



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

April 14, 2020

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-02-10004800-20B

Dear Ms. Nielsen:

**C-746-S&T AND C-746-U SOLID WASTE LANDFILLS FIRST QUARTER CALENDAR YEAR 2020 WASTE OPERATING REPORT, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, FRNP-RPT-0134/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 2020 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 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 1st Qtr. CY20 Waste Operating Report, FRNP-RPT-0134/V1

cc w/enclosures:


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**CERTIFICATION**

**Document Identification:** *C-746-S&T and C-746-U Solid Waste Landfills First Quarter Calendar Year 2020 Waste Operating Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, FRNP-RPT-0134/V1, Solid Waste Permit SW07300014, SW07300015, SW07300045, Agency Interest No. 3059, April 2020*

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.

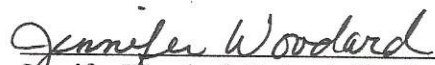
Four Rivers Nuclear Partnership, LLC  
Permittee (Operator)

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

4/14/2020  
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

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

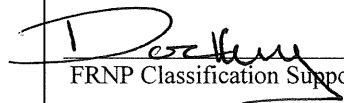
4/14/2020  
Date Signed

FRNP-RPT-0134/V1

**C-746-S&T and C-746-U Solid Waste Landfills  
First Quarter Calendar Year 2020  
Waste Operating Report  
Paducah Gaseous Diffusion Plant,  
Paducah, Kentucky**



This document is approved for public release per review by:

  
FRNP Classification Support

4.13.2020  
Date



**C-746-S&T and C-746-U Solid Waste Landfills  
First Quarter Calendar Year 2020  
Waste Operating Report  
Paducah Gaseous Diffusion Plant,  
Paducah, Kentucky**

Date Issued—April 2020

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 2020 for the Paducah Gaseous Diffusion Plant, McCracken County, Kentucky.

In the first quarter of calendar year 2020, a total of 60.18 tons of industrial waste was disposed of in the C-746-U Contained Landfill. No asbestos-containing materials were disposed of in the landfill this quarter. No special waste or spill-residue-containing materials were disposed of in the landfill this quarter.

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 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)].

### **Leachate Collection and Disposition**

A total of 434,200 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. 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.

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 13, 2020. 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 associated with 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: February 13, 2020

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"

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### OWNER INFORMATION

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

Contact Person: James Miller Phone No.: (270) 441-5068  
Director, Technical Services,

Contact Person Title: Four Rivers Nuclear Partnership, LLC

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

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### 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

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### 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

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### 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

PERMIT NUMBER: 073-00045

COUNTY: McCracken

Month & Year: January 2020

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	<b>D-2</b>	<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>
8	<b>D-2</b>	<b>YES</b>	<b>YES</b>	<b>NO</b>	<b>NO</b>	<b>YES</b>
9						
10						
11						
12						
13						
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28						
29						
30						
31						



# CP3-WM-0017-F02 - COVER LOG

**DEPARTMENT OF ENERGY**  
**COUNTY: McCracken**

**PERMIT NUMBER: 073-00045**  
**Month & Year: February 2020**

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						
11						
12						
13						
14						
15						
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There were no waste disposal activities during the month of February 2020

# CP3-WM-0017-F02 - COVER LOG

DEPARTMENT OF ENERGY

PERMIT NUMBER: 073-00045

COUNTY: McCracken

Month & Year: March 2020

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						
11						
12						
13						
14						
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There were no waste disposal activities during the month of March 2020

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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 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
1-02-20	1,2,3,4,5	F-001		27500		
1-02-20	1,2,3,4,5	F-002		28900	10100	L
1-02-20	1,2,3,4,5	F-007		1200		
1-02-20	1,2,3,4,5	F-008		1200		
1-02-20	1,2,3,4,5	F-009		600		
1-06-20	1,2,3,4,5	F-001		28900	7900	L
1-06-20	1,2,3,4,5	F-002		24000		
1-06-20	1,2,3,4,5	F-007		1200		
1-06-20	1,2,3,4,5	F-008		1200		
1-06-20	1,2,3,4,5	F-009		600		
1-07-20	1,2,3,4,5	F-001		21000		
1-07-20	1,2,3,4,5	F-002		29300	8000	L
1-07-20	1,2,3,4,5	F-007		1200		
1-07-20	1,2,3,4,5	F-008		1200		
1-07-20	1,2,3,4,5	F-009		600		
1-08-20	1,2,3,4,5	F-001		24900	8700	L
1-08-20	1,2,3,4,5	F-002		21300		
1-08-20	1,2,3,4,5	F-007		1200		
1-08-20	1,2,3,4,5	F-008		1200		
1-08-20	1,2,3,4,5	F-009		600		
1-09-20	1,2,3,4,5	F-001		20400	7400	L
1-09-20	1,2,3,4,5	F-002		25200	8200	L
1-09-20	1,2,3,4,5	F-007		1200		
1-09-20	1,2,3,4,5	F-008		1200		
1-09-20	1,2,3,4,5	F-009		600		
1-13-20	1,2,3,4,5	F-001		15900	2600	L
1-13-20	1,2,3,4,5	F-002		29800	5600	L

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

Permit No. 073-00045

McCracken County, Kentucky

Month January Year 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
1-13-20	1,2,3,4,5	F-007		1200		
1-13-20	1,2,3,4,5	F-008		1200		
1-13-20	1,2,3,4,5	F-009		600		
1-14-20	1,2,3,4,5	F-001		21000		
1-14-20	1,2,3,4,5	F-002		24200	7700	L
1-14-20	1,2,3,4,5	F-007		1200		
1-14-20	1,2,3,4,5	F-008		1200		
1-14-20	1,2,3,4,5	F-009		600		
1-15-20	1,2,3,4,5	F-001		27100		
1-15-20	1,2,3,4,5	F-002		16500	9000	L
1-15-20	1,2,3,4,5	F-007		1200		
1-15-20	1,2,3,4,5	F-008		1200		
1-15-20	1,2,3,4,5	F-009		600		
1-16-20	1,2,3,4,5	F-001		29500	7700	L
1-16-20	1,2,3,4,5	F-002		10500		
1-16-20	1,2,3,4,5	F-007		1200		
1-16-20	1,2,3,4,5	F-008		1200		
1-16-20	1,2,3,4,5	F-009		600		
1-21-20	1,2,3,4,5	F-001		29500	10700	L
1-21-20	1,2,3,4,5	F-002		21800		
1-21-20	1,2,3,4,5	F-007		1200		
1-21-20	1,2,3,4,5	F-008		1200		
1-21-20	1,2,3,4,5	F-009		600		
1-22-20	1,2,3,4,5	F-001		18800	6900	L
1-22-20	1,2,3,4,5	F-002		24200		
1-22-20	1,2,3,4,5	F-007		1200		
1-22-20	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 January

Year 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
1-22-20	1,2,3,4,5	F-009		600		
1-23-20	1,2,3,4,5	F-001		11900	9700	L
1-23-20	1,2,3,4,5	F-002		25700		
1-23-20	1,2,3,4,5	F-007		1200		
1-23-20	1,2,3,4,5	F-008		1200		
1-23-20	1,2,3,4,5	F-009		600		
1-27-20	1,2,3,4,5	F-001		7500		
1-27-20	1,2,3,4,5	F-002		26800	10300	L
1-27-20	1,2,3,4,5	F-007		1200		
1-27-20	1,2,3,4,5	F-008		1200		
1-27-20	1,2,3,4,5	F-009		600		
1-28-20	1,2,3,4,5	F-001		12200		
1-28-20	1,2,3,4,5	F-002		16500	6000	L
1-28-20	1,2,3,4,5	F-007		1200		
1-28-20	1,2,3,4,5	F-008		1200		
1-28-20	1,2,3,4,5	F-009		600		
1-29-20	1,2,3,4,5	F-001		16800		
1-29-20	1,2,3,4,5	F-002		10500	8100	L
1-29-20	1,2,3,4,5	F-007		1200		
1-29-20	1,2,3,4,5	F-008		1200		
1-29-20	1,2,3,4,5	F-009		600		
1-30-20	1,2,3,4,5	F-001		16800	5500	L
1-30-20	1,2,3,4,5	F-002		2400		
1-30-20	1,2,3,4,5	F-007		1200		
1-30-20	1,2,3,4,5	F-008		1200		
1-30-20	1,2,3,4,5	F-009		600		
		<i>Tommy Smith</i>		<i>1-30-20</i>		



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

Permit No. 073-00045

McCracken County, Kentucky

Month February Year 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
2-03-20	1,2,3,4,5	F-001		11300	7800	L
2-03-20	1,2,3,4,5	F-002		2800		
2-03-20	1,2,3,4,5	F-007		1200		
2-03-20	1,2,3,4,5	F-008		1200		
2-03-20	1,2,3,4,5	F-009		600		
2-04-20	1,2,3,4,5	F-001		3700		
2-04-20	1,2,3,4,5	F-002		13900	7900	L
2-04-20	1,2,3,4,5	F-007		1200		
2-04-20	1,2,3,4,5	F-008		1200		
2-04-20	1,2,3,4,5	F-009		600		
2-05-20	1,2,3,4,5	F-001		21500	7300	L
2-05-20	1,2,3,4,5	F-002		6000		
2-05-20	1,2,3,4,5	F-007		1200		
2-05-20	1,2,3,4,5	F-008		1200		
2-05-20	1,2,3,4,5	F-009		600		
2-06-20	1,2,3,4,5	F-001		14200		
2-06-20	1,2,3,4,5	F-002		21500	7300	L
2-06-20	1,2,3,4,5	F-007		1200		
2-06-20	1,2,3,4,5	F-008		1200		
2-06-20	1,2,3,4,5	F-009		600		
2-10-20	1,2,3,4,5	F-001		22300	2200	L
2-10-20	1,2,3,4,5	F-002		26400	5700	L
2-10-20	1,2,3,4,5	F-007		1200		
2-10-20	1,2,3,4,5	F-008		1200		
2-10-20	1,2,3,4,5	F-009		600		
2-11-20	1,2,3,4,5	F-001		26600	9600	L
2-11-20	1,2,3,4,5	F-002		22900		

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

Permit No. 073-00045

McCracken County, Kentucky

Month February Year 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
2-11-20	1,2,3,4,5	F-007		1200		
2-11-20	1,2,3,4,5	F-008		1200		
2-11-20	1,2,3,4,5	F-009		600		
2-12-20	1,2,3,4,5	F-001		21800		
2-12-20	1,2,3,4,5	F-002		22900	9000	L
2-12-20	1,2,3,4,5	F-007		1200		
2-12-20	1,2,3,4,5	F-008		1200		
2-12-20	1,2,3,4,5	F-009		600		
2-13-20	1,2,3,4,5	F-001		24900	9900	L
2-13-20	1,2,3,4,5	F-002		16500		
2-13-20	1,2,3,4,5	F-007		1200		
2-13-20	1,2,3,4,5	F-008		1200		
2-13-20	1,2,3,4,5	F-009		600		
2-17-20	1,2,3,4,5	F-001		26800	8900	L
2-17-20	1,2,3,4,5	F-002		21800		
2-17-20	1,2,3,4,5	F-007		1200		
2-17-20	1,2,3,4,5	F-008		1200		
2-17-20	1,2,3,4,5	F-009		600		
2-18-20	1,2,3,4,5	F-001		21800		
2-18-20	1,2,3,4,5	F-002		24200	8900	L
2-18-20	1,2,3,4,5	F-007		1200		
2-18-20	1,2,3,4,5	F-008		1200		
2-18-20	1,2,3,4,5	F-009		600		
2-19-20	1,2,3,4,5	F-001		22900	8400	L
2-19-20	1,2,3,4,5	F-002		19000		
2-19-20	1,2,3,4,5	F-007		1200		
2-19-20	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 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
2-19-20	1,2,3,4,5	F-009		600		
2-20-20	1,2,3,4,5	F-001		17900		
2-20-20	1,2,3,4,5	F-002		21500	9300	L
2-20-20	1,2,3,4,5	F-007		1200		
2-20-20	1,2,3,4,5	F-008		1200		
2-20-20	1,2,3,4,5	F-009		600		
2-24-20	1,2,3,4,5	F-001		19900		
2-24-20	1,2,3,4,5	F-002		26200	9700	L
2-24-20	1,2,3,4,5	F-007		1200		
2-24-20	1,2,3,4,5	F-008		1200		
2-24-20	1,2,3,4,5	F-009		600		
2-25-20	1,2,3,4,5	F-001		21300	9100	L
2-25-20	1,2,3,4,5	F-002		18200		
2-25-20	1,2,3,4,5	F-007		1200		
2-25-20	1,2,3,4,5	F-008		1200		
2-25-20	1,2,3,4,5	F-009		600		
2-26-20	1,2,3,4,5	F-001		17000		
2-26-20	1,2,3,4,5	F-002		21800	9200	L
2-26-20	1,2,3,4,5	F-007		1200		
2-26-20	1,2,3,4,5	F-008		1200		
2-26-20	1,2,3,4,5	F-009		600		
2-27-20	1,2,3,4,5	F-001		18500	8000	L
2-27-20	1,2,3,4,5	F-002		18200		
2-27-20	1,2,3,4,5	F-007		1200		
2-27-20	1,2,3,4,5	F-008		1200		
2-27-20	1,2,3,4,5	F-009		600		
		<i>Jimmy Smith 2-27-20</i>				

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

Permit No. 073-00045

McCracken County, Kentucky

Month March Year 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
3-02-20	1,2,3,4,5	F-001		23400	9500	L
3-02-20	1,2,3,4,5	F-002		19300		
3-02-20	1,2,3,4,5	F-007		1200		
3-02-20	1,2,3,4,5	F-008		1200		
3-02-20	1,2,3,4,5	F-009		600		
3-03-20	1,2,3,4,5	F-001		18500		
3-03-20	1,2,3,4,5	F-002		19300	10200	L
3-03-20	1,2,3,4,5	F-007		1200		
3-03-20	1,2,3,4,5	F-008		1200		
3-03-20	1,2,3,4,5	F-009		600		
3-04-20	1,2,3,4,5	F-001		21500	9900	L
3-04-20	1,2,3,4,5	F-002		13900		
3-04-20	1,2,3,4,5	F-007		1200		
3-04-20	1,2,3,4,5	F-008		1200		
3-04-20	1,2,3,4,5	F-009		600		
3-05-20	1,2,3,4,5	F-001		15600	7800	L
3-05-20	1,2,3,4,5	F-002		14800		
3-05-20	1,2,3,4,5	F-007		1200		
3-05-20	1,2,3,4,5	F-008		1200		
3-05-20	1,2,3,4,5	F-009		600		
3-09-20	1,2,3,4,5	F-001		18800		
3-09-20	1,2,3,4,5	F-002		17000	10500	L
3-09-20	1,2,3,4,5	F-007		1200		
3-09-20	1,2,3,4,5	F-008		1200		
3-09-20	1,2,3,4,5	F-009		600		
3-10-20	1,2,3,4,5	F-001		20400	8800	L
3-10-20	1,2,3,4,5	F-002		6500		

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

Permit No. 073-00045

McCracken County, Kentucky

Month March Year 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
3-10-20	1,2,3,4,5	F-007		1200		
3-10-20	1,2,3,4,5	F-008		1200		
3-10-20	1,2,3,4,5	F-009		600		
3-11-20	1,2,3,4,5	F-001		11600	9700	L
3-11-20	1,2,3,4,5	F-002		10800		
3-11-20	1,2,3,4,5	F-007		1200		
3-11-20	1,2,3,4,5	F-008		1200		
3-11-20	1,2,3,4,5	F-009		600		
3-12-20	1,2,3,4,5	F-001		4100		
3-12-20	1,2,3,4,5	F-002		12200	8500	L
3-12-20	1,2,3,4,5	F-007		1200		
3-12-20	1,2,3,4,5	F-008		1200		
3-12-20	1,2,3,4,5	F-009		600		
3-16-20	1,2,3,4,5	F-001		5300		
3-16-20	1,2,3,4,5	F-002		11600	9400	L
3-16-20	1,2,3,4,5	F-007		1200		
3-16-20	1,2,3,4,5	F-008		1200		
3-16-20	1,2,3,4,5	F-009		600		
3-17-20	1,2,3,4,5	F-001		7500	4900	L
3-17-20	1,2,3,4,5	F-002		5800	3400	L
3-17-20	1,2,3,4,5	F-007		1200		
3-17-20	1,2,3,4,5	F-008		1200		
3-17-20	1,2,3,4,5	F-009		600		
3-18-20	1,2,3,4,5	F-001		8900	7500	L
3-18-20	1,2,3,4,5	F-002		2600		
3-18-20	1,2,3,4,5	F-007		1200		
3-18-20	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 2020

Date	Phase	Collection Tank Number	Mobile Tanker	Tank Volume (Gallons)	Disposal Volume (Gallons)	Disposal Method*
3-18-20	1,2,3,4,5	F-009		600		
3-19-20	1,2,3,4,5	F-001		7500	6000	L
3-19-20	1,2,3,4,5	F-002		6800	2000	L
3-19-20	1,2,3,4,5	F-007		1200		
3-19-20	1,2,3,4,5	F-008		1200		
3-19-20	1,2,3,4,5	F-009		600		
3-23-20	1,2,3,4,5	F-001		21000	8800	L
3-23-20	1,2,3,4,5	F-002		5000		
3-23-20	1,2,3,4,5	F-007		1200		
3-23-20	1,2,3,4,5	F-008		1200		
3-23-20	1,2,3,4,5	F-009		600		
3-24-20	1,2,3,4,5	F-001		12200	7900	L
3-24-20	1,2,3,4,5	F-002		9700		
3-24-20	1,2,3,4,5	F-007		1200		
3-24-20	1,2,3,4,5	F-008		1200		
3-24-20	1,2,3,4,5	F-009		600		
3-25-20	1,2,3,4,5	F-001		4300	3100	L
3-25-20	1,2,3,4,5	F-002		14800	6700	L
3-25-20	1,2,3,4,5	F-007		1200		
3-25-20	1,2,3,4,5	F-008		1200		
3-25-20	1,2,3,4,5	F-009		600		
3-26-20	1,2,3,4,5	F-001		5300		
3-26-20	1,2,3,4,5	F-002		8100	6900	L
3-26-20	1,2,3,4,5	F-007		1200		
3-26-20	1,2,3,4,5	F-008		1200		
3-26-20	1,2,3,4,5	F-009		600		
3-30-20	1,2,3,4,5	F-001		19900	8000	L



**LEACHATE ANALYTICAL DATA**



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## Paducah OREIS Report for SLS20-01

**SLS20-01-01**

from: C-746-S

on 2/13/2020

Media: WW

SmpMethod: GR

Comments: Leachate Cell 2 sample

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
<b>ANION</b>										
Bromide	0.2	mg/L	U		0.2			SW846-9056	GEL	/X/
Chloride	10.7	mg/L			1			SW846-9056	GEL	/X/
Fluoride	0.692	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	0.504	mg/L			0.1			SW846-9056	GEL	/X/
Sulfate	46	mg/L			2			SW846-9056	GEL	/X/
<b>FS</b>										
Conductivity	1024	umho/cm						FS	FS	//
Dissolved Oxygen	3.86	mg/L						FS	FS	//
pH	6.62	Std Unit						FS	FS	//
Redox	380	mV						FS	FS	//
Temperature	48.2	deg F						FS	FS	//
<b>METAL</b>										
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	0.00235	mg/L	J		0.005			SW846-6020	GEL	/X/
Barium	0.24	mg/L			0.004			SW846-6020	GEL	/X/
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/X/
Boron	0.0287	mg/L			0.015			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	168	mg/L			1			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	0.000625	mg/L	J		0.002			SW846-6020	GEL	/X/
Iron	0.0983	mg/L	J		0.1			SW846-6020	GEL	/X/
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Magnesium	22.8	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	0.0255	mg/L			0.005			SW846-6020	GEL	/X/
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/X/
Molybdenum	0.000788	mg/L	J		0.001			SW846-6020	GEL	/X/
Nickel	0.00376	mg/L			0.002			SW846-6020	GEL	/X/
Phosphorous	0.118	mg/L			0.05			EPA-365.4	GEL	/X/
Potassium	1.22	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	40.8	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	0.00731	mg/L			0.0002			SW846-6020	GEL	/X/
Vanadium	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.00528	mg/L	J		0.02			SW846-6020	GEL	/X/
<b>METAL-D</b>										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.00242	mg/L	J		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.241	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/

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Cobalt, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/X/
Copper, Dissolved	0.00105	mg/L	J	0.002			SW846-6020	GEL	/X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/X/
Manganese, Dissolved	0.0248	mg/L		0.005			SW846-6020	GEL	/X/
Nickel, Dissolved	0.00374	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	0.00727	mg/L		0.0002			SW846-6020	GEL	/X/
Vanadium, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/X/
Zinc, Dissolved	0.00659	mg/L	J	0.02			SW846-6020	GEL	/X/

**OTHOR**

Oil and Grease	4.2	mg/L	U	4.2			EPA-1664A	GEL	/X/
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**PCCB**

PCB-1016	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
PCB-1221	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
PCB-1232	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
PCB-1242	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
PCB-1248	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
PCB-1254	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
PCB-1260	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
PCB-1268	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0476	ug/L	U	0.0476			SW846-8082	GEL	/X/

**RADS**

Alpha activity	3.19	pCi/L	U	14.9	7.94	7.95	SW846-9310	GEL	/X/
Americium-241	0.29	pCi/L	U	0.79	0.57	0.571	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	-3.9	pCi/L	U	15.5	8.32	8.32	SW846-9310	GEL	/X/
Cesium-137	-0.402	pCi/L	U	1.39	0.825	0.846	EPA-901.1	GEL	/X/
Cobalt-60	-0.346	pCi/L	U	1.46	0.837	0.851	EPA-901.1	GEL	/X/
Dissolved Alpha	2.21	pCi/L	U	3.97	2.37	2.41	SW846-9310	GEL	/X/
Dissolved Beta	2.7	pCi/L	U	1.46	0.926	1.03	SW846-9310	GEL	/X/
Neptunium-237	-0.219	pCi/L	U	1.35	0.497	0.497	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	0.165	pCi/L	U	1.45	0.741	0.741	HASL 300, Pu-11-RC M	GEL	/X/
Radium-226	0.376	pCi/L	U	1.08	0.691	0.692	AN-1418	GEL	/X/
Radium-228	1.14	pCi/L	U	4.96	2.76	2.78	EPA-904-M	GEL	/X/
Strontium-90	1.88	pCi/L	U	4.13	2.42	2.44	EPA-905.0-M	GEL	/X/
Technetium-99	2.49	pCi/L	U	22.8	13.3	13.3	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	0.575	pCi/L	U	1.69	1.02	1.03	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	0.137	pCi/L	U	1.05	0.591	0.592	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	18.4	pCi/L	U	22.2	38.3	38.6	EPA-901.1	GEL	/X/
Tritium	-37.4	pCi/L	U	206	117	117	EPA-906.0-M	GEL	/X/
Uranium	5.97	pCi/L		2.6	2.52	2.59	HASL 300, U-02-RC M	GEL	S/X/
Uranium-234	2.26	pCi/L		1.97	1.62	1.66	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	0.456	pCi/L	U	1.24	0.897	0.899	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	3.25	pCi/L		1.16	1.7	1.77	HASL 300, U-02-RC M	GEL	/X/

**RADS-D**

Americium-241, Dissolved	-0.134	pCi/L	U	1.62	0.698	0.698	HASL 300, Am-05-RC M	GEL	/X/
Cesium-137, Dissolved	3.29	pCi/L	U	8.7	4.2	4.46	EPA-901.1	GEL	/X/
Cobalt-60, Dissolved	1.12	pCi/L	U	8.96	3.86	3.89	EPA-901.1	GEL	/X/
Neptunium-237, Dissolved	0.256	pCi/L	U	1.84	0.968	0.969	ASTM-1475-00M	GEL	/X/
Plutonium-239/240, Dissolved	0.0175	pCi/L	U	1.77	0.804	0.805	HASL 300, Pu-11-RC M	GEL	/X/
Technetium-99, Dissolved	-12.1	pCi/L	U	21.4	12.2	12.2	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230, Dissolved	-0.376	pCi/L	U	5.48	2.19	2.2	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234, Dissolved	131	pCi/L	U	432	246	255	EPA-901.1	GEL	/X/

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Uranium, Dissolved	3.24	pCi/L		2.91	2.21	2.24	HASL 300, U-02-RC M	GEL	/X/
Uranium-234, Dissolved	1.21	pCi/L	U	2.15	1.44	1.45	HASL 300, U-02-RC M	GEL	/X/
Uranium-235, Dissolved	0	pCi/L	U	0.879	0.59	0.592	HASL 300, U-02-RC M	GEL	/X/
Uranium-238, Dissolved	2.03	pCi/L		1.75	1.57	1.6	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	0.0098	ug/L	UY2	0.0098			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	UY1	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 SLS20-01

Carbonaceous Biochemical Oxygen Demand (CBOD)	2	mg/L	UX	2	SM-5210 B	GEL	/X/
Chemical Oxygen Demand (COD)	20	mg/L	U	20	EPA-410.4	GEL	/X/
Cyanide	0.2	mg/L	U	0.2	SW846-9012B	GEL	/X/
Dissolved Solids	541	mg/L		14.3	EPA-160.1	GEL	/X/
Hardness - Total as CaCO3	406	mg/L		2	EPA-130.2	GEL	/X/
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/X/
Suspended Solids	2.5	mg/L	U	2.5	EPA-160.2	GEL	/X/
Total Organic Carbon (TOC)	3.47	mg/L		2	SW846-9060A	GEL	/X/
Total Organic Halides (TOX)	11.7	ug/L		10	SW846-9020B	GEL	/X/

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## Paducah OREIS Report for SLS20-01

**SLS20-01-02**

from: C-746-S

on 2/13/2020

Media: WW

SmpMethod: GR

Comments: Leachate Cell 3 sample

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
<b>ANION</b>										
Bromide	0.652	mg/L			0.2			SW846-9056	GEL	/X/
Chloride	25.7	mg/L			1			SW846-9056	GEL	/X/
Fluoride	0.252	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	0.876	mg/L			0.1			SW846-9056	GEL	/X/
Sulfate	5.85	mg/L			0.4			SW846-9056	GEL	/X/
<b>FS</b>										
Conductivity	1224	umho/cm						FS	FS	//
Dissolved Oxygen	4.23	mg/L						FS	FS	//
pH	6.35	Std Unit						FS	FS	//
Redox	199	mV						FS	FS	//
Temperature	48.4	deg F						FS	FS	//
<b>METAL</b>										
Aluminum	0.021	mg/L	J		0.05			SW846-6020	GEL	/X/
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic	0.00647	mg/L			0.005			SW846-6020	GEL	/X/
Barium	0.513	mg/L			0.004			SW846-6020	GEL	/X/
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/X/
Boron	0.0324	mg/L			0.015			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	125	mg/L			1			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	81.3	mg/L			0.5			SW846-6020	GEL	/X/
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Magnesium	25.5	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	1.33	mg/L			0.025			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	0.000918	mg/L	J		0.002			SW846-6020	GEL	/X/
Phosphorous	0.43	mg/L			0.05			EPA-365.4	GEL	/X/
Potassium	4.79	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	36.7	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	0.000464	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/
<b>METAL-D</b>										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.00461	mg/L	J		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.405	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 SLS20-01**

Cobalt, Dissolved	0.001	mg/L	U	0.001			SW846-6020	GEL	/X/
Copper, Dissolved	0.000415	mg/L	J	0.002			SW846-6020	GEL	/X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/X/
Manganese, Dissolved	1.31	mg/L		0.025			SW846-6020	GEL	/X/
Nickel, Dissolved	0.000986	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	0.000433	mg/L		0.0002			SW846-6020	GEL	/X/
Vanadium, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/X/
Zinc, Dissolved	0.00337	mg/L	J	0.02			SW846-6020	GEL	S /X/

**OTHOR**

Oil and Grease	4.27	mg/L	U	4.27			EPA-1664A	GEL	/X/
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**PCCB**

PCB-1016	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
PCB-1221	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
PCB-1232	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
PCB-1242	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
PCB-1248	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
PCB-1254	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
PCB-1260	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
PCB-1268	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0515	ug/L	U	0.0515			SW846-8082	GEL	/X/

**RADS**

Alpha activity	11	pCi/L	U	13.6	9.1	9.28	SW846-9310	GEL	/X/
Americium-241	0.321	pCi/L	U	1.04	0.639	0.64	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	5.6	pCi/L	U	10.5	6.31	6.39	SW846-9310	GEL	/X/
Cesium-137	-0.63	pCi/L	U	1.68	1.1	1.13	EPA-901.1	GEL	/X/
Cobalt-60	0.592	pCi/L	U	1.87	0.999	1.04	EPA-901.1	GEL	/X/
Dissolved Alpha	1.8	pCi/L	U	2.83	1.83	1.85	SW846-9310	GEL	/X/
Dissolved Beta	3.6	pCi/L	U	1.67	1.32	1.45	SW846-9310	GEL	/X/
Neptunium-237	0.0737	pCi/L	U	1.78	0.872	0.872	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	-0.0792	pCi/L	U	1.33	0.547	0.548	HASL 300, Pu-11-RC M	GEL	/X/
Radium-226	2.57	pCi/L	U	1.11	1.36	1.36	AN-1418	GEL	S /X/
Radium-228	-0.0164	pCi/L	U	4.1	2.07	2.08	EPA-904-M	GEL	/X/
Strontium-90	4.07	pCi/L	U	6.39	3.89	3.95	EPA-905.0-M	GEL	/X/
Technetium-99	-11.6	pCi/L	U	22.6	12.9	12.9	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	0.4	pCi/L	U	2.07	1.14	1.14	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	-0.089	pCi/L	U	1.42	0.586	0.588	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	4.34	pCi/L	U	47.6	38.4	38.5	EPA-901.1	GEL	/X/
Tritium	93	pCi/L	U	208	123	125	EPA-906.0-M	GEL	/X/
Uranium	0	pCi/L	U	2.21	0.86	0.861	HASL 300, U-02-RC M	GEL	/X/
Uranium-234	-0.0227	pCi/L	U	1.27	0.55	0.551	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	-0.172	pCi/L	U	1.46	0.518	0.52	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	-0.0926	pCi/L	U	1.07	0.409	0.41	HASL 300, U-02-RC M	GEL	/X/

**RADS-D**

Americium-241, Dissolved	0.255	pCi/L	U	1.21	0.672	0.673	HASL 300, Am-05-RC M	GEL	/X/
Cesium-137, Dissolved	3.37	pCi/L	U	8.35	3.8	4.1	EPA-901.1	GEL	/X/
Cobalt-60, Dissolved	-0.15	pCi/L	U	8.53	4.19	4.19	EPA-901.1	GEL	/X/
Neptunium-237, Dissolved	-0.279	pCi/L	U	1.86	0.604	0.605	ASTM-1475-00M	GEL	/X/
Plutonium-239/240, Dissolved	-0.462	pCi/L	U	1.66	0.55	0.551	HASL 300, Pu-11-RC M	GEL	/X/
Technetium-99, Dissolved	-8.12	pCi/L	U	22	12.6	12.6	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230, Dissolved	-0.411	pCi/L	U	3.65	1.37	1.38	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234, Dissolved	69.3	pCi/L	U	330	269	269	EPA-901.1	GEL	/X/

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Uranium, Dissolved	0.382	pCi/L	U	3.68	1.58	1.58	HASL 300, U-02-RC M	GEL	/X/
Uranium-234, Dissolved	-0.863	pCi/L	U	3.07	1.15	1.15	HASL 300, U-02-RC M	GEL	/X/
Uranium-235, Dissolved	-0.0746	pCi/L	U	1.49	0.643	0.645	HASL 300, U-02-RC M	GEL	/X/
Uranium-238, Dissolved	0.382	pCi/L	U	1.39	0.878	0.88	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	0.00981	ug/L	UY2	0.00981			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	UY1	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	2.53	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	3.61	ug/L	J	5			EPA-624.1	GEL	S/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	1.79	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 SLS20-01

Carbonaceous Biochemical Oxygen Demand (CBOD)	7.04	mg/L		6	SM-5210 B	GEL	/X/
Chemical Oxygen Demand (COD)	42.8	mg/L		20	EPA-410.4	GEL	/X/
Cyanide	0.2	mg/L	U	0.2	SW846-9012B	GEL	/X/
Dissolved Solids	451	mg/L		14.3	EPA-160.1	GEL	S/X/
Hardness - Total as CaCO3	312	mg/L		10	EPA-130.2	GEL	/X/
Iodide	1.36	mg/L		0.5	EPA-300.0	GEL	/X/
Suspended Solids	96	mg/L		25	EPA-160.2	GEL	/X/
Total Organic Carbon (TOC)	9.44	mg/L		2	SW846-9060A	GEL	/X/
Total Organic Halides (TOX)	19.4	ug/L		10	SW846-9020B	GEL	/X/

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## Paducah OREIS Report for SLS20-01

**FBSLS20-01**

from: QC

on 2/13/2020

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
<b>ANION</b>										
Bromide	0.2	mg/L	U		0.2			SW846-9056	GEL	/X/
Chloride	0.2	mg/L	U		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/
<b>METAL</b>										
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	0.0003	mg/L	J		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	0.153	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	0.00769	mg/L	J		0.02			SW846-6020	GEL	/X/
<b>OTHOR</b>										
Oil and Grease	4.07	mg/L	U		4.07			EPA-1664A	GEL	/X/
<b>PPCB</b>										
PCB-1016	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
PCB-1221	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
PCB-1232	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
PCB-1242	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
PCB-1248	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
PCB-1254	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
PCB-1260	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
PCB-1268	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0515	ug/L	U		0.0515			SW846-8082	GEL	/X/

**Paducah OREIS Report for SLS20-01**

<b>RADS</b>									
Alpha activity	0.618	pCi/L	U	11.8	5.91	5.91	SW846-9310	GEL	/X/
Americium-241	0.29	pCi/L	U	1.06	0.667	0.668	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	2.63	pCi/L	U	8.57	4.88	4.91	SW846-9310	GEL	/X/
Cesium-137	-0.2	pCi/L	U	1.72	0.957	0.961	EPA-901.1	GEL	/X/
Cobalt-60	0.231	pCi/L	U	1.84	1.02	1.02	EPA-901.1	GEL	/X/
Neptunium-237	0.204	pCi/L	U	1.34	0.701	0.701	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	0.157	pCi/L	U	0.99	0.589	0.589	HASL 300, Pu-11-RC M	GEL	/X/
Radium-226	0.858	pCi/L	U	1.03	0.87	0.87	AN-1418	GEL	/X/
Radium-228	0.949	pCi/L	U	4.04	2.23	2.24	EPA-904-M	GEL	/X/
Strontium-90	-3.45	pCi/L	U	7.37	3.62	3.62	EPA-905.0-M	GEL	/X/
Technetium-99	-1.86	pCi/L	U	23.7	13.7	13.7	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	0.351	pCi/L	U	1.73	0.96	0.965	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	0.701	pCi/L	U	0.956	0.95	0.956	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	0.98	pCi/L	U	46.8	39.3	39.3	EPA-901.1	GEL	/X/
Tritium	123	pCi/L	U	218	130	132	EPA-906.0-M	GEL	/X/
Uranium	1.17	pCi/L	U	2.5	1.56	1.57	HASL 300, U-02-RC M	GEL	/X/
Uranium-234	0.94	pCi/L	U	1.65	1.19	1.21	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	0.231	pCi/L	U	1.45	0.865	0.866	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	-0.0589	pCi/L	U	1.18	0.508	0.509	HASL 300, U-02-RC M	GEL	/X/

<b>VOA</b>									
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	0.02	ug/L	UY2	0.02			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	UY1	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	6.99	ug/L		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	2.45	ug/L		1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloroform	0.46	ug/L	J	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 SLS20-01

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/
<b>WETCHEM</b>							
Chemical Oxygen Demand (COD)	20	mg/L	U	20	EPA-410.4	GEL	/X/
Hardness - Total as CaCO3	8.28	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)	0.523	mg/L	J	2	SW846-9060A	GEL	/X/

## Paducah OREIS Report for SLS20-01

**TBSLS20-01**

from: QC

on 2/13/2020

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
<b>VOA</b>										
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	0.0201	ug/L	UY2		0.0201			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	UY1		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	8.61	ug/L			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	3.13	ug/L			1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroform	0.52	ug/L	J		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/



## Paducah OREIS Report for ULS20-01

**ULS20-01-01**

from: C-746-U

on 2/13/2020

Media: WW

SmpMethod: GR

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
<b>ANION</b>										
Bromide	0.4	mg/L	U		0.4			SW846-9056	GEL	/X/
Chloride	24.4	mg/L			4			SW846-9056	GEL	/X/
Fluoride	0.421	mg/L			0.1			SW846-9056	GEL	/X/
Nitrate as Nitrogen	2.05	mg/L			0.2			SW846-9056	GEL	/X/
Sulfate	176	mg/L			8			SW846-9056	GEL	/X/
<b>FS</b>										
Conductivity	1126	umho/cm						FS	FS	//
Dissolved Oxygen	7.95	mg/L						FS	FS	//
pH	6.69	Std Unit						FS	FS	//
Redox	152	mV						FS	FS	//
Temperature	53.8	deg F						FS	FS	//
<b>METAL</b>										
Aluminum	0.123	mg/L			0.05			SW846-6020	GEL	/X/
Antimony	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic	0.00303	mg/L	J		0.005			SW846-6020	GEL	/X/
Barium	0.114	mg/L			0.004			SW846-6020	GEL	/X/
Beryllium	0.0005	mg/L	U		0.0005			SW846-6020	GEL	/X/
Boron	0.505	mg/L			0.075			SW846-6020	GEL	/X/
Cadmium	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Calcium	132	mg/L			1			SW846-6020	GEL	/X/
Chromium	0.00306	mg/L	J		0.01			SW846-6020	GEL	/X/
Cobalt	0.00103	mg/L			0.001			SW846-6020	GEL	/X/
Copper	0.00171	mg/L	J		0.002			SW846-6020	GEL	/X/
Iron	0.0902	mg/L	J		0.1			SW846-6020	GEL	/X/
Lead	0.002	mg/L	U		0.002			SW846-6020	GEL	/X/
Magnesium	40.1	mg/L			0.03			SW846-6020	GEL	/X/
Manganese	0.0454	mg/L			0.005			SW846-6020	GEL	/X/
Mercury	0.0002	mg/L	U		0.0002			SW846-7470A	GEL	/X/
Molybdenum	0.000798	mg/L	J		0.001			SW846-6020	GEL	/X/
Nickel	0.00402	mg/L			0.002			SW846-6020	GEL	/X/
Phosphorous	0.134	mg/L			0.05			EPA-365.4	GEL	/X/
Potassium	4.86	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	73.4	mg/L			1.25			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	0.135	mg/L			0.001			SW846-6020	GEL	/X/
Vanadium	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.026	mg/L			0.02			SW846-6020	GEL	/X/
<b>METAL-D</b>										
Antimony, Dissolved	0.003	mg/L	U		0.003			SW846-6020	GEL	/X/
Arsenic, Dissolved	0.00283	mg/L	J		0.005			SW846-6020	GEL	/X/
Barium, Dissolved	0.109	mg/L			0.004			SW846-6020	GEL	/X/
Cadmium, Dissolved	0.001	mg/L	U		0.001			SW846-6020	GEL	/X/
Chromium, Dissolved	0.0032	mg/L	J		0.01			SW846-6020	GEL	S/X/

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Cobalt, Dissolved	0.000902	mg/L	J	0.001			SW846-6020	GEL	/X/
Copper, Dissolved	0.00324	mg/L		0.002			SW846-6020	GEL	/X/
Lead, Dissolved	0.002	mg/L	U	0.002			SW846-6020	GEL	/X/
Manganese, Dissolved	0.0374	mg/L		0.005			SW846-6020	GEL	/X/
Nickel, Dissolved	0.00382	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	0.129	mg/L		0.001			SW846-6020	GEL	/X/
Vanadium, Dissolved	0.02	mg/L	U	0.02			SW846-6020	GEL	/X/
Zinc, Dissolved	0.0229	mg/L		0.02			SW846-6020	GEL	/X/

**OTHOR**

Oil and Grease	4.27	mg/L	U	4.27			EPA-1664A	GEL	/X/
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**PCCB**

PCB-1016	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
PCB-1221	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
PCB-1232	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
PCB-1242	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
PCB-1248	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
PCB-1254	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
PCB-1260	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
PCB-1268	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0473	ug/L	U	0.0473			SW846-8082	GEL	/X/

**RADS**

Alpha activity	37.8	pCi/L		13.9	13.9	15.3	SW846-9310	GEL	/X/
Americium-241	0.0776	pCi/L	U	0.826	0.431	0.431	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	67.5	pCi/L		8.64	10.4	15.1	SW846-9310	GEL	/X/
Cesium-137	0.641	pCi/L	U	1.65	0.936	0.981	EPA-901.1	GEL	/X/
Cobalt-60	0.908	pCi/L	U	1.59	0.818	0.917	EPA-901.1	GEL	/X/
Dissolved Alpha	16.4	pCi/L		2.96	3.83	4.73	SW846-9310	GEL	/X/
Dissolved Beta	22.3	pCi/L		2.01	2.17	4.33	SW846-9310	GEL	/X/
Neptunium-237	0.257	pCi/L	U	1.71	0.894	0.895	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	0.173	pCi/L	U	1.09	0.59	0.591	HASL 300, Pu-11-RC M	GEL	/X/
Radium-226	0.583	pCi/L	U	0.709	0.531	0.531	AN-1418	GEL	/X/
Radium-228	1.25	pCi/L	U	4.75	2.69	2.7	EPA-904-M	GEL	/X/
Strontium-90	-0.66	pCi/L	U	4.7	2.32	2.32	EPA-905.0-M	GEL	/X/
Technetium-99	-0.371	pCi/L	U	22	12.8	12.8	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	0.692	pCi/L	U	1.66	1.03	1.04	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	0.167	pCi/L	U	1.22	0.642	0.643	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	41.4	pCi/L	U	43.8	53.9	54.7	EPA-901.1	GEL	/X/
Tritium	130	pCi/L	U	216	129	132	EPA-905.0-M	GEL	/X/
Uranium	56.9	pCi/L		1.75	6.08	8.7	HASL 300, U-02-RC M	GEL	/X/
Uranium-234	9.57	pCi/L		1.04	2.51	2.82	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	1.79	pCi/L		0.978	1.27	1.29	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	45.6	pCi/L		1.01	5.39	8.13	HASL 300, U-02-RC M	GEL	/X/

**RADS-D**

Americium-241, Dissolved	-0.315	pCi/L	U	2.54	1.06	1.06	HASL 300, Am-05-RC M	GEL	/X/
Cesium-137, Dissolved	-0.138	pCi/L	U	11.1	5.43	5.43	EPA-901.1	GEL	/X/
Cobalt-60, Dissolved	0.439	pCi/L	U	8.57	3.98	3.98	EPA-901.1	GEL	/X/
Neptunium-237, Dissolved	-0.142	pCi/L	U	1.6	0.601	0.602	ASTM-1475-00M	GEL	/X/
Plutonium-239/240, Dissolved	-0.404	pCi/L	U	1.57	0.46	0.461	HASL 300, Pu-11-RC M	GEL	/X/
Technetium-99, Dissolved	16.6	pCi/L	U	21.5	12.9	13	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230, Dissolved	0.617	pCi/L	U	3.13	1.72	1.73	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234, Dissolved	163	pCi/L	U	280	378	379	EPA-901.1	GEL	/X/



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Uranium, Dissolved	62.9	pCi/L		2.2	6.62	9.8	HASL 300, U-02-RC M	GEL	/X/
Uranium-234, Dissolved	11.1	pCi/L		1.64	2.85	3.24	HASL 300, U-02-RC M	GEL	/X/
Uranium-235, Dissolved	0.437	pCi/L	U	0.655	0.749	0.751	HASL 300, U-02-RC M	GEL	/X/
Uranium-238, Dissolved	51.4	pCi/L		1.31	5.93	9.21	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	0.0199	ug/L	UY2	0.0199			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	UY1	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 ULS20-01**

Carbonaceous Biochemical Oxygen Demand (CBOD)	2	mg/L	UX	2	SM-5210 B	GEL	/X/
Chemical Oxygen Demand (COD)	20	mg/L	U	20	EPA-410.4	GEL	/X/
Cyanide	0.005	mg/L	U	0.005	SW846-9012B	GEL	/X/
Dissolved Solids	647	mg/L		14.3	EPA-160.1	GEL	/X/
Hardness - Total as CaCO3	402	mg/L		2	EPA-130.2	GEL	/X/
Iodide	0.5	mg/L	U	0.5	EPA-300.0	GEL	/X/
Suspended Solids	3.46	mg/L	J	4.81	EPA-160.2	GEL	/X/
Total Organic Carbon (TOC)	6.87	mg/L		2	SW846-9060A	GEL	/X/
Total Organic Halides (TOX)	39	ug/L		10	SW846-9020B	GEL	/X/

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## Paducah OREIS Report for ULS20-01

**FBULS20-01**

from: QC

on 2/13/2020

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
<b>ANION</b>										
Bromide	0.2	mg/L	U		0.2			SW846-9056	GEL	/X/
Chloride	0.2	mg/L	U		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/
<b>METAL</b>										
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	0.0154	mg/L			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	0.122	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	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	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
Zinc	0.02	mg/L	U		0.02			SW846-6020	GEL	/X/
<b>OTHOR</b>										
Oil and Grease	4.31	mg/L	U		4.31			EPA-1664A	GEL	/X/
<b>PPCB</b>										
PCB-1016	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
PCB-1221	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
PCB-1232	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
PCB-1242	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
PCB-1248	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
PCB-1254	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
PCB-1260	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
PCB-1268	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/
Polychlorinated biphenyl	0.0502	ug/L	U		0.0502			SW846-8082	GEL	/X/

**Paducah OREIS Report for ULS20-01**

**RADS**

Alpha activity	-1.08	pCi/L	U	7.99	3.17	3.17	SW846-9310	GEL	/X/
Americium-241	0.208	pCi/L	U	1.22	0.653	0.654	HASL 300, Am-05-RC M	GEL	/X/
Beta activity	3.57	pCi/L	U	11.8	6.76	6.79	SW846-9310	GEL	/X/
Cesium-137	0.0119	pCi/L	U	1.24	0.732	0.732	EPA-901.1	GEL	/X/
Cobalt-60	0.54	pCi/L	U	1.31	0.711	0.752	EPA-901.1	GEL	/X/
Neptunium-237	0.000000495	pCi/L	U	1.89	0.9	0.9	ASTM-1475-00M	GEL	/X/
Plutonium-239/240	-0.156	pCi/L	U	1.33	0.472	0.473	HASL 300, Pu-11-RC M	GEL	/X/
Radium-226	0.143	pCi/L	U	0.556	0.317	0.317	AN-1418	GEL	/X/
Radium-228	0.631	pCi/L	U	4.28	2.31	2.31	EPA-904-M	GEL	/X/
Strontium-90	-0.913	pCi/L	U	7.05	3.66	3.66	EPA-905.0-M	GEL	/X/
Technetium-99	-0.239	pCi/L	U	21.7	12.6	12.6	HASL 300, Tc-02-RC M	GEL	/X/
Thorium-230	0.834	pCi/L	U	1.98	1.21	1.22	HASL 300, Th-01-RC M	GEL	/X/
Thorium-232	0.279	pCi/L	U	1.64	0.871	0.872	HASL 300, Th-01-RC M	GEL	/X/
Thorium-234	0	pCi/L	UX	34.7	50.7	51.6	EPA-901.1	GEL	/X/
Tritium	45.5	pCi/L	U	207	121	121	EPA-905.0-M	GEL	/X/
Uranium	0.341	pCi/L	U	3.22	1.59	1.59	HASL 300, Th-01-RC M	GEL	/X/
Uranium-234	-0.0168	pCi/L	U	1.93	0.848	0.849	HASL 300, U-02-RC M	GEL	/X/
Uranium-235	0.189	pCi/L	U	2.01	1.05	1.05	HASL 300, U-02-RC M	GEL	/X/
Uranium-238	0.153	pCi/L	U	1.62	0.848	0.849	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	0.0198	ug/L	UY2	0.0198			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	UY1	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	6.67	ug/L		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	2.31	ug/L		1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U	1			EPA-624.1	GEL	/X/
Chloroform	0.43	ug/L	J	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 ULS20-01

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/
<b>WETCHEM</b>							
Chemical Oxygen Demand (COD)	67.8	mg/L		20	EPA-410.4	GEL	/X/
Hardness - Total as CaCO3	6.02	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)	0.462	mg/L	J	2	SW846-9060A	GEL	/X/

**Paducah OREIS Report for ULS20-01**

**TBULS20-01**

from: QC

on 2/13/2020

Media: WQ

SmpMethod:

Comments:

Analysis	Results	Units	Result Qual	Foot Note	Reporting Limit	Counting Error	TPU	Method	LabCode	V/V/A*
<b>VOA</b>										
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	0.01	ug/L	UY2		0.01			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	UY1		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	7.8	ug/L			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	3.2	ug/L			1			EPA-624.1	GEL	/X/
Chloroethane	1	ug/L	U		1			EPA-624.1	GEL	/X/
Chloroform	0.51	ug/L	J		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/





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

RECEIVED  
By Carolee.Thompson at 4:38 pm, Apr 14, 2020

April 14, 2020

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-02-10004799-20B

Dear Ms. Nielsen:

**C-746-U SOLID WASTE LANDFILL FIRST QUARTER CALENDAR YEAR 2020  
WASTE QUANTITY REPORT, SOLID WASTE PERMIT NO. SW07300014,  
SW07300015, SW07300045, AGENCY INTEREST NO. 3059**

Enclosed is the subject report for the first quarter calendar year 2020. This report is required in accordance with Permit Condition ACTV0006, Special Condition Number 12, of Solid Waste Permit No. SW07300014, SW07300015, SW07300045, issued September 27, 2019.

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

Sincerely,

Jennifer Woodard  
Paducah Site Lead  
Portsmouth/Paducah Project Office

Enclosure:

C-746-U Solid Waste Landfill First Qtr. CY 2020 Waste Quantity Report, DEP Form 7046-Q

cc w/enclosure:

abigail.parish@pppo.gov, PPPO  
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Department for Environmental Protection / Division of Waste Management / Solid Waste Branch  
 Quarterly Waste Quantity Report - DEP 7046-Q (Revised 2-05)

Page 1 of 1

**WASTE ACTIVITY: CONTAINED LANDFILL**

Facility Name: U.S. Department of Energy-Paducah Gaseous Diffusion Plant Permit Number: SW07300014, SW07300015, SW07300045  
 County where landfill is located: McCracken Agency Interest Number: 3059  
 Report for the Months of: January, February, March For the Year of: 2020

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, McCracken County, Kentucky (January)	0.00	60.18	0.00	0.00
Paducah Gaseous Diffusion Plant, McCracken County, Kentucky (February)	0.00	00.00	0.00	0.00
Paducah Gaseous Diffusion Plant, McCracken County, Kentucky (March)	0.00	00.00	0.00	0.00
<b>Total for this page</b>	0.00	60.18	0.00	0.00
<b>Grand Total of all pages</b>	0.00	60.18	0.00	0.00

\*Grand Total of Municipal, Industrial, and Special from all pages 60.18

\*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.


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: 4/14/2020

Signature: 

Phone Number: (270) 441-6800

Name - Please Print: Jennifer Woodard

Date: 4/14/2020

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).