILL FIRST QUARTER CALENDAR YEAR 2021 WASTE QUANTITY REPORT

Reference: Letter from M. Redfield to M. Fultz, "Four Rivers Nuclear Partnership, LLC—
FINAL C-746-U Solid Waste Landfill First Quarter Calendar Year 2021 Waste
Quantity Report, Solid Waste Permit No. SW07300014, SW07300015,
SW07300045, Agency Interest No. 3059," (FRNP-21-4958), dated April 20, 2021

As co-permittee of the Kentucky Solid Waste Permit Number SW07300014, SW07300015, and SW07300045, Four Rivers Nuclear Partnership, LLC (FRNP) is required to comply with the electronic transmittal system implemented by the Kentucky Energy and Environmental Cabinet.

The U.S. Department of Energy reviewed the first quarter calendar year 2021 data in Solid Waste Branch Submittal eForm #51 and has no comments. FRNP may submit the electronic Solid Waste Branch Submittal eForm #51, pursuant to Contract No. DE-EM0004895. Further, electronic submittal of eForm #51 by FRNP does not change any of the obligations or liabilities under the contract, including the liabilities pursuant to H.65 of the contract.

If you have any questions or require additional information, please contact David Dollins at (270) 441-6819.

Sincerely,

Jennifer Woodard
Contracting Officer's Representative
Portsmouth/Paducah Project Office

I am not authorized to negotiate, or make any agreements or commitments, which involve a change in the scope, price, period of performance, terms or conditions of the contract. If you believe that a change has been directed as a result of this correspondence, then in accordance with contract clause DEAR 952.242-70 "Technical Direction," you are directed to contact the Contracting Officer, in writing, within five (5) working days after receipt of this letter (or email) and prior to taking any action as a result of this letter.

cc:

abigail.parish@pppo.gov, PPPO
april.ladd@pppo.gov, PPPO
brandy.mitchell@pad.pppo.gov, FRNP
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Division of Waste Management
Solid Waste Branch
Quarterly Waste Quantity Report - DEP 7046-Q
Electronic Submittal

**This eForm is not applicable to Transfer stations or Convenience Centers. Those reports still need to be sent in the mail.

Agency/Site Information:

Agency Interest #(*) <input type="text" value="3059"/>	Facility Name <input type="text" value="Dept of Energy-Paducah Gaseous"/>	Report for the Months of(*) <input type="text" value="Jan, Feb, Mar"/>	Year(*) <input type="text" value="2021"/>
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County where landfill is located: <input type="text" value="McCracken"/>	LandFill(*) <input type="text" value="Contained Landfill(ACTV6)/07300045"/>
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CONTAINED LANDFILL

**Editing the Grid: You may click in each cell to edit the value.
You may navigate the grid items by using the tab and arrow keys or you may press the enter key to enable editing of a cell.**

	Waste Source	*Municipal Solid Waste	*Industrial Waste	*Special Waste	**Waste Used as Alternate Daily Cover As Approved	Delete
1	MCCRACKEN,KY		1396.79			Delete
+						

Total tonnage: 1396.79

Total Fee :	<input type="text" value="2444.382"/>
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*Does not include waste used as Alternate Daily Cover.
**Indicate the amount of waste used as Alternate Daily Cover. Please note this requires prior approval by the Cabinet.

- For this calendar quarter, please check this box if no waste has been collected at the Solid Waste Disposal Facility.
- Check this box if you elect to submit a check or money order instead of paying this fee online, or payment is not required for this activity type. Payments shall be made payable to the Kentucky State Treasurer, and mailed to:

Division of Waste Management
Solid Waste Branch
300 Sower Blvd., Second Floor
Frankfort, Kentucky 40601

Certification:

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:(*)	Pin(*)	Title:(*)
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Signature		PIN	Title	
First Name:(*) First Name		M.I.: MI	Last Name:(*) Last Name	
eMail Address:(*) eMail Address	Business Phone:(*) Phone	Alternate Phone: Phone	Signature Date:(*) Date	
Click to Save Values for Future Retrieval		Submit		