From: Sweazy, Colleen
To: Hummel, Lindsey

Cc: WEAVER, TROY; Schwartz, Owen R; Roeder, Chris; Luke, William C; Flanigan, Daniel W; Holstein, David C;

Whittaker, Robert D

Subject: Gibson South Landfill FP 26-06 Background Sampling Event May 2024

Date: Wednesday, July 3, 2024 2:54:00 PM

Attachments: <u>image001.png</u>

FP 26-06 Background Event 3 Report 5-2024.pdf

SALF FP 26-06 May 2024 EDD 50373903 MW-109S MW-111S.txt SALF FP 26-06 May 2024 EDD 50374080 MW-112S.txt

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Good afternoon Lindsey,

Please see the attached Third Background Water Quality Sampling Report for the Gibson South Landfill (FP 26-06) monitoring wells MW-109S, MW-111S, and MW-112S. The electronic data files (EDFs) are attached and will also be submitted to geologydata@idem.in.gov. The Level IV QA/QC package is not yet available from Pace Labs, and will posted to the IDEM Sharepoint when finalized.

Regards,

Colleen Sweazy
Senior Environmental Specialist
Waste and Groundwater Programs
(O) 812-386-4805 (M) 812-457-6282
800 Old Wheatland Road
Vincennes, IN 47591
Colleen.sweazy@duke-energy.com



Duke Energy WP994 / 1000 East Main Street Plainfield, IN 46168



July 3, 2024

Ms. Lindsey Hummel Environmental Manager Solid Waste Permits Section Office of Land Quality IDEM 100 North Senate Ave. IGCN 1154 Indianapolis, IN 46204

Subject: Gibson South Landfill RWS Type I Landfill FP #26-06

MW-109S, MW-111S, MW-112S

Third Background Water Quality Monitoring Report

Dear Ms. Hummel:

In accordance with 329 IAC 10-29-4(a)(4), Duke Energy Indiana, LLC (DEI) respectfully submits to the Indiana Department of Environmental Management (IDEM) the attached first quarterly background monitoring event report for MW-109S, MW-111S, and MW-112S at the RWS Type I Landfill (FP #26-06). The submittal includes an analytical report completed by Pace Analytical Services, Inc., sampling trip report and field data sheets from Apex Companies, LLC.

Proper QA/QC procedures for this sampling event were adhered to as detailed in the Revised Sampling and Analysis Plan (SAP) for the Gibson Generating Station South Landfill FP #26-06 dated August 25, 2023 and approved by IDEM on September 14, 2023.

A well installation report for monitoring wells MW-109S, MW-111S, and MW-112S was submitted to IDEM on August 25, 2023 and approved by IDEM on October 12, 2023. The third quarterly sampling event was completed on May 21 and May 23, 2024.

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 persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that I am authorized to submit this information. If you have any questions or require additional information regarding this submittal, please contact me at colleen.sweazy@duke-energy.com.

Sincerely,

Duke Energy Indiana, LLC

Colleen Sweazy

EHS CCP Waste & Groundwater Programs

Attachment

CC: Electronic Full Version

Owen Schwartz Chris Roeder Dan Flanigan Dave Holstein Robert Whittaker William Luke Cast Pro



June 17, 2024

Ms. Colleen Sweazy Senior Environmental Specialist Duke Energy 1000 East Main Street, WP994 Plainfield, IN 46168-1782

Re: May 2024

Gibson Station - South Landfill Background Sampling Event

Owensville, Indiana

Dear Ms. Sweazy:

Apex Companies, LLC completed the South Landfill background monitoring event at the Duke Energy Gibson Station located in Owensville, Indiana during the week of May 20, 2024. The following information regarding the background monitoring activities for the South Landfill is enclosed:

- ◆ Trip report memorandum;
- ◆ Copy of the field logbook notes (Attachment A);
- ♦ Field data sheet (Attachment B);
- ◆ Summary of water level measurements (Attachment C); and
- ♦ Chain-of-custody records (Attachment D).

If you require additional information or have any questions, please contact me at (412) 400-6985. We appreciate the opportunity to continue providing environmental services to Duke Energy.

Sincerely,

Apex Companies, LLC

Tom Wolf

Senior Project Manager

Enclosure

Apex Companies, LLC

Memo

To: Tom Wolf

From: G. O'Toole

Date: June 13, 2024

Re: May 2024 South Landfill Background Sampling Event

Duke Energy Gibson Station, Owensville, IN

SCOPE OF WORK

The scope of work involved the collection of three (3) groundwater monitoring well samples associated with the South Landfill Background monitoring event at the Duke Energy Gibson Station Site in Owensville, IN. Depth to water level measurements were also obtained at the 3 planned monitoring well locations. Purging prior to sampling was conducted using low flow techniques, with pH, conductivity, ORP, dissolved oxygen and temperature or turbidity as the stabilization parameters.

WORK COMPLETION

One round of groundwater levels was completed on Monday, May 20, 2024. Apex personnel conducted the monitoring well sampling activities on Tuesday, May 21, 2024 and Thursday, May 23, 2024. All monitoring well samples were collected using submersible pumps and low flow techniques. Wells MW-109S and MW-111S were sampled using dedicated submersible pumps. The dedicated pump in well MW-112S malfunctioned and it was sampled with a portable submersible pump.

The following wells were sampled on the following dates:

- Tuesday, May 21, 2024 MW-109S; MW-111S (2 wells); and
- Thursday, May 23, 2023 MW-112S (1 well).

Samples were placed in coolers and kept on ice following collection. The samples collected on Tuesday, May 21, 2024 were held until the following day and transported with the samples from that date by Jett Express to Pace Analytical Services in Indianapolis, IN on Wednesday, May 22, 2024. The samples collected on Thursday, May 23, 2024 were delivered to the lab by Jett Express on the day of collection.

QA/QC SAMPLES

QA/QC sample collection at the site was completed as planned. QA/QC samples included one field duplicate collected at well MW-109S, one field blank collected near MW-111S and one trip blank. One equipment blank was also collected from a non-dedicated water level meter utilized during this event and analyzed for the South Landfill Background list of constituents.

WORK DOCUMENTATION

A complete package of project documentation is attached to this memo. Included are the following:

- Notes from the field books (Attachment A);
- Field Data Sheet for South Landfill wells (Attachment B);
- Summary of Water Level Measurements (Attachment C); and
- Chain-of-Custody Records (Attachment D).

ADDITIONAL NOTES

All waste material from sampling activities was bagged and disposed of by Apex at the Gibson Station site.

Samples for dissolved metals analyses from each well were field filtered.

Well Condition Notes:

 MW-112S: Dedicated pump malfunctioned this event. Well sampled with a portable submersible pump.

Attachment A

Field Book Notes

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MN-47A	12.77	14140 R	MW 49C	16,97	15.54 R
MW-47B	12.74	14:44 8	MW-1015	41.32	13140
MW-47C	12.84	14:47 R	MW-10LS	23.57	13:36
MU-48A	14.35	14:55 R	MD-1085	37.83	12.55
MW-43B	14.36	14:57R	MU-1035	28.35	13.30
MW-43C	14.26	15,00R	MW-1045	27.22	13725 R
MU-53A	10:58	16:17 6	MW-1055	29.14	13:20 R
MW-53B	10.45	16:19 6	MW-105I	23,98	13218 R
MW-53C	10,24	16 346	MU-105D	23.91	13-16 €
MW-S4A	20.09	14:326	ML5-1065	29.56	13.14 R
NW-548	20,45	14:346	1	29.55	13:11 A
MW-SYC	20,39	14:366		2964	13:69 R
MW-52A	9.34	15/62 G	MW-1075	36.05	13:07 R
MU-52B	9.46	15165 R	MW-107D	35.85	13:64 R
MW 520	9,62	15:07 R	MW-1095	25.05	12:37 G
MW-44 B	8.45	15:26 R	MW-1115	23-50	12:27R
MW-44C	813	10,22 R		22,99	12:46 R
MW-45A	16,92	15.39 R		37.22	12:59 R
MW-45B	17.25	15.36 R	Mis-955	12.11	17521 A
Mu-45C	[7,17	15132 B	MW-965	9.14	11:35 R
MW-468	n.45	15:44 R	1	1096	11:488
MW-46C	17.48	15:47 B	P2-315R	11.49	11:38 R
	15.20	16.00 R	P2~985	11.65	12:188
MW-496	16,87	15,57R	P2-95I	12,30	11:17 R
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Attachment B

Field Data Sheet

FIELD DATA SHEET

Facility: Gibson Station - South Landfill Background	Event (month/year): May-24	Location: Ow	Location: Owensville, Indiana
Operator Names/Signatures:	Gordon O'Toole	Gorden Bilos	09
	Print	Signature	Initials
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Comments: Water levels collected on 5/20/2024. Equipment blank collected on non-dedicated water level meter May 23, 2043.			
Quality Assurance Sample Summary:		Trip Blank Shipped?:	
	Date, Time, and Location of Field Blank Preparation: Selected Well for Duplicate Sample: Selected Well used for MS/MSD bottles:		5/21/2024 17:45 MW-111S MW-109S

Checked By: TW Date Checked:06/14/2024

FIELD DATA SHEET

	FIELD DA			
Facility: Gibson Station - South Landfill Background	Event (month/year):			Location: Owensville, Indiana
Well ID:	MW-109S	MW-111S	MW-112S	
Water Level Measurements and Well Information:				
Date and Time of Measurement	12:37	12:27	12:46	
Elevation of Top of PVC Casing, MSL (TOC)	408.21	407.34	408.30	
Depth to Water, ft (DTW) (measure to nearest 0.01 ft)	25.05	23.50	22.99	
Static Water Level, MSL (SWL = TOC - DTW)	383.16	383.84	385.31	
Total Well Depth, ft (TD)	30.68	29.34	34.80	
Well Diameter, inches (WD)	2	2	2	
Upgradient or Downgradient	Downgradient	Not Applicable	Not Applicable	
Purging Information:				
Water Volume (WV) in Well Casing (gallons) = (TD-DTW) x 0.163				
Date and Time of Purge Start	18:32	17:26	9:15	
Date and Time of Purge End	18:44	17:41	9:45	
Elapsed Purge Time (minutes)	12	15	30	
Actual Volume Purged (gallons)	1.5	1.80	2.1	
Purge Rate (gallons per minute)	0.13	0.12	0.07	
Sample and Field Analysis Information:	•			-
Date and Time of Sample	5/21/24 18:45	5/21/24 17:45	5/23/24 09:50	
Sample Device	Geotech	Grundfos Rediflo 2	Grundfos Rediflo 2	
Sample Material / Tubing Material	Teflon	Teflon	Teflon	
Sample Rate (gallons per minute or liters per minute)	0.13	0.12	0.07	
Filter Device (for dissolved metals)	0.45µm	0.45µm	0.45µm	
Final Dissolved Oxygen mg/L	4.35	0.00	0.00	
Final ORP, mv	161	69	39	
Final pH, standard units	7.05	7.27	7.27	
Final Specific conductance, umhos/cm	579	535	464	
Final Temperature, °C	14.3	17.4	14.6	
Sample Appearance (color / odor / turbidity (NTU))	Clear	Clear	Clear	
Weather Conditions During Sample	Clear,80's	Clear, 80's	Clear, 80's	
Comments:	•			1
The dedicated pump in MW-112S malfunctioned and it was sampled with a portable pump				
Operators Initials (also sign and initial cover sheet):	GO	GO	GO	
A	<u> </u>			

FIELD DATA SHEET

Facility: Gibson Station - South Landfill Background	Event (month/day/year):	May-24		Location: Owensvill	le, Indiana
Field Meter Information	Meter #2				
Manufacturer, Model Number, and Serial Number:	U64227X				
Calibrated by:	FEI				
Analyzed by:	GO				
Initial Meter Calibration	Standard Used	Manufacturer	Lot No.	Expiration Date	Meter Reading
pH Standard #2: (5/20-5/23)	4.00	FEI	830965	1/17/2026	4.01/4.01/4.00/4.00
Specific Conductance Standard #2: (5/20-5/23)	4.45	FEI	830965	1/17/2026	4.50/4.50/4.50/4.50
Final Meter Calibration/Check					
pH Standard #2: (5/20-5/23)	4.00	FEI	830965	1/17/2026	4.00/4.01/4.00/4.00
Specific Conductance Standard #2: (5/20-5/23)	4.45	FEI	830965	1/17/2026	4.40/4.50/4.50/4.50

Attachment C

Summary of Water Level Measurements

TABLE 1 SUMMARY OF DEPTH TO WATER MEASUREMENTS - May 20, 2024 SOUTH LANDFILL BACKGROUND WELLS

DUKE ENERGY GIBSON STATION OWENSVILLE, INDIANA

Well Number	Depth to Water (feet)	Time of Measurement	Top of Casing Elevation (feet MSL)	Total Depth (feet)	Groundwater Elevation (feet MSL)
MW-109S	25.05	12:37	408.21	30.68	383.16
MW-111S	23.50	12:27	407.34	29.34	383.84
MW-112S	22.99	12:46	408.30	34.80	385.31

Notes:

- 1. Top of casing elevations and total depths taken from Atlas Monitoring Well Installation Report dated August 24, 2023.
- 2. Water level meters were calibrated at MW-35A. No changes were needed.

Attachment D

Chain-of-Custody Records

Section B

Report To:

Required Project Information:

Section A

Company

Required Client Information:

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All r LIO#: 50373903

Section C

Invoice Information:

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Of

Duke Energy-Gibson Generating Station Colleen Sweazy Accounts Payable GIBSON GENERATING STATION Address Copy To Company Name: Duke Energy Owensville, IN 47665 Address colleen.sweazy@duke-energy.com Purchase Order #: Pace Quote Phone 317-838-2161 Project Name: Gibson SLF New Wells Pace Project Manager State / Location kenneth hunt@pacelabs.com, Requested Due Date Project#: 5992 Line 7 Standard Pace Profile #: Requested Analysis Filtered (Y/N) Y COLLECTED valid codes to Preservatives MATRIX CODE Drinking Water DW WT GRAB pH 4500, Conductance 2510B, Nitrate-353.2 ww Waste Weter PA PA Product SAMPLE TEMP AT COI SAMPLE ID SL OL WP AR Soll/Solid START END Ra 226 Sub Pace® Ra 228 Sub Pace® 90 # OF CONTAINERS Diss Metals FF olics 420.4 One Character per box. Wipe CODE (A-Z, 0-91, -) OT Sample Ids must be unique SAMPLE ITEM Tissue NaOH TIME TIME DATE MW-109S MW-111S 1945 3/21 WT 12 6 MW-112S WT 12 6 X GBS SHARE-FD-2024 0521 3/4 WT 5 7 8 10 11 12 ADDITIONAL COMMENTS RELINQUISHED BY / AFFILIATION DATE ACCEPTED BY / AFFILIATION TIME SAMPLE CONDITIONS Metals 6010 (Ba, B, Cd, Cr, Cu, Fe, Pb, Mn, Mo, Ag, Zn, Ca, Na, Li) ZOK 704 822 Metals Continued 6020 (Be, Co, As, Se, Sb, Tl), Mercury 7470 Nitrate 353.2 Short Hold (48 hours) SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: DATE Signed: 5-22 SIGNATURE of SAMPLER:

CHAIN-OF-CUSTODY / Analytical Re The Chain-of-Custody is a LEGAL DOCUMENT. All relevan

W0#:50373913

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	
Company: Duke Energy-Gibson Generating Station	Report To: Colleen Sweazy	Attention: Accounts Payable 50373913	1141141 411
Address: GIBSON GENERATING STATION	Copy To:	Company Name: Duke Energy	
Owensville, IN 47665		Address:	
Email: colleen.sweazy@duke-energy.com	Purchase Order #:	Pace Quote:	
Phone: 317-838-2161 Fax:	Project Name: Gibson SLF NW Shared QC	Pace Project Manager: kenneth.hunt@pacelabs.com,	State / Location
Requested Due Date: Standard	Project #:	Pace Profile #: 5992 Line 6	IN

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 | Methanol | Other | Analyses lest | C-9056 (Cl, F, SO4) |
 | Diss Metals FF * | TDS 2540C | 2510B, Nitrate-353.2 | Ammonia 350.1/COD 410.4 | henolics 420.4
 | Ra 226 Sub Pace® PA | Residual Chlorine (Y/N) | | |
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| | SAMPLE ID One Character per box. (A-Z, 0-91, -) Sample Ids must be unique GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 ADDITIONAL COMMENTS 6010:(Ba, B, Cd, Cr, Cu, Fe, Pb, Mn, Mo, Ag, Zn, Ca, Na, Li) Continued: 6020 (Be, Co, As, Se, Sb, Ti), Mercury 7470 | One Character per box. (A-Z, 0-91, -) Sample Ids must be unique GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-TB-2024 GBS | One Character per box. (A-Z, 0-91,-) Sample Ids must be unique GBS_SHARE-EB-2024 GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-TB-2024 GBS_SHARE-TB-2024 GBS_SHARE-TB-2024 GBS_SHARE-TB-2024 GBS_SHARE-TB-2024 GBS_SHARE-TB-2024 WT ADDITIONAL COMMENTS RELINQUE 6010:(Ba, B, Cd, Cr, Cu, Fe, Pb, Mn, Mo, Ag, Zn, Ca, Na, Li) Continued: 6020 (Be, Co, As, Se, Sb, Ti), Mercury 7470 | One Character per box. (A-Z, 0-91,-) Sample Ids must be unique GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-FB-2024 GBS_SHARE-TB-2024 GBS_SH | One Character per box. 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CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section Require	A d Client Information:	Section B Required Pro	oject Ini	formation:						ion C	orma	tion:									: 5					80	80			i
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Owensy	ille, IN 47665								Addr								311	50	37/	ina.			ш	ш						
Email:	colleen.sweazy@duke-energy.com	Purchase Ord	ier#.						V-11-	Quote								-	• • •	100	•									
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ITEM #	One Character per box. Wipe Air (A-Z, 0-9 / , -) Other Tissue	OL WP AR OT TS	MATRIX CODE (%)		TIME	DATE	TIME	SAMPLE TEMP AT D	# OF CONTAINERS	Unpreserved	HNO3	HCI	NaOH	Na2S203 Methanol	Other	Analyses Te	VOC 8260	IC-9056 (CI, F, SCI	Tot Metals *	TDS 2540C	pH 4500, Condu	2510B, Nitrate	Ammonia 350.17C	Ro 226 Suh Dare	Sub	i	Kesidual Chlorine (Y/N)			
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CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All relev WO#: 50374073

Section		Required P	roject li	nformation:						ice In		nation										111	41 M	111	-						
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Email:	colleen.sweazy@duke-energy.com	Purchase O	rder #.						Pace	e Qual	ote												L								
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June 24, 2024

Ms. Colleen Sweazy Duke Energy 1097 N 950 W Owensville. IN 47665

RE: Project: Gibson SLF New Wells

Pace Project No.: 50373903

Dear Ms. Sweazy:

Enclosed are the analytical results for sample(s) received by the laboratory on May 22, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services Indianapolis
- Pace Analytical Services Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

Leuneth 9

kenneth.hunt@pacelabs.com (317)228-3120 Project Manager

Enclosures

cc: Ms. Samanta Lax, ATC Group Services

Mr. Bryan Moeller, Duke Energy

Mr. Shane Neumann, Duke Energy Gibson

Mr. John Noel, ATC Group Services

Colton Palmer, Atlas Technical Consultants

Mr. Joshua Stowe, Duke Energy



(317)228-3100



CERTIFICATIONS

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417 ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590 Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950 Colorado Certification #: PA01547 Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683 Georgia Certification #: C040

Guam Certification

Hawaii Certification Idaho Certification Illinois Certification

Indiana Certification Iowa Certification #: 391 Kansas Certification #: E-10358 Kentucky Certification #: KY90133 KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010 Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021 Maryland Certification #: 308

Massachusetts Certification #: M-PA1457 Michigan/PADEP Certification #: 9991 Missouri Certification #: 235

Montana Certification #: Cert0082 Nebraska Certification #: NE-OS-29-14 Nevada Certification #: PA014572023-03 New Hampshire/TNI Certification #: 297622

New Jersey/TNI Certification #: PA051 New Mexico Certification #: PA01457 New York/TNI Certification #: 10888 North Carolina Certification #: 42706 North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-015 Pennsylvania/TNI Certification #: 65-00282 Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18
Utah/TNI Certification #: PA01457223-14
USDA Soil Permit #: 525-23-67-77263
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Pace Analytical Services Indianapolis

7726 Moller Road, Indianapolis, IN 46268

Illinois Accreditation #: 200074

Indiana Drinking Water Laboratory #: C-49-06

Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050

Ohio VAP Certified Laboratory #: CL0065

Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130

USDA Foreign Soil Permit #: 525-23-13-23119 USDA Compliance Agreement #: IN-SL-22-001



SAMPLE SUMMARY

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50373903001	MW-109S	Water	05/21/24 18:45	05/22/24 20:45
50373903002	MW-111S	Water	05/21/24 17:45	05/22/24 20:45
50373903003	GBS_SHARE-FD-20240521	Water	05/21/24 08:00	05/22/24 20:45



SAMPLE ANALYTE COUNT

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50373903001	MW-109S	EPA 9056	ADM	3	PASI-I
		EPA 6010	JPK	14	PASI-I
		EPA 6010	ELK	14	PASI-I
		EPA 6020	MTM	6	PASI-I
		EPA 6020	MTM	6	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 8260	TMW	43	PASI-I
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		SM 2510B	QAK	1	PASI-I
		SM 2540C	SL	1	PASI-I
		EPA 410.4	AEL	1	PASI-I
		SM 4500-H+B	LHZ	1	PASI-I
		EPA 350.1	MTW	1	PASI-I
		EPA 353.2	ZM	1	PASI-I
		EPA 420.4	OAS	1	PASI-I
0373903002	MW-111S	EPA 9056	ADM	3	PASI-I
		EPA 6010	JPK	14	PASI-I
		EPA 6010	ELK	14	PASI-I
		EPA 6020	MTM	6	PASI-I
		EPA 6020	MTM	6	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 8260	TMW	43	PASI-I
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		SM 2510B	QAK	1	PASI-I
		SM 2540C	SL	1	PASI-I
		EPA 410.4	AEL	1	PASI-I
		SM 4500-H+B	LHZ	1	PASI-I
		EPA 350.1	MTW	1	PASI-I
		EPA 353.2	ZM	1	PASI-I
		EPA 420.4	OAS	1	PASI-I
50373903003	GBS_SHARE-FD-20240521	EPA 9056	ADM	3	PASI-I



SAMPLE ANALYTE COUNT

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
	•	EPA 6010	JPK	14	PASI-I
		EPA 6010	ELK	14	PASI-I
		EPA 6020	MTM	6	PASI-I
		EPA 6020	MTM	6	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 8260	TMW	43	PASI-I
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		SM 2510B	QAK	1	PASI-I
		SM 2540C	SL	1	PASI-I
		EPA 410.4	AEL	1	PASI-I
		SM 4500-H+B	LHZ	1	PASI-I
		EPA 350.1	MTW	1	PASI-I
		EPA 353.2	ZM	1	PASI-I
		EPA 420.4	OAS	1	PASI-I

PASI-I = Pace Analytical Services - Indianapolis PASI-PA = Pace Analytical Services - Greensburg



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 9056
Description: 9056 IC Anions

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 9056 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 6010
Description: 6010 MET ICP

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 6010 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793481

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50374037021

P6: Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike

• MS (Lab ID: 3630681)

Calcium

• MSD (Lab ID: 3630682)

Calcium

Additional Comments:



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 6010

Description: 6010 MET ICP, Dissolved

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 6010 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 6020

Description: 6020 MET ICPMS

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 6020 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.2 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 6020

Description: 6020 MET ICPMS, Dissolved

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 6020 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.2 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 7470
Description: 7470 Mercury

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 7470 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 7470

Description: 7470 Mercury, Dissolved

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 7470 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 8260

Description: 8260/5030 MSV unpreserved

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 8260 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 792047

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 3624788)
 - lodomethane

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 792047

1d: Neither matrix spike nor matrix precision data could be provided for this analytical batch due to insufficient sample volume.

- BLANK (Lab ID: 3624787)
 - Dibromofluoromethane (S)



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 903.1

Description: 903.1 Radium 226

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 903.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 904.0

Description: 904.0 Radium 228

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 904.0 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: Total Radium Calculation
Description: Total Radium 228+226

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: SM 2510B

Description: 2510B Specific Conductance

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for SM 2510B by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: SM 2540C

Description: 2540C Total Dissolved Solids

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for SM 2540C by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 410.4 Description: 410.4 COD

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 410.4 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 792796

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50373903001,50373948001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3627850)
 - Chemical Oxygen Demand
- MSD (Lab ID: 3627849)
 - Chemical Oxygen Demand



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: SM 4500-H+B

Description: 4500H+ pH, Electrometric

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for SM 4500-H+B by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.

• GBS_SHARE-FD-20240521 (Lab ID: 50373903003)

MW-109S (Lab ID: 50373903001)MW-111S (Lab ID: 50373903002)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 350.1
Description: 350.1 Ammonia

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 350.1 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 353.2

Description: 353.2 Nitrogen, NO2/NO3 unpres **Client:** Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 353.2 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.

• GBS_SHARE-FD-20240521 (Lab ID: 50373903003)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Method: EPA 420.4

Description: 420.4 Phenolics, Total

Client: Duke Energy Gibson Generating Station

Date: June 24, 2024

General Information:

3 samples were analyzed for EPA 420.4 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 420.4 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Sample: MW-109S	Lab ID: 5037	73903001	Collected: 05/21/2	4 18:45	Received: 05	5/22/24 20:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9056 IC Anions	Analytical Meth	nod: EPA 90	056					
	Pace Analytica	l Services -	Indianapolis					
Chloride	15.0	mg/L	0.25	1		06/05/24 02:26	6 16887-00-6	
Fluoride	ND	mg/L	0.10	1		06/05/24 02:20		
Sulfate	36.7	mg/L	0.25	1		06/05/24 02:26		
6010 MET ICP	Analytical Meth	nod: EPA 60	010 Preparation Meth	nod: EPA	A 3010			
	Pace Analytica							
Barium	0.012	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:42	2 7440-39-3	
Boron	ND	mg/L	0.10	1	06/04/24 16:04	06/06/24 00:42	2 7440-42-8	
Cadmium	ND	mg/L	0.0010	1	06/04/24 16:04	06/06/24 00:42	2 7440-43-9	
Calcium	74.4	mg/L	1.0	1	06/04/24 16:04	06/06/24 00:42	2 7440-70-2	
Chromium	ND	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:42	2 7440-47-3	
Copper	ND	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:42	2 7440-50-8	
ron	ND	mg/L	0.10	1	06/04/24 16:04	06/06/24 00:42	2 7439-89-6	
₋ead	ND	mg/L	0.0050	1	06/04/24 16:04	06/06/24 00:42	2 7439-92-1	
Lithium	ND	mg/L	0.020	1	06/04/24 16:04			
Manganese	ND	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:42	2 7439-96-5	
Nolybdenum	ND	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:42	2 7439-98-7	
Silver	ND	mg/L	0.010	1	06/04/24 16:04			
Sodium	6.8	mg/L	1.0	1	06/04/24 16:04	06/06/24 00:42	2 7440-23-5	
linc	ND	mg/L	0.020	1	06/04/24 16:04			
6010 MET ICP, Dissolved	Analytical Meth	nod: EPA 60	010 Preparation Meth	nod: EPA	A 3010			
,	Pace Analytica							
Barium, Dissolved	0.012	mg/L	0.010	1	06/04/24 21:45	06/06/24 15:29	9 7440-39-3	
Boron, Dissolved	ND	mg/L	0.10	1	06/04/24 21:45			
Cadmium, Dissolved	ND	mg/L	0.0010	1	06/04/24 21:45			
Calcium, Dissolved	72.6	mg/L	1.0	1	06/04/24 21:45			
Chromium, Dissolved	ND	mg/L	0.010	1	06/04/24 21:45			
Copper, Dissolved	ND	mg/L	0.010	1	06/04/24 21:45			
ron, Dissolved	ND	mg/L	0.10	1	06/04/24 21:45			
Lead, Dissolved	ND	mg/L	0.0050	1	06/04/24 21:45			
ithium, Dissolved	ND	mg/L	0.020	1	06/04/24 21:45			
Manganese, Dissolved	ND	mg/L	0.010	1	06/04/24 21:45			
Molybdenum, Dissolved	ND	mg/L	0.010	1	06/04/24 21:45			
Silver, Dissolved	ND ND	mg/L	0.010	1	06/04/24 21:45			
Sodium, Dissolved	6.7	mg/L	1.0	1	06/04/24 21:45			
Zinc, Dissolved	ND	mg/L	0.020	1	06/04/24 21:45			
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20 Preparation Meth	nod: FP4	\ 200.2			
-	Pace Analytica		·	·				
Antimony	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 09:17	7 7440-36-0	
Arsenic	ND	mg/L	0.0010	1	05/30/24 07:37			
	ND	mg/L	0.00020	1	05/30/24 07:37			
					JJ/JJ/27 U1.J1	JU/ U I/ ZT UU. I	1 7 7 0 7 1 7	
Beryllium Cobalt	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 00:17	7 7440-48-4	



Date: 06/24/2024 08:15 AM

ANALYTICAL RESULTS

Project: Gibson SLF New Wells

Sample: MW-109S	Lab ID: 503	73903001	Collected: 05/21/2	4 18:45	Received: 05	5/22/24 20:45 N	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua			
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20 Preparation Meth	nod: EP	A 200.2						
	Pace Analytica	l Services -	Indianapolis								
Thallium	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 09:17	7440-28-0				
6020 MET ICPMS, Dissolved	Analytical Meth	nod: EPA 60	20 Preparation Meth	nod: EP	A 200.2						
	Pace Analytica										
Antimony, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:46	7440-36-0				
Arsenic, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:46	7440-38-2				
Beryllium, Dissolved	ND	mg/L	0.00020	1	05/30/24 07:37	06/01/24 06:46	7440-41-7				
Cobalt, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:46	7440-48-4				
Selenium, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:46	7782-49-2				
Thallium, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:46	7440-28-0				
7470 Mercury	Analytical Meth	nod: EPA 74	170 Preparation Meth	nod: EP	A 7470						
•		ace Analytical Services - Indianapolis									
Mercury	ND	mg/L	0.00020	1	06/04/24 10:11	06/04/24 20:25	7439-97-6				
7470 Mercury, Dissolved	Analytical Meth	nod: EPA 74	70 Preparation Meth	nod: EP	A 7470						
	Pace Analytica	l Services -	Indianapolis								
Mercury, Dissolved	ND	mg/L	0.00020	1	06/05/24 09:51	06/05/24 20:16	7439-97-6				
8260/5030 MSV unpreserved	Analytical Meth	nod: EPA 82	260								
	Pace Analytica	l Services -	Indianapolis								
Acetone	ND	ug/L	100	1		05/24/24 16:21	67-64-1				
Acrolein	ND	ug/L	50.0	1		05/24/24 16:21	107-02-8				
Acrylonitrile	ND	ug/L	100	1		05/24/24 16:21	107-13-1				
Benzene	ND	ug/L	5.0	1		05/24/24 16:21	71-43-2				
Bromodichloromethane	ND	ug/L	5.0	1		05/24/24 16:21	75-27-4				
Bromoform	ND	ug/L	5.0	1		05/24/24 16:21	75-25-2				
Bromomethane	ND	ug/L	5.0	1		05/24/24 16:21	74-83-9				
2-Butanone (MEK)	ND	ug/L	25.0	1		05/24/24 16:21	78-93-3				
Carbon disulfide	ND	ug/L	10.0	1		05/24/24 16:21	75-15-0				
Carbon tetrachloride	ND	ug/L	5.0	1		05/24/24 16:21	56-23-5				
Chlorobenzene	ND	ug/L	5.0	1		05/24/24 16:21	108-90-7				
Chloroethane	ND	ug/L	5.0	1		05/24/24 16:21	75-00-3				
2-Chloroethylvinyl ether	ND	ug/L	50.0	1		05/24/24 16:21					
Chloroform	ND	ug/L	5.0	1		05/24/24 16:21					
Chloromethane	ND	ug/L	5.0	1		05/24/24 16:21					
Dibromochloromethane	ND	ug/L	5.0	1		05/24/24 16:21					
Dibromomethane	ND	ug/L	5.0	1		05/24/24 16:21					
Dichlorodifluoromethane	ND	ug/L	5.0	1		05/24/24 16:21					
1,2-Dichloroethane	ND	ug/L	5.0	1		05/24/24 16:21					
,2-Dichloroethane (Total)	ND	ug/L	5.0	1		05/24/24 16:21					
		-	5.0	1		05/24/24 16:21					
• • • • • • • • • • • • • • • • • • • •	KILI										
,1-Dichloroethene	ND ND	ug/L									
1,1-Dichloroethene cis-1,3-Dichloropropene trans-1,3-Dichloropropene	ND ND	ug/L ug/L ug/L	5.0 5.0 5.0	1 1		05/24/24 16:21 05/24/24 16:21	10061-01-5				



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Sample: MW-109S	Lab ID:	50373903001	Collected: 05/21	24 18:45	Received: 0	5/22/24 20:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3260/5030 MSV unpreserved	Analytical	Method: EPA 82	260					
	Pace Anal	ytical Services -	Indianapolis					
Ethyl methacrylate	NI	D ug/L	100	1		05/24/24 16:2	1 97-63-2	
2-Hexanone	NI	O ug/L	25.0	1		05/24/24 16:2	1 591-78-6	
odomethane	NI	O ug/L	10.0	1		05/24/24 16:21	1 74-88-4	L1
Methylene Chloride	NI	O ug/L	5.0	1		05/24/24 16:21	1 75-09-2	
I-Methyl-2-pentanone (MIBK)	NI	O ug/L	25.0	1		05/24/24 16:21	1 108-10-1	
Styrene	NI	O ug/L	5.0	1		05/24/24 16:21	1 100-42-5	
,1,2,2-Tetrachloroethane	NI	O ug/L	5.0	1		05/24/24 16:21	1 79-34-5	
oluene	NI	O ug/L	5.0	1		05/24/24 16:21	1 108-88-3	
,1,1-Trichloroethane	NI	O ug/L	5.0	1		05/24/24 16:21	1 71-55-6	
,1,2-Trichloroethane	NI	O ug/L	5.0	1		05/24/24 16:21	1 79-00-5	
richloroethene	NI	O ug/L	5.0	1		05/24/24 16:21	1 79-01-6	
richlorofluoromethane	NI	O ug/L	5.0	1		05/24/24 16:2	1 75-69-4	
,2,3-Trichloropropane	NI	O ug/L	5.0	1		05/24/24 16:2	1 96-18-4	
/inyl acetate	NI		50.0	1		05/24/24 16:21	1 108-05-4	
/inyl chloride	NI	O ug/L	2.0	1		05/24/24 16:21	1 75-01-4	
(ylene (Total)	NI	O ug/L	10.0	1		05/24/24 16:2	1 1330-20-7	
Surrogates								
Dibromofluoromethane (S)	10		82-128			05/24/24 16:2		
-Bromofluorobenzene (S)	10		79-124	1		05/24/24 16:2		
oluene-d8 (S)	9	7 %.	73-122	1		05/24/24 16:21	1 2037-26-5	
510B Specific Conductance	Analytical	Method: SM 25	10B					
	Pace Anal	ytical Services -	Indianapolis					
Specific Conductance	53	5 umhos/cn	10.0	1		06/10/24 17:10)	
2540C Total Dissolved Solids	Analytical	Method: SM 25	40C					
	Pace Anal	ytical Services -	Indianapolis					
Total Dissolved Solids	31	8 mg/L	25.0	1		05/28/24 11:57	7	
110.4 COD	Analytical	Method: EPA 41	0.4 Preparation Me	athod: EP	Δ 410 4			
110.4 000	-	ytical Services -		7t1100. E1 7	1410.4			
Chemical Oxygen Demand	NI	D mg/L	10.0	1	05/30/24 11:32	2 05/30/24 17:25	5	
1500H+ pH, Electrometric	Analytical	Method: SM 45	00-H+B					
pri, Lioutiumotrio		ytical Services -						
H at 25 Degrees C	7.	6 Std. Units	0.10	1		06/06/24 18:44	4	Н3
50.1 Ammonia	Analytical	Method: EPA 35	50.1					
	Pace Anal	ytical Services -	Indianapolis					
litrogen, Ammonia	NI	O mg/L	0.10	1		06/03/24 14:22	2 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical	Method: EPA 35	53.2					
- · · · ·	Pace Anal	ytical Services -	Indianapolis					
Nitrogen, Nitrate	8.	1 mg/L	0.50	5		05/23/24 17:01	1 14797-55-8	
3,	0.	y/ =	0.00	•		30,20,2111.0		



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Sample: MW-109S Lab ID: 50373903001 Collected: 05/21/24 18:45 Received: 05/22/24 20:45 Matrix: Water DF CAS No. **Parameters** Results Units Report Limit Prepared Analyzed Qual 420.4 Phenolics, Total Analytical Method: EPA 420.4 Preparation Method: EPA 420.4 Pace Analytical Services - Indianapolis ug/L Phenolics, Total Recoverable ND 20.0 06/03/24 13:00 06/04/24 15:44 64743-03-9



Project: Gibson SLF New Wells

Date: 06/24/2024 08:15 AM

Pace Project No.: 50373903								
Sample: MW-111S	Lab ID: 503	73903002	Collected: 05/21/2	24 17:45	Received: 05	5/22/24 20:45 N	fatrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9056 IC Anions	Analytical Meth	nod: EPA 90	956					
	Pace Analytica	l Services -	Indianapolis					
Chloride	24.3	mg/L	0.25	1		06/05/24 02:43	16887-00-6	
Fluoride	0.11	mg/L	0.10	1		06/05/24 02:43		
Sulfate	21.2	mg/L	0.25	1		06/05/24 02:43	14808-79-8	
6010 MET ICP	Analytical Meth	nod: EPA 60	010 Preparation Meth	nod: EP/	A 3010			
	Pace Analytica	l Services -	Indianapolis					
Barium	0.019	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:44	7440-39-3	
Boron	ND	mg/L	0.10	1	06/04/24 16:04	06/06/24 00:44	7440-42-8	
Cadmium	ND	mg/L	0.0010	1	06/04/24 16:04	06/06/24 00:44	7440-43-9	
Calcium	71.9	mg/L	1.0	1	06/04/24 16:04	06/06/24 00:44	7440-70-2	
Chromium	ND	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:44	7440-47-3	
Copper	ND	mg/L	0.010	1	06/04/24 16:04	06/06/24 00:44	7440-50-8	
ron	0.37	mg/L	0.10	1	06/04/24 16:04	06/06/24 00:44	7439-89-6	
_ead	ND	mg/L	0.0050	1		06/06/24 00:44		
Lithium	ND	mg/L	0.020	1		06/06/24 00:44		
Manganese	0.099	mg/L	0.010	1		06/06/24 00:44		
Molybdenum	ND	mg/L	0.010	1		06/06/24 00:44		
Silver	ND	mg/L	0.010	1		06/06/24 00:44		
Sodium	4.9	mg/L	1.0	1		06/06/24 00:44		
Zinc	ND	mg/L	0.020	1		06/06/24 00:44		
	A b - C L B A - (b		MA Deservation Mail		1 0010			
6010 MET ICP, Dissolved	Pace Analytica		10 Preparation Meth	100: EP/	4 3010			
	-							
Barium, Dissolved	0.016	mg/L	0.010	1		06/06/24 15:38		
Boron, Dissolved	ND	mg/L	0.10	1	06/04/24 21:45	06/06/24 15:38	7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.0010	1	06/04/24 21:45	06/06/24 15:38	7440-43-9	
Calcium, Dissolved	69.3	mg/L	1.0	1	06/04/24 21:45	06/06/24 15:38	7440-70-2	
Chromium, Dissolved	ND	mg/L	0.010	1	06/04/24 21:45	06/06/24 15:38	7440-47-3	
Copper, Dissolved	ND	mg/L	0.010	1	06/04/24 21:45	06/06/24 15:38	7440-50-8	
ron, Dissolved	ND	mg/L	0.10	1	06/04/24 21:45	06/06/24 15:38	7439-89-6	
_ead, Dissolved	ND	mg/L	0.0050	1	06/04/24 21:45	06/06/24 15:38	7439-92-1	
_ithium, Dissolved	ND	mg/L	0.020	1	06/04/24 21:45	06/06/24 15:38	7439-93-2	
Manganese, Dissolved	0.083	mg/L	0.010	1	06/04/24 21:45	06/06/24 15:38	7439-96-5	
Molybdenum, Dissolved	ND	mg/L	0.010	1	06/04/24 21:45	06/06/24 15:38	7439-98-7	
Silver, Dissolved	ND	mg/L	0.010	1		06/06/24 15:38		
Sodium, Dissolved	4.6	mg/L	1.0	1		06/06/24 15:38		
Zinc, Dissolved	ND	mg/L	0.020	1		06/06/24 15:38		
6020 MET ICPMS	Analytical Meth	nod: EPA 60	20 Preparation Meth	nod: EP/	A 200.2			
- -	Pace Analytica		•					
Antimony	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 09:21	7440-36-0	
Arsenic	ND ND	mg/L	0.0010	1		06/01/24 09:21		
Beryllium	ND ND	mg/L	0.00020	1		06/01/24 09:21		
•		•						
Cobalt	ND	mg/L	0.0010	1		06/01/24 09:21		
Selenium	ND	mg/L	0.0050	1	05/30/24 07:37	06/01/24 09:21	7782-49-2	



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Sample: MW-111S	Lab ID: 503	73903002	Collected: 05/21/2	24 17:45	Received: 05	5/22/24 20:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6020 MET ICPMS	Analytical Meth	nod: EPA 60	020 Preparation Meth	nod: EP/	A 200.2			
	Pace Analytica	l Services -	Indianapolis					
Thallium	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 09:2	1 7440-28-0	
6020 MET ICPMS, Dissolved	Analytical Meth	nod: EPA 60	020 Preparation Meth	nod: EPA	A 200.2			
,	Pace Analytica	l Services -	Indianapolis					
Antimony, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:50	7440-36-0	
Arsenic, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:50	7440-38-2	
Beryllium, Dissolved	ND	mg/L	0.00020	1	05/30/24 07:37	06/01/24 06:50	7440-41-7	
Cobalt, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:50	7440-48-4	
Selenium, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:50	7782-49-2	
Thallium, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 06:50	7440-28-0	
7470 Mercury	Analytical Meth	nod: EPA 74	170 Preparation Meth	nod: EP/	A 7470			
-	Pace Analytica							
Mercury	ND	mg/L	0.00020	1	06/04/24 10:11	06/04/24 20:27	7 7439-97-6	
7470 Mercury, Dissolved	Analytical Meth	nod: EPA 74	170 Preparation Meth	nod: EP/	A 7470			
•	Pace Analytica	l Services -	Indianapolis					
Mercury, Dissolved	ND	mg/L	0.00020	1	06/05/24 09:51	06/05/24 20:19	7439-97-6	
3260/5030 MSV unpreserved	Analytical Meth	nod: EPA 82	260					
	Pace Analytica	l Services -	Indianapolis					
Acetone	ND	ug/L	100	1		05/24/24 16:52	2 67-64-1	
Acrolein	ND	ug/L	50.0	1		05/24/24 16:52	2 107-02-8	
Acrylonitrile	ND	ug/L	100	1		05/24/24 16:52	2 107-13-1	
Benzene	ND	ug/L	5.0	1		05/24/24 16:52	2 71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		05/24/24 16:52	2 75-27-4	
Bromoform	ND	ug/L	5.0	1		05/24/24 16:52	2 75-25-2	
Bromomethane	ND	ug/L	5.0	1		05/24/24 16:52	2 74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		05/24/24 16:52	2 78-93-3	
Carbon disulfide	ND	ug/L	10.0	1		05/24/24 16:52	2 75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		05/24/24 16:52	2 56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		05/24/24 16:52		
Chloroethane	ND	ug/L	5.0	1		05/24/24 16:52		
2-Chloroethylvinyl ether	ND	ug/L	50.0	1		05/24/24 16:52		
Chloroform	ND	ug/L	5.0	1		05/24/24 16:52		
Chloromethane	ND	ug/L	5.0	1		05/24/24 16:52		
Dibromochloromethane	ND	ug/L	5.0	1		05/24/24 16:52		
Dibromomethane	ND	ug/L	5.0	1		05/24/24 16:52		
Dichlorodifluoromethane	ND ND	ug/L ug/L	5.0	1		05/24/24 16:52		
		_		1				
1,2-Dichloroethane	ND	ug/L	5.0			05/24/24 16:52		
1,2-Dichloroethene (Total)	ND	ug/L	5.0	1		05/24/24 16:52		
1,1-Dichloroethene	ND	ug/L	5.0	1		05/24/24 16:52		
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		05/24/24 16:52		
rans-1,3-Dichloropropene	ND	ug/L	5.0	1		05/24/24 16:52		
Ethylbenzene	ND	ug/L	5.0	1		05/24/24 16:52	2 100-41-4	



Project: Gibson SLF New Wells

Date: 06/24/2024 08:15 AM

Sample: MW-111S	Lab ID: 503	373903002	Collected: 05/21/2	24 17:45	Received: 0	5/22/24 20:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3260/5030 MSV unpreserved	Analytical Met	hod: EPA 82	260					
	Pace Analytica	al Services -	Indianapolis					
Ethyl methacrylate	ND	ug/L	100	1		05/24/24 16:5	2 97-63-2	
2-Hexanone	ND	ug/L	25.0	1		05/24/24 16:5	2 591-78-6	
odomethane	ND	ug/L	10.0	1		05/24/24 16:5	2 74-88-4	L1
Methylene Chloride	ND	ug/L	5.0	1		05/24/24 16:5	2 75-09-2	
I-Methyl-2-pentanone (MIBK)	ND	ug/L	25.0	1		05/24/24 16:5	2 108-10-1	
Styrene	ND	ug/L	5.0	1		05/24/24 16:5		
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		05/24/24 16:5		
Toluene	ND	ug/L	5.0	1		05/24/24 16:5		
1,1,1-Trichloroethane	ND	ug/L	5.0	1		05/24/24 16:5		
I,1,2-Trichloroethane	ND	ug/L	5.0	1		05/24/24 16:5		
Trichloroethene	ND	ug/L	5.0	1		05/24/24 16:5		
Trichlorofluoromethane	ND	ug/L	5.0	1		05/24/24 16:5		
I,2,3-Trichloropropane	ND	ug/L	5.0	1		05/24/24 16:5		
/inyl acetate	ND	ug/L	50.0	1		05/24/24 16:5		
/inyl chloride	ND	ug/L	2.0	1		05/24/24 16:5		
Kylene (Total) S urrogates	ND	ug/L	10.0	1		05/24/24 16:5	2 1330-20-7	
Dibromofluoromethane (S)	102	%.	82-128	1		05/24/24 16:5	2 1868-53-7	
4-Bromofluorobenzene (S)	99	%.	79-124	1		05/24/24 16:5		
Toluene-d8 (S)	98	%.	73-122	1		05/24/24 16:5	2 2037-26-5	
2510B Specific Conductance	Analytical Met	hod: SM 251	10B					
	Pace Analytica	al Services -	Indianapolis					
Specific Conductance	500	umhos/cm	10.0	1		06/10/24 17:1	0	
2540C Total Dissolved Solids	Analytical Met	hod: SM 254	40C					
	Pace Analytica							
Total Dissolved Solids	287	mg/L	25.0	1		05/28/24 11:58	3	
410.4 COD	Analytical Met	hod: EPA 41	0.4 Preparation Me	thod: EP/	A 410.4			
	Pace Analytica		•					
Chemical Oxygen Demand	ND	mg/L	10.0	1	05/30/24 11:32	05/30/24 17:2	5	
4500H+ pH, Electrometric	Analytical Met	hod: SM 450	00-H+B					
, ,	Pace Analytica							
oH at 25 Degrees C	7.6	Std. Units	0.10	1		06/06/24 18:4	5	Н3
350.1 Ammonia	Analytical Met	hod: EPA 35	50.1					
	Pace Analytica	al Services -	Indianapolis					
Nitrogen, Ammonia	ND	mg/L	0.10	1		06/03/24 14:2	4 7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Met	hod: EPA 35	3.2					
-	Pace Analytica	al Services -	Indianapolis					
Nitrogen, Nitrate	9.0	mg/L	0.40	4		05/23/24 16:4	5 14797-55-8	
-		•						



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Sample: MW-111S Lab ID: 50373903002 Collected: 05/21/24 17:45 Received: 05/22/24 20:45 Matrix: Water DF CAS No. **Parameters** Results Units Report Limit Prepared Analyzed Qual 420.4 Phenolics, Total Analytical Method: EPA 420.4 Preparation Method: EPA 420.4 Pace Analytical Services - Indianapolis ug/L Phenolics, Total Recoverable ND 20.0 06/03/24 13:00 06/04/24 15:46 64743-03-9



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Sample: GBS_SHARE-FD-20240521	Lab ID:	50373903003	Collected: 05/21/	24 08:00	Received: 05	5/22/24 20:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9056 IC Anions	Analytical	Method: EPA 90	056					
	Pace Anal	ytical Services -	Indianapolis					
Chloride	15.0	0 mg/L	0.25	1		06/05/24 03:00	16887-00-6	
Fluoride	NE	9	0.10	1		06/05/24 03:00		
Sulfate	36.7	-	0.25	1		06/05/24 03:00	14808-79-8	
6010 MET ICP	Analytical	Method: EPA 60	010 Preparation Met	hod: EPA	A 3010			
	Pace Anal	ytical Services -	Indianapolis					
Barium	0.012	2 mg/L	0.010	1	06/04/24 16:04	06/06/24 00:46	6 7440-39-3	
Boron	NE	J	0.10	1		06/06/24 00:46		
Cadmium	NE	-	0.0010	1		06/06/24 00:46		
Calcium	75.3	U	1.0	1		06/06/24 00:46		
Chromium	NE	J	0.010	1		06/06/24 00:46		
Copper	NE	9	0.010	1		06/06/24 00:46		
ron	NE	9	0.10	1		06/06/24 00:46		
_ead	NE	•	0.0050	1		06/06/24 00:46		
Lithium	NE	ū	0.020	1		06/06/24 00:46		
Manganese	NE	J	0.010	1		06/06/24 00:46		
Molybdenum	NE	9	0.010	1		06/06/24 00:46		
Silver	NE	J	0.010	1		06/06/24 00:46		
Sodium	6.9	U	1.0	1		06/06/24 00:46		
Zinc	NE	-	0.020	1		06/06/24 00:46		
		Ü						
6010 MET ICP, Dissolved	-		010 Preparation Met	thod: EPA	A 3010			
	Pace Anal	ytical Services -	Indianapolis					
Barium, Dissolved	0.01	1 mg/L	0.010	1	06/04/24 21:45	06/06/24 15:40	7440-39-3	
Boron, Dissolved	NE	D mg/L	0.10	1	06/04/24 21:45	06/06/24 15:40	7440-42-8	
Cadmium, Dissolved	NE	D mg/L	0.0010	1	06/04/24 21:45	06/06/24 15:40	7440-43-9	
Calcium, Dissolved	72.3	•	1.0	1	06/04/24 21:45	06/06/24 15:40	7440-70-2	
Chromium, Dissolved	NE	D mg/L	0.010	1	06/04/24 21:45	06/06/24 15:40	7440-47-3	
Copper, Dissolved	NE	•	0.010	1	06/04/24 21:45	06/06/24 15:40	7440-50-8	
ron, Dissolved	NE	•	0.10	1		06/06/24 15:40		
_ead, Dissolved	NE	ū	0.0050	1	06/04/24 21:45	06/06/24 15:40	7439-92-1	
ithium, Dissolved	NE	9	0.020	1		06/06/24 15:40		
Manganese, Dissolved	NE	J	0.010	1		06/06/24 15:40		
Molybdenum, Dissolved	NE	J	0.010	1		06/06/24 15:40		
Silver, Dissolved	NE	3	0.010	1		06/06/24 15:40		
Sodium, Dissolved	6.8	J	1.0	1		06/06/24 15:40		
Zinc, Dissolved	NE		0.020	1		06/06/24 15:40		
6020 MET ICPMS	Analytical	Method: EPA 60	20 Preparation Met	hod: EPA	A 200.2			
	-	ytical Services -						
Antimony	NE	D mg/L	0.0010	1	05/30/24 07:37	06/01/24 09:33	3 7440-36-0	
Arsenic	NE	9	0.0010	1		06/01/24 09:33		
Beryllium	NE	J	0.00020	1		06/01/24 09:33		
Cobalt	NE	_	0.0020	1		06/01/24 09:33		
	NE	_	0.0050	1	05/30/24 07:37			



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Sample: GBS_SHARE-FD-20240521	Lab ID: 5037	73903003	Collected: 05/21/2	24 08:00	Received: 05	/22/24 20:45	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6020 MET ICPMS	Analytical Meth	od: EPA 60	020 Preparation Meth	nod: EP/	A 200.2			
	Pace Analytica	l Services -	Indianapolis					
Thallium	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 09:3	3 7440-28-0	
6020 MET ICPMS, Dissolved	Analytical Meth	od: EPA 60	020 Preparation Meth	nod: EP/	A 200.2			
	Pace Analytica	l Services -	Indianapolis					
Antimony, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 07:02	2 7440-36-0	
Arsenic, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 07:02	2 7440-38-2	
Beryllium, Dissolved	ND	mg/L	0.00020	1	05/30/24 07:37	06/01/24 07:02	2 7440-41-7	
Cobalt, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 07:02	2 7440-48-4	
Selenium, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 07:02	2 7782-49-2	
Γhallium, Dissolved	ND	mg/L	0.0010	1	05/30/24 07:37	06/01/24 07:02	2 7440-28-0	
470 Mercury	Analytical Meth	od: EPA 74	170 Preparation Meth	nod: EPA	A 7470			
	Pace Analytica	l Services -	Indianapolis					
Mercury	ND	mg/L	0.00020	1	06/04/24 10:11	06/04/24 20:30	7439-97-6	
470 Mercury, Dissolved	Analytical Meth	od: EPA 74	170 Preparation Meth	nod: EP/	٦ 7470			
	Pace Analytica	l Services -	Indianapolis					
Mercury, Dissolved	ND	mg/L	0.00020	1	06/05/24 09:51	06/05/24 20:2	1 7439-97-6	
3260/5030 MSV unpreserved	Analytical Meth	od: EPA 82	260					
	Pace Analytica	l Services -	Indianapolis					
Acetone	ND	ug/L	100	1		05/24/24 17:22	2 67-64-1	
Acrolein	ND	ug/L	50.0	1		05/24/24 17:22	2 107-02-8	
Acrylonitrile	ND	ug/L	100	1		05/24/24 17:22	2 107-13-1	
Benzene	ND	ug/L	5.0	1		05/24/24 17:22	2 71-43-2	
Bromodichloromethane	ND	ug/L	5.0	1		05/24/24 17:22	2 75-27-4	
Bromoform	ND	ug/L	5.0	1		05/24/24 17:22	2 75-25-2	
Bromomethane	ND	ug/L	5.0	1		05/24/24 17:22	2 74-83-9	
2-Butanone (MEK)	ND	ug/L	25.0	1		05/24/24 17:22	2 78-93-3	
Carbon disulfide	ND	ug/L	10.0	1		05/24/24 17:22	2 75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		05/24/24 17:22	2 56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		05/24/24 17:22	2 108-90-7	
Chloroethane	ND	ug/L	5.0	1		05/24/24 17:22	2 75-00-3	
2-Chloroethylvinyl ether	ND	ug/L	50.0	1		05/24/24 17:22	2 110-75-8	
Chloroform	ND	ug/L	5.0	1		05/24/24 17:22	2 67-66-3	
Chloromethane	ND	ug/L	5.0	1		05/24/24 17:22	2 74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		05/24/24 17:22	2 124-48-1	
Dibromomethane	ND	ug/L	5.0	1		05/24/24 17:22	2 74-95-3	
Dichlorodifluoromethane	ND	ug/L	5.0	1		05/24/24 17:22	2 75-71-8	
,2-Dichloroethane	ND	ug/L	5.0	1		05/24/24 17:22		
,2-Dichloroethene (Total)	ND	ug/L	5.0	1		05/24/24 17:23	2 540-59-0	
,1-Dichloroethene	ND	ug/L	5.0	1		05/24/24 17:23	2 75-35-4	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1			2 10061-01-5	
rans-1,3-Dichloropropene	ND	ug/L	5.0	1		05/24/24 17:23		
Ethylbenzene	ND	ug/L	5.0	1		05/24/24 17:2		



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Analytical Method: EPA 8250 Pace Analytical Services - Indianapolis	Sample: GBS_SHARE-FD-20240521	Lab ID:	50373903003	Collected: 05	5/21/2	4 08:00	Received: 0	05/22/24 20:45	Matrix: Water	
Pace Analytical Services - Indianapolis	Parameters	Results	Units	Report Li	imit _	DF	Prepared	Analyzed	CAS No.	Qua
Section Continue	3260/5030 MSV unpreserved	Analytical	Method: EPA 82	260						
Second		Pace Ana	ytical Services -	Indianapolis						
ND	Ethyl methacrylate	N	D ug/L		100	1		05/24/24 17:22	2 97-63-2	
Methylene Chloride	2-Hexanone	N	D ug/L	:	25.0	1		05/24/24 17:22	2 591-78-6	
Methyl-2-pentanone (MIBK)	odomethane	N	D ug/L		10.0	1		05/24/24 17:22	2 74-88-4	L1
ND	•	N	D ug/L		5.0	1		05/24/24 17:22	2 75-09-2	
1,1,2,2-Tetrachloroethane	1-Methyl-2-pentanone (MIBK)	N	D ug/L	:	25.0	1		05/24/24 17:22	2 108-10-1	
Tollene		N	D ug/L		5.0	1		05/24/24 17:22	2 100-42-5	
1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	N	0		5.0	1		05/24/24 17:22	2 79-34-5	
1.1.2 Trichloroethane	Toluene	N	D ug/L		5.0	1		05/24/24 17:22	2 108-88-3	
Trichlorethene		N	_		5.0	1		05/24/24 17:22	2 71-55-6	
Trichlorofluoromethane	1,1,2-Trichloroethane	N	D ug/L		5.0	1		05/24/24 17:22	2 79-00-5	
1.2.3-Trichloropropane		N	_			-		05/24/24 17:22	2 79-01-6	
Vinyl acetate		N	_							
Virigin Chloride			_							
ND		N			50.0	1		05/24/24 17:22	2 108-05-4	
Surrogates 103	•	N			2.0					
103 %. 82-128		N	D ug/L		10.0	1		05/24/24 17:22	2 1330-20-7	
Petromofluorobenzene (S)	•	4.0	0 0/		400			05/04/04 47 04	4000 50 7	
Solution Solution	()			_	_					
Analytical Method: SM 2510B Pace Analytical Services - Indianapolis	` ,			_		-				
Pace Analytical Services - Indianapolis Specific Conductance 534 umhos/cm 10.0 1 06/10/24 17:11 Analytical Method: SM 2540C Pace Analytical Services - Indianapolis Total Dissolved Solids 313 mg/L 25.0 1 05/28/24 11:58 Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Indianapolis Chemical Oxygen Demand ND mg/L 10.0 1 05/30/24 11:32 05/30/24 17:25 Analytical Method: SM 4500-H+B Pace Analytical Services - Indianapolis Analytical Services - Indianapolis Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Analytical Method: EPA 353.2 Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	oluene-d8 (S)	9	6 %.	73-	-122	1		05/24/24 17:22	2 2037-26-5	
Specific Conductance 534	2510B Specific Conductance	Analytical	Method: SM 25	10B						
Analytical Method: SM 2540C Pace Analytical Services - Indianapolis Fotal Dissolved Solids 313 mg/L 25.0 1 05/28/24 11:58 410.4 COD Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Indianapolis Chemical Oxygen Demand ND mg/L 10.0 1 05/30/24 11:32 05/30/24 17:25 4500H+ pH, Electrometric Analytical Method: SM 4500-H+B Pace Analytical Services - Indianapolis 6H at 25 Degrees C 7.6 Std. Units 0.10 1 06/06/24 18:45 H3 450.1 Ammonia Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis ND mg/L 0.10 1 06/03/24 14:26 7664-41-7 453.2 Nitrogen, NO2/NO3 unpres Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis		Pace Ana	ytical Services -	Indianapolis						
Pace Analytical Services - Indianapolis	Specific Conductance	53	4 umhos/cm	1	10.0	1		06/10/24 17:1	l	
Total Dissolved Solids 313 mg/L 25.0 1 05/28/24 11:58 410.4 COD	2540C Total Dissolved Solids	Analytical	Method: SM 254	40C						
Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Indianapolis Chemical Oxygen Demand ND mg/L 10.0 1 05/30/24 11:32 05/30/24 17:25 Analytical Method: SM 4500-H+B Pace Analytical Services - Indianapolis OH at 25 Degrees C 7.6 Std. Units 0.10 1 06/06/24 18:45 H3 B50.1 Ammonia Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Nitrogen, Ammonia ND mg/L 0.10 1 06/03/24 14:26 7664-41-7 Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis		•								
Pace Analytical Services - Indianapolis Chemical Oxygen Demand ND mg/L 10.0 1 05/30/24 11:32 05/30/24 17:25 4500H+ pH, Electrometric Analytical Method: SM 4500-H+B Pace Analytical Services - Indianapolis OH at 25 Degrees C 7.6 Std. Units 0.10 1 06/06/24 18:45 H3 350.1 Ammonia Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Nitrogen, Ammonia ND mg/L 0.10 1 06/03/24 14:26 7664-41-7 353.2 Nitrogen, NO2/NO3 unpres Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	Total Dissolved Solids	31	3 mg/L	:	25.0	1		05/28/24 11:58	3	
Pace Analytical Services - Indianapolis Chemical Oxygen Demand ND mg/L 10.0 1 05/30/24 11:32 05/30/24 17:25 4500H+ pH, Electrometric Analytical Method: SM 4500-H+B Pace Analytical Services - Indianapolis OH at 25 Degrees C 7.6 Std. Units 0.10 1 06/06/24 18:45 H3 350.1 Ammonia Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Nitrogen, Ammonia ND mg/L 0.10 1 06/03/24 14:26 7664-41-7 353.2 Nitrogen, NO2/NO3 unpres Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	440.4.000	A +	Mathadi EDA 44	10.4 Duamanatia		EDA	V 440 4			
Analytical Method: SM 4500-H+B Pace Analytical Services - Indianapolis DH at 25 Degrees C 7.6 Std. Units On 1 O6/06/24 18:45 H3 Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Nitrogen, Ammonia ND mg/L On 1 O6/03/24 14:26 7664-41-7 Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	410.4 COD	-			n weu	100. EPA	4410.4			
Pace Analytical Services - Indianapolis OH at 25 Degrees C 7.6 Std. Units On 10 1 O6/06/24 18:45 H3 S50.1 Ammonia Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis NItrogen, Ammonia ND mg/L On 1 O6/03/24 14:26 7664-41-7 S53.2 Nitrogen, NO2/NO3 unpres Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	Chemical Oxygen Demand	N	D mg/L		10.0	1	05/30/24 11:32	2 05/30/24 17:25	5	
Analytical Method: EPA 350.1 Pace Analytical Services - Indianapolis Nitrogen, Ammonia ND mg/L O.10 1 O6/03/24 14:26 7664-41-7 Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	1500H+ pH, Electrometric									
Pace Analytical Services - Indianapolis Nitrogen, Ammonia ND mg/L Onlo 1 Onlo 1 Onlo 1 Onlo 1 Onlo 24 14:26 7664-41-7 Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	oH at 25 Degrees C	7.	6 Std. Units	3	0.10	1		06/06/24 18:4	5	НЗ
Analytical Method: EPA 353.2 Pace Analytical Services - Indianapolis	350.1 Ammonia	•								
Pace Analytical Services - Indianapolis	Nitrogen, Ammonia	N	D mg/L		0.10	1		06/03/24 14:26	7664-41-7	
	353.2 Nitrogen, NO2/NO3 unpres	-								
	Vitrogen, Nitrate				0.50	5		05/23/24 18:33	3 14797-55-8	НЗ

06/03/24 13:00 06/04/24 15:47 64743-03-9



ANALYTICAL RESULTS

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Phenolics, Total Recoverable

Date: 06/24/2024 08:15 AM

Sample: GBS_SHARE-FD-20240521 Lab ID: 50373903003 Collected: 05/21/24 08:00 Received: 05/22/24 20:45 Matrix: Water DF CAS No. **Parameters** Results Units Report Limit Prepared Analyzed Qual 420.4 Phenolics, Total Analytical Method: EPA 420.4 Preparation Method: EPA 420.4 Pace Analytical Services - Indianapolis

20.0

ND

ug/L



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 793071 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3628861 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

_		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	06/04/24 09:01	
Fluoride	mg/L	ND	0.10	06/04/24 09:01	
Sulfate	mg/L	ND	0.25	06/04/24 09:01	

LABORATORY CONTROL SAMPLE: 3628862 LCS Spike LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 2.4 97 mg/L 2.5 80-120 Fluoride 1.0 104 80-120 mg/L 1 Sulfate 5 5.0 mg/L 100 80-120

MATRIX SPIKE & MATRIX SP	IKE DUPL	ICATE: 3628	867		3628868							
			MS	MSD								
		50373861003	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Chloride	mg/L	17.5	2.5	2.5	20.1	20.1	105	106	80-120	0	15	
Fluoride	mg/L	ND	1	1	1.1	1.0	108	105	80-120	3	15	
Sulfate	mg/L	39.3	5	5	44.5	44.4	104	101	80-120	0	15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 793373 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3630359 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/L ND 0.00020 06/04/24 20:20

LABORATORY CONTROL SAMPLE: 3630360

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury mg/L 0.005 0.0051 102 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3630361 3630362

MS MSD

50373905003 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits ND 0.0051 20 Mercury mg/L 0.005 0.005 0.0054 100 107 75-125 6

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 793458 Analysis Method: EPA 7470

QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury Dissolved

> Laboratory: Pace Analytical Services - Indianapolis

50373903001, 50373903002, 50373903003 Associated Lab Samples:

METHOD BLANK: Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

mg/L

Blank Reporting

Qualifiers Parameter Units Result Limit Analyzed

0.005

Mercury, Dissolved ND 0.00020 06/05/24 20:06 mg/L

LABORATORY CONTROL SAMPLE: 3630625

> Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units

Mercury, Dissolved mg/L 0.005 0.0050 101 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3630626 3630627

> MSD MS

50373905005 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits Mercury, Dissolved ND

0.0055

0.0054

109

108

75-125

20

0.005

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 793481 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3630679 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Barium	mg/L	ND	0.010	06/06/24 00:40	
Boron	mg/L	ND	0.10	06/06/24 00:40	
Cadmium	mg/L	ND	0.0010	06/06/24 00:40	
Calcium	mg/L	ND	1.0	06/06/24 00:40	
Chromium	mg/L	ND	0.010	06/06/24 00:40	
Copper	mg/L	ND	0.010	06/06/24 00:40	
Iron	mg/L	ND	0.10	06/06/24 00:40	
Lead	mg/L	ND	0.0050	06/06/24 00:40	
Lithium	mg/L	ND	0.020	06/06/24 00:40	
Manganese	mg/L	ND	0.010	06/06/24 00:40	
Molybdenum	mg/L	ND	0.010	06/06/24 00:40	
Silver	mg/L	ND	0.010	06/06/24 00:40	
Sodium	mg/L	ND	1.0	06/06/24 00:40	
Zinc	mg/L	ND	0.020	06/06/24 00:40	

LABORATORY CONTROL SAMPLE:	3630680					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Barium	mg/L	1	0.99	99	80-120	
Boron	mg/L	1	0.94	94	80-120	
Cadmium	mg/L	1	0.95	95	80-120	
Calcium	mg/L	10	10	100	80-120	
Chromium	mg/L	1	0.97	97	80-120	
Copper	mg/L	1	0.96	96	80-120	
Iron	mg/L	10	9.8	98	80-120	
Lead	mg/L	1	0.93	93	80-120	
Lithium	mg/L	1	0.98	98	80-120	
Manganese	mg/L	1	0.97	97	80-120	
Molybdenum	mg/L	1	1.0	101	80-120	
Silver	mg/L	0.5	0.51	101	80-120	
Sodium	mg/L	10	9.7	97	80-120	
Zinc	mg/L	1	0.95	95	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

MATRIX SPIKE & MATRIX	SPIKE DUPI	LICATE: 3630	681 MS	MSD	3630682							
		50374037021	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Barium	mg/L	0.082	1	1	1.1	1.1	101	98	75-125	2	20	
Boron	mg/L	0.22	1	1	1.2	1.2	96	94	75-125	2	20	
Cadmium	mg/L	ND	1	1	0.97	0.95	97	95	75-125	1	20	
Calcium	mg/L	285	10	10	289	279	40	-57	75-125	3	20	P6
Chromium	mg/L	ND	1	1	0.97	0.95	97	95	75-125	2	20	
Copper	mg/L	ND	1	1	0.99	0.98	99	98	75-125	2	20	
Iron	mg/L	14.7	10	10	24.1	23.7	94	90	75-125	2	20	
Lead	mg/L	ND	1	1	0.91	0.89	91	89	75-125	2	20	
Lithium	mg/L	0.071	1	1	1.1	1.0	100	98	75-125	2	20	
Manganese	mg/L	0.35	1	1	1.3	1.3	94	92	75-125	1	20	
Molybdenum	mg/L	0.0035J	1	1	1.0	1.0	101	100	75-125	1	20	
Silver	mg/L	ND	0.5	0.5	0.53	0.52	105	103	75-125	2	20	
Sodium	mg/L	37.6	10	10	46.7	45.6	91	81	75-125	2	20	
Zinc	mg/L	ND	1	1	0.92	0.91	92	91	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 793584 Analysis Method: EPA 6010

QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3630976 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Barium, Dissolved	mg/L	ND	0.010	06/06/24 15:25	
Boron, Dissolved	mg/L	ND	0.10	06/06/24 15:25	
Cadmium, Dissolved	mg/L	ND	0.0010	06/06/24 15:25	
Calcium, Dissolved	mg/L	ND	1.0	06/06/24 15:25	
Chromium, Dissolved	mg/L	ND	0.010	06/06/24 15:25	
Copper, Dissolved	mg/L	ND	0.010	06/06/24 15:25	
Iron, Dissolved	mg/L	ND	0.10	06/06/24 15:25	
Lead, Dissolved	mg/L	ND	0.0050	06/06/24 15:25	
Lithium, Dissolved	mg/L	ND	0.020	06/06/24 15:25	
Manganese, Dissolved	mg/L	ND	0.010	06/06/24 15:25	
Molybdenum, Dissolved	mg/L	ND	0.010	06/06/24 15:25	
Silver, Dissolved	mg/L	ND	0.010	06/06/24 15:25	
Sodium, Dissolved	mg/L	ND	1.0	06/06/24 15:25	
Zinc, Dissolved	mg/L	ND	0.020	06/06/24 15:25	

LABORATORY CONTROL SAMPLE:	3630977					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Barium, Dissolved	mg/L	1	0.92	92	80-120	_
Boron, Dissolved	mg/L	1	0.92	92	80-120	
Cadmium, Dissolved	mg/L	1	0.91	91	80-120	
Calcium, Dissolved	mg/L	10	9.7	97	80-120	
Chromium, Dissolved	mg/L	1	0.95	95	80-120	
Copper, Dissolved	mg/L	1	0.91	91	80-120	
Iron, Dissolved	mg/L	10	9.2	92	80-120	
Lead, Dissolved	mg/L	1	0.91	91	80-120	
Lithium, Dissolved	mg/L	1	0.94	94	80-120	
Manganese, Dissolved	mg/L	1	0.94	94	80-120	
Molybdenum, Dissolved	mg/L	1	0.96	96	80-120	
Silver, Dissolved	mg/L	0.5	0.49	98	80-120	
Sodium, Dissolved	mg/L	10	9.3	93	80-120	
Zinc, Dissolved	mg/L	1	0.94	94	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 3630			3630979							
		E0272002004	MS Spiles	MSD	MS	MSD	MS	MSD	% Rec		May	
Parameter	Units	50373903001 Result	Spike Conc.	Spike Conc.	Result	เพรษ Result	WS % Rec	МSD % Rec	% Rec	RPD	Max RPD	Qual
Barium, Dissolved	mg/L	0.012	1	1	0.95	0.99	94	98	75-125	4		
Boron, Dissolved	mg/L	0.012 ND	1	1	0.95	1.0	94	98	75-125 75-125	4	_	
Cadmium, Dissolved	mg/L	ND	1	1	0.92	0.97	92	97	75-125	5	_	
Calcium, Dissolved	mg/L	72.6	10	10	83.6	83.9	110	113	75-125	0	20	
Chromium, Dissolved	mg/L	ND	1	1	0.95	1.0	95	99	75-125	5	20	
Copper, Dissolved	mg/L	ND	1	1	0.92	0.97	92	97	75-125	5	20	
Iron, Dissolved	mg/L	ND	10	10	9.3	9.6	93	96	75-125	4	20	
Lead, Dissolved	mg/L	ND	1	1	0.91	0.95	90	95	75-125	4	20	
Lithium, Dissolved	mg/L	ND	1	1	0.95	1.0	95	100	75-125	6	20	
Manganese, Dissolved	mg/L	ND	1	1	0.94	0.99	94	99	75-125	5	20	
Molybdenum, Dissolved	mg/L	ND	1	1	0.97	1.0	97	102	75-125	5	20	
Silver, Dissolved	mg/L	ND	0.5	0.5	0.50	0.52	99	104	75-125	5	20	
Sodium, Dissolved	mg/L	6.7	10	10	16.1	16.6	95	99	75-125	3	20	
Zinc, Dissolved	mg/L	ND	1	1	0.93	0.98	93	97	75-125	5	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 792636 Analysis Method: EPA 6020
QC Batch Method: EPA 200.2 Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3627307 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony	mg/L	ND ND	0.0010	06/01/24 09:09	
Arsenic	mg/L	ND	0.0010	06/01/24 09:09	
Beryllium	mg/L	ND	0.00020	06/01/24 09:09	
Cobalt	mg/L	ND	0.0010	06/01/24 09:09	
Selenium	mg/L	ND	0.0050	06/01/24 09:09	
Thallium	mg/L	ND	0.0010	06/01/24 09:09	

LABORATORY CONTROL SAMPLE:	3627308					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.04	0.042	105	80-120	
Arsenic	mg/L	0.04	0.039	97	80-120	
Beryllium	mg/L	0.04	0.039	97	80-120	
Cobalt	mg/L	0.04	0.041	102	80-120	
Selenium	mg/L	0.04	0.039	98	80-120	
Thallium	mg/L	0.04	0.039	97	80-120	

MATRIX SPIKE & MATRIX SF	PIKE DUPI	LICATE: 3627	309		3627310							
			MS	MSD								
		50373905004	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.04	0.04	0.042	0.042	104	105	75-125	1	20	
Arsenic	mg/L	0.013	0.04	0.04	0.051	0.052	95	95	75-125	0	20	
Beryllium	mg/L	ND	0.04	0.04	0.038	0.039	95	96	75-125	1	20	
Cobalt	mg/L	ND	0.04	0.04	0.038	0.038	94	95	75-125	1	20	
Selenium	mg/L	ND	0.04	0.04	0.041	0.039	103	97	75-125	6	20	
Thallium	mg/L	ND	0.04	0.04	0.039	0.039	97	98	75-125	1	20	

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Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 792632 Analysis Method: EPA 6020

QC Batch Method: EPA 200.2 Analysis Description: 6020 MET Dissolved

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3627289 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Antimony, Dissolved	mg/L	ND	0.0010	06/01/24 06:38	
Arsenic, Dissolved	mg/L	ND	0.0010	06/01/24 06:38	
Beryllium, Dissolved	mg/L	ND	0.00020	06/01/24 06:38	
Cobalt, Dissolved	mg/L	ND	0.0010	06/01/24 06:38	
Selenium, Dissolved	mg/L	ND	0.0010	06/01/24 06:38	
Thallium, Dissolved	mg/L	ND	0.0010	06/01/24 06:38	

LABORATORY CONTROL SAMPLE:	3627290					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony, Dissolved	mg/L	0.04	0.043	107	80-120	
Arsenic, Dissolved	mg/L	0.04	0.040	101	80-120	
Beryllium, Dissolved	mg/L	0.04	0.041	102	80-120	
Cobalt, Dissolved	mg/L	0.04	0.042	106	80-120	
Selenium, Dissolved	mg/L	0.04	0.044	110	80-120	
Thallium, Dissolved	mg/L	0.04	0.039	98	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 3627		MOD	3627292							
Danamatar	11-20-	50373905004	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec	D.D.D.	Max	0
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony, Dissolved	mg/L	ND	0.04	0.04	0.042	0.042	104	105	75-125	1	20	
Arsenic, Dissolved	mg/L	0.013	0.04	0.04	0.052	0.053	97	99	75-125	2	20	
Beryllium, Dissolved	mg/L	ND	0.04	0.04	0.039	0.039	98	99	75-125	1	20	
Cobalt, Dissolved	mg/L	ND	0.04	0.04	0.038	0.039	94	95	75-125	0	20	
Selenium, Dissolved	mg/L	ND	0.04	0.04	0.039	0.040	97	101	75-125	4	20	
Thallium, Dissolved	mg/L	ND	0.04	0.04	0.039	0.039	97	98	75-125	1	20	

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Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 792047 Analysis Method: EPA 8260

QC Batch Method: EPA 8260 Analysis Description: 8260 MSV unpreserved

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3624787 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	 ug/L	ND	5.0	05/24/24 13:19	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	05/24/24 13:19	
1,1,2-Trichloroethane	ug/L	ND	5.0	05/24/24 13:19	
1,1-Dichloroethene	ug/L	ND	5.0	05/24/24 13:19	
1,2,3-Trichloropropane	ug/L	ND	5.0	05/24/24 13:19	
1,2-Dichloroethane	ug/L	ND	5.0	05/24/24 13:19	
1,2-Dichloroethene (Total)	ug/L	ND	5.0	05/24/24 13:19	
2-Butanone (MEK)	ug/L	ND	25.0	05/24/24 13:19	
2-Chloroethylvinyl ether	ug/L	ND	50.0	05/24/24 13:19	
2-Hexanone	ug/L	ND	25.0	05/24/24 13:19	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	05/24/24 13:19	
Acetone	ug/L	ND	100	05/24/24 13:19	
Acrolein	ug/L	ND	50.0	05/24/24 13:19	
Acrylonitrile	ug/L	ND	100	05/24/24 13:19	
Benzene	ug/L	ND	5.0	05/24/24 13:19	
Bromodichloromethane	ug/L	ND	5.0	05/24/24 13:19	
Bromoform	ug/L	ND	5.0	05/24/24 13:19	
Bromomethane	ug/L	ND	5.0	05/24/24 13:19	
Carbon disulfide	ug/L	ND	10.0	05/24/24 13:19	
Carbon tetrachloride	ug/L	ND	5.0	05/24/24 13:19	
Chlorobenzene	ug/L	ND	5.0	05/24/24 13:19	
Chloroethane	ug/L	ND	5.0	05/24/24 13:19	
Chloroform	ug/L	ND	5.0	05/24/24 13:19	
Chloromethane	ug/L	ND	5.0	05/24/24 13:19	
cis-1,3-Dichloropropene	ug/L	ND	5.0	05/24/24 13:19	
Dibromochloromethane	ug/L	ND	5.0	05/24/24 13:19	
Dibromomethane	ug/L	ND	5.0	05/24/24 13:19	
Dichlorodifluoromethane	ug/L	ND	5.0	05/24/24 13:19	
Ethyl methacrylate	ug/L	ND	100	05/24/24 13:19	
Ethylbenzene	ug/L	ND	5.0	05/24/24 13:19	
Iodomethane	ug/L	ND	10.0	05/24/24 13:19	
Methylene Chloride	ug/L	ND	5.0	05/24/24 13:19	
Styrene	ug/L	ND	5.0	05/24/24 13:19	
Toluene	ug/L	ND	5.0	05/24/24 13:19	
trans-1,3-Dichloropropene	ug/L	ND	5.0	05/24/24 13:19	
Trichloroethene	ug/L	ND	5.0	05/24/24 13:19	
Trichlorofluoromethane	ug/L	ND	5.0	05/24/24 13:19	
Vinyl acetate	ug/L	ND	50.0	05/24/24 13:19	
Vinyl chloride	ug/L	ND	2.0	05/24/24 13:19	
Xylene (Total)	ug/L	ND	10.0	05/24/24 13:19	

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Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

METHOD BLANK: 3624787 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4-Bromofluorobenzene (S)	%.	98	79-124	05/24/24 13:19	
Dibromofluoromethane (S)	%.	103	82-128	05/24/24 13:19	1d
Toluene-d8 (S)	%.	95	73-122	05/24/24 13:19	

LABORATORY CONTROL SAMPLE:	3624788					
_		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc	Result	% Rec	Limits	Qualifiers
,1,1-Trichloroethane	ug/L	50	50.8	102	71-126	
,1,2,2-Tetrachloroethane	ug/L	50	47.3	95	70-126	
1,2-Trichloroethane	ug/L	50	50.8	102	79-125	
1-Dichloroethene	ug/L	50	49.2	98	71-130	
2,3-Trichloropropane	ug/L	50	49.1	98	74-127	
2-Dichloroethane	ug/L	50	49.5	99	72-123	
2-Dichloroethene (Total)	ug/L	100	104	104	75-122	
Butanone (MEK)	ug/L	250	220	88	67-135	
Chloroethylvinyl ether	ug/L	250	194	78	45-144	
Hexanone	ug/L	250	246	98	65-135	
Methyl-2-pentanone (MIBK)	ug/L	250	250	100	69-136	
etone	ug/L	250	202	81	34-156	
rolein	ug/L	1000	946	95	59-191	
rylonitrile	ug/L	250	252	101	67-146	
nzene	ug/L	50	52.3	105	76-122	
omodichloromethane	ug/L	50	55.2	110	80-126	
moform	ug/L	50	54.7	109	77-124	
momethane	ug/L	50	81.5	163	10-175	
rbon disulfide	ug/L	50	45.5	91	69-121	
rbon tetrachloride	ug/L	50	54.1	108	73-127	
orobenzene	ug/L	50	50.7	101	76-118	
oroethane	ug/L	50	50.9	102	36-162	
oroform	ug/L	50	51.4	103	78-121	
loromethane	ug/L	50	48.6	97	37-143	
-1,3-Dichloropropene	ug/L	50	56.5	113	76-132	
promochloromethane	ug/L	50	56.4	113	79-130	
oromomethane	ug/L	50	53.9	108	79-124	
chlorodifluoromethane	ug/L	50	26.7	53	29-126	
hyl methacrylate	ug/L	50	56.2J	112	78-137	
nylbenzene	ug/L	50	53.8	108	76-120	
lomethane	ug/L	50	84.0	168	10-148 L	.1
thylene Chloride	ug/L	50	50.7	101	71-121	
rene	ug/L	50	52.4	105	80-121	
uene	ug/L	50	50.1	100	74-118	
ns-1,3-Dichloropropene	ug/L	50	57.8	116	77-126	
chloroethene	ug/L	50	51.6	103	74-125	
chlorofluoromethane	ug/L	50	48.0	96	64-138	

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REPORT OF LABORATORY ANALYSIS

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Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

LABORATORY CONTROL SAMPLE:	3624788					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Vinyl acetate	ug/L	200	263	131	74-154	
Vinyl chloride	ug/L	50	47.5	95	55-139	
Xylene (Total)	ug/L	150	150	100	73-119	
4-Bromofluorobenzene (S)	%.			102	79-124	
Dibromofluoromethane (S)	%.			102	82-128	
Toluene-d8 (S)	%.			98	73-122	

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Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 794720 Analysis Method: SM 2510B

QC Batch Method: SM 2510B Analysis Description: 2510B Specific Conductance

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3636348 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Specific Conductance umhos/cm ND 10.0 06/10/24 16:49

LABORATORY CONTROL SAMPLE: 3636349

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Specific Conductance umhos/cm 1410 1340 95 90-110

SAMPLE DUPLICATE: 3636350

Parameter Units Result Result RPD Qualifiers

Specific Conductance umhos/cm 6380 6310 1 20

SAMPLE DUPLICATE: 3636351

Date: 06/24/2024 08:15 AM

50373902014 Dup Max RPD RPD Parameter Units Result Result Qualifiers 2010 0 Specific Conductance umhos/cm 2020 20

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Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 792212 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3625855 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Total Dissolved Solids mg/L ND 25.0 05/28/24 11:51

LABORATORY CONTROL SAMPLE: 3625856

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units **Total Dissolved Solids** mg/L 300 293 98 80-120

SAMPLE DUPLICATE: 3625857

50373872003 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 250 **Total Dissolved Solids** mg/L 239 4 10

SAMPLE DUPLICATE: 3625858

Date: 06/24/2024 08:15 AM

50373906001 Dup Max RPD RPD Parameter Units Result Result Qualifiers Total Dissolved Solids 1190 0 10 mg/L 1190

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 792796 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD

Laboratory: Pace Analytical Services - Indianapolis

Qualifiers

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3627846 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Blank Reporting
Parameter Units Result Limit Analyzed

Chemical Oxygen Demand mg/L ND 10.0 05/30/24 17:25

LABORATORY CONTROL SAMPLE: 3627847

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Chemical Oxygen Demand 49.5 50.3 102 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3627848 3627849

MS MSD

50373903001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Result **RPD** RPD Qual Result Conc. Conc. % Rec % Rec Limits Chemical Oxygen Demand 20 M0 mg/L ND 49.5 49.5 55.4 48.0 98 83 90-110

MATRIX SPIKE SAMPLE: 3627850

Date: 06/24/2024 08:15 AM

50373948001 MS MS % Rec Spike Parameter Units Result Conc. Result % Rec Limits Qualifiers 27.7 Chemical Oxygen Demand 49.5 69.7 85 90-110 M0 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 794003 Analysis Method: SM 4500-H+B
QC Batch Method: SM 4500-H+B Analysis Description: 4500H+B pH

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

SAMPLE DUPLICATE: 3632695

 Parameter
 Units
 50373902006 Result
 Dup Result
 Max RPD
 Max RPD
 Qualifiers

 pH at 25 Degrees C
 Std. Units
 6.9
 7.0
 1
 2 H3

SAMPLE DUPLICATE: 3632696

Date: 06/24/2024 08:15 AM

		50373902014	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.3	7.3	1		2 H3

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Gibson SLF New Wells Project:

Pace Project No.: 50373903

Nitrogen, Ammonia

Date: 06/24/2024 08:15 AM

QC Batch: 793349 Analysis Method: EPA 350.1 QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia

> Laboratory: Pace Analytical Services - Indianapolis

50373903001, 50373903002, 50373903003 Associated Lab Samples:

METHOD BLANK: Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

> Blank Reporting Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Ammonia ND 0.10 06/03/24 13:52 mg/L

LABORATORY CONTROL SAMPLE: 3630278

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Nitrogen, Ammonia 5.2 104 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3630280 3630279

mg/L

MSD MS 50373908001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Conc. Limits 5 103 20 Nitrogen, Ammonia mg/L 1.4 5 6.6 6.6 103 90-110 0

MATRIX SPIKE SAMPLE: 3630281 50373908004 MS MS % Rec Spike Qualifiers Parameter Units Result Conc. Result % Rec Limits 1.1 5 6.3 104 90-110

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 791705 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002

METHOD BLANK: 3622848 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Nitrate mg/L ND 0.10 05/23/24 18:36

LABORATORY CONTROL SAMPLE: 3622849

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units mg/L Nitrogen, Nitrate 1.1 107 90-110

3622850

MS MSD

50373911001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Conc. Limits ND 104 20 Nitrogen, Nitrate mg/L 1 1.1 1.1 104 90-110

3622851

MATRIX SPIKE SAMPLE: 3622942

Date: 06/24/2024 08:15 AM

% Rec MS MS 50373908009 Spike Qualifiers Parameter Units Result Conc. Result % Rec Limits ND Nitrogen, Nitrate 1 0.65 63 90-110 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 791757 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903003

METHOD BLANK: 3623041 Matrix: Water

Associated Lab Samples: 50373903003

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Nitrate mg/L ND 0.10 05/23/24 18:31

LABORATORY CONTROL SAMPLE: 3623042

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Nitrogen, Nitrate mg/L 1.0 100 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3623043 3623044

MS MSD

50373902006 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits Nitrogen, Nitrate ND 0.91 0.91 20 mg/L 1 1 89 89 90-110 0

MATRIX SPIKE SAMPLE: 3623045

Date: 06/24/2024 08:15 AM

% Rec MS MS 50373905004 Spike Qualifiers Parameter Units Result Conc. Result % Rec Limits ND Nitrogen, Nitrate 1 0.80 78 90-110 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

QC Batch: 793301 Analysis Method: EPA 420.4

QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3630166 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Phenolics, Total Recoverable ug/L ND 20.0 06/04/24 15:42

LABORATORY CONTROL SAMPLE: 3630167

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units ug/L Phenolics, Total Recoverable 49.5 99 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3630168 3630169

MS MSD

50373946005 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec **RPD** RPD Qual Result % Rec Limits Phenolics, Total ND ug/L 50 50 51.6 54.0 98 102 90-110 5 20 Recoverable

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Sample: MW-109S PWS:	Lab ID: 5037 Site ID:	3903001 Collected: 05/21/24 18:45 Sample Type:	Received:	05/22/24 20:45	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	-0.403U ± 0.424 (0.955) C:NA T:93%	pCi/L	06/17/24 16:07	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.384U ± 0.326 (0.645) C:85% T:82%	pCi/L	06/04/24 15:05	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.384U ± 0.750 (1.60)	pCi/L	06/17/24 17:19	7440-14-4	



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Sample: MW-111S PWS:	Lab ID: 5037 Site ID:	3903002 Collected: 05/21/24 17:45 Sample Type:	Received:	05/22/24 20:45	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	-0.0435U ± 0.226 (0.522) C:NA T:98%	pCi/L	06/17/24 16:07	7 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.752 ± 0.400 (0.704) C:84% T:83%	pCi/L	06/04/24 15:05	5 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.752U ± 0.626 (1.23)	pCi/L	06/17/24 17:19	9 7440-14-4	



Total Radium

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Total Radium

Calculation

Pace Project No.: 50373903

Sample: GBS_SHARE-FD-20240521 Lab ID: 50373903003 Collected: 05/21/24 08:00 Received: 05/22/24 20:45 Matrix: Water PWS: Site ID: Sample Type: Act ± Unc (MDC) Carr Trac **Parameters** Method Units Analyzed CAS No. Qual Pace Analytical Services - Greensburg -0.185U ± 0.462 (0.956) EPA 903.1 Radium-226 pCi/L 06/17/24 16:07 13982-63-3 C:NA T:93% Pace Analytical Services - Greensburg EPA 904.0 0.257U ± 0.332 (0.706) Radium-228 pCi/L 06/04/24 15:06 15262-20-1 C:86% T:84% Pace Analytical Services - Greensburg

0.257U ± 0.794 (1.66)

pCi/L

06/17/24 17:19 7440-14-4



QUALITY CONTROL - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 671620 Analysis Method: EPA 903.1

QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3270325 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

ParameterAct \pm Unc (MDC) Carr TracUnitsAnalyzedQualifiersRadium-226-0.116 \pm 0.178 (0.466) C:NA T:88%pCi/L06/17/24 15:54

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Pace Project No.: 50373903

QC Batch: 671622 Analysis Method: EPA 904.0

QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 50373903001, 50373903002, 50373903003

METHOD BLANK: 3270326 Matrix: Water

Associated Lab Samples: 50373903001, 50373903002, 50373903003

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.605 ± 0.388 (0.718) C:83% T:81%
 pCi/L
 06/04/24 15:04

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: Gibson SLF New Wells

Pace Project No.: 50373903

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 06/24/2024 08:15 AM

1d	Neither matrix spike nor matrix precision data could be provided for this analytical batch due to insufficient sample
	volume.

H3 Sample was received or analysis requested beyond the recognized method holding time.

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 9056 EPA 9056 EPA 9056	793071 793071 793071	_	
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 3010 EPA 3010 EPA 3010	793481 793481 793481	EPA 6010 EPA 6010 EPA 6010	794070 794070 794070
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 3010 EPA 3010 EPA 3010	793584 793584 793584	EPA 6010 EPA 6010 EPA 6010	794241 794241 794241
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 200.2 EPA 200.2 EPA 200.2	792636 792636 792636	EPA 6020 EPA 6020 EPA 6020	792885 792885 792885
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 200.2 EPA 200.2 EPA 200.2	792632 792632 792632	EPA 6020 EPA 6020 EPA 6020	792880 792880 792880
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 7470 EPA 7470 EPA 7470	793373 793373 793373	EPA 7470 EPA 7470 EPA 7470	793717 793717 793717
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 7470 EPA 7470 EPA 7470	793458 793458 793458	EPA 7470 EPA 7470 EPA 7470	793982 793982 793982
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 8260 EPA 8260 EPA 8260	792047 792047 792047		
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 903.1 EPA 903.1 EPA 903.1	671620 671620 671620		
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 904.0 EPA 904.0 EPA 904.0	671622 671622 671622		
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	Total Radium Calculation Total Radium Calculation Total Radium Calculation	676379 676379 676379		
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	SM 2510B SM 2510B SM 2510B	794720 794720 794720		
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	SM 2540C SM 2540C SM 2540C	792212 792212 792212		
50373903001 50373903002 50373903003	MW-109S MW-111S GBS_SHARE-FD-20240521	EPA 410.4 EPA 410.4 EPA 410.4	792796 792796 792796	EPA 410.4 EPA 410.4 EPA 410.4	792996 792996 792996



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Gibson SLF New Wells

Pace Project No.: 50373903

Date: 06/24/2024 08:15 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50373903001	MW-109S	SM 4500-H+B	794003		
50373903002	MW-111S	SM 4500-H+B	794003		
50373903003	GBS_SHARE-FD-20240521	SM 4500-H+B	794003		
50373903001	MW-109S	EPA 350.1	793349		
50373903002	MW-111S	EPA 350.1	793349		
50373903003	GBS_SHARE-FD-20240521	EPA 350.1	793349		
50373903001	MW-109S	EPA 353.2	791705		
50373903002	MW-111S	EPA 353.2	791705		
50373903003	GBS_SHARE-FD-20240521	EPA 353.2	791757		
50373903001	MW-109S	EPA 420.4	793301	EPA 420.4	793654
50373903002	MW-111S	EPA 420.4	793301	EPA 420.4	793654
50373903003	GBS_SHARE-FD-20240521	EPA 420.4	793301	EPA 420.4	793654

Duke Energy-Gibson Generating Station

GIBSON GENERATING STATION

Section B

Report To:

Copy To

Required Project Information:

Colleen Sweazy

Section A

Company

Address

Required Client Information:

CHAIN-OF-CUSTODY / Analytical Request Document
The Chain-of-Custody is a LEGAL DOCUMENT. All r LIO#: 50373903

Accounts Pavable

Section C

Invoice Information:

Company Name: Duke Energy

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Of

Owensville, IN 47665 Address: colleen.sweazy@duke-energy.com Purchase Order #: Pace Quote Phone 317-838-2161 Project Name: Pace Project Manager: Gibson SLF New Wells kenneth.hunt@pacelabs.com State / Location Requested Due Date Project #: Standard Pace Profile #: 5992 Line 7 Requested Analysis Filtered (Y/N) valid codes to left) Y COLLECTED Preservatives MATRIX CODE Drinking Water DW WT GRAB pH 4500, Conductance 2510B, Nitrate-353.2 Waste Water ww PA PA Product SAMPLE TEMP AT COL **SAMPLE ID** Soil/Solid SL (see Sub Pace® START END Sub Pace® # OF CONTAINERS Diss Metals FF * Oil OL Phenolics 420.4 One Character per box. WP MATRIX CODE AR (A-Z, 0-9/, -) ot Metals Other OT Sample Ids must be unique SAMPLE ITEM Ra 226 Ra 228 \$ DATE TIME DATE TIME MW-109S WT MAS MW-111S 9/21 WT MW-112S WT 12 6 Х X X GBS_SHARE-FD-2024 0521 3/4 WT 5 6 8 10 11 12 ADDITIONAL COMMENTS **RELINQUISHED BY / AFFILIATION** DATE ACCEPTED BY / AFFILIATION TIME SAMPLE CONDITIONS * Metals 6010: (Ba, B, Cd, Cr, Cu, Fe, Pb, Mn, Mo, Ag, Zn, Ca, Na, Li) 704 1045 822 Metals Continued: 6020 (Be, Co, As, Se, Sb, Tl), Mercury 7470 Sur Nitrate 353.2 Short Hold (48 hours) SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: Bage 64 of 66 TEMP DATE Signed: 5-22 SIGNATURE of SAMPLER:



SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents	:: I BM	20:	45 S122124			
1. Courier: FED EX IUPS DLIENT PACE		ETT) I	5. Packing Material:	Bubbl		
2. Custody Seal on Cooler/Box Present: 16 Yes	□ No		None	I I Other		
(If yes)Seals Intact: Yes D No (leave blank	k if no seals	were prese	ent) 6, Ice Type: 🖾 Wet 🗆 Blue 🗆 Nor	ne		
3. Thermometer: 12,345678 A(B)C D	EFGH		7. Was the PM notified of out of temp cooler?:	I I Yes	□No	
4. Cooler Temperature(s): 1-6/1-8 (Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECE	EIVED (use Co	mments belov	Cooler temp should be above freezing to 6°C w to add more) 8. EZ Bottle Order? Yes			
			If yes but not on COC what is the EZ Bottle Order Number?:			
Al	l discrepand	cies will be	written out in the comments section below.			
	Yes	No		Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		/	All containers needing acid/base preservation have been pH <u>CHECKED</u> ?: Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCI.			
Short Hold Time Analysis (48 hours or less)? Analysis:	/		Circle: HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9) Any non-conformance to pH recommendations will be noted on the container count form	/		
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:		Residual Chlorine Check (SVOC 625 Pest/PCB 608)	Present	Absent	N/A
Rush TAT Requested (4 days or less):		/	Residual Chlorine Check (Total/Amenable/Free Cyanide)			
Custody Signatures Present?			Headspace Wisconsin Sulfide?			/
Containers Intact?:	/		Headspace in VOA Vials (>6mm): See Containter Count form for details	Present	Absent	No VOA Vials Sen
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	/		Trip Blank Present?			
Extra labels on Terracore Vials? (soils only)		/	Trip Blank Custody Seals?:			/
COMMENTS:						

Sample Container Count

** Place a RED dot on containers

that are out of conformance **

			MeOH (only)	-	ı	ı				AMB	ER G	LASS						PL	AST	IC.					ОТН	HER		Nitric	Sulfuric	Sodium Hydroxide	Sodium Hydroxide/ ZnAc
			DI	1																					•			Red	Yellow	Green	Black
COC Line Item	WGFU	WGKU BG1U	R	резн УСЭН	VOA VIAL HS >6mm	VG9U DG9U	VG9T	AGOU	AG1H	AG10	AG3U	AG3S	AG3SF	AG3B	BP1U	BP1N	BP2U	врзи	BP3N	ВРЗЕ	BP3S	врзв	BP3Z	ССЗН	CG3F	Syringe Kit	Matrix	HNO3 <2	H2SO4 <2	NaOH >10	NaOH/Zn Ac >9
1						3						1				2	1	2	1	l	1						ш	V	1		
2						1						1				1	7	T	I	V	1						L	V	~		
3												-																			
4						3						1				2	1	2	1	1	1						M	V	-		
5																															
6																															
7																															
8								i i	-																						
9						77																									
10								*																							
11																															
12																															

Container Codes

	Gla	ISS	
DG9H	40mL HCI amber voa vial	BG1T	glass
DG9P	40mL TSP amber vial	BG1U	1L unpreserved glass
DG9S	40mL H2SO4 amber vial	CG3U	250mL Unpres Clear Glass
DG9T	40mL Na Thio amber vial	AG0U	100mL unpres amber glass
DG9U	40mL unpreserved amber vial	AG1H	1L HCl amber glass
VG9H	40mL HCl clear vial	AG1S	1L H2SO4 amber glass
VG9T	40mL Na Thio. clear vial	AG1T	1L Na Thiosulfate amber glass
VG9U	40mL unpreserved clear vial	AG1U	1liter unpres amber glass
I	40mL w/hexane wipe vial	AG2N	500mL HNO3 amber glass
WGKL	8oz unpreserved clear jar	AG2S	500mL H2SO4 amber glass
WGFU	4oz clear soil jar	AG2U	500mL unpres amber glass
JGFU	4oz unpreserved amber wide	AG3S	250mL H2SO4 amber glass
CG3H	250mL clear glass HCI	AG3SF	250mL H2SO4 amb glass-field filtered
CG3F	250mL clear glass HCl, Field Filter	AG3U	250mL unpres amber glass
BG1H	1L HCl clear glass	AG3B	250mL NaOH amber glass
BG1S	1L H2SO4 clear glass		

	Plastic									
BP1B	1L NaOH plastic	BP4U	125mL unpreserved plastic							
BP1N	1L HNO3 plastic	BP4N	125mL HNO3 plastic							
BP1S	1L H2SO4 plastic	BP4S	125mL H2SO4 plastic							
BP1U	1L unpreserved plastic		Miscellaneous							
BP1Z	1L NaOH, Zn, Ac		Miscellaneous							
BP2N	500mL HNO3 plastic	Syring	ge Kit LL Cr+6 sampling kit							
BP2C	500mL NaOH plastic	ZPLC	Ziploc Bag							
BP2S	500mL H2SO4 plastic	R	Terracore Kit							
BP2U	500mL unpreserved plastic	SP5T	120mL Coliform Sodium Thiosulfate							
BP2Z	500mL NaOH, Zn Ac	GN	General Container							
BP3B	250mL NaOH plastic	U	Summa Can (air sample)							
BP3N	250mL HNO3 plastic	WT	Water							
BP3F	250mL HNO3 plastic-field filtered	SL	Solid							
BP3U	250mL unpreserved plastic	OL:	Oil							
BP3S	250mL H2SO4 plastic	NAL	Non-aqueous liquid							
BP3Z	250mL NaOH, ZnAc plastic	WP	Wipe							
BP3R	250mL Unpres. FF SO4/OH buffer									





June 19, 2024

Ms. Colleen Sweazy Duke Energy 1097 N 950 W Owensville, IN 47665

RE: Project: Gibson SLF New Wells

Pace Project No.: 50374080

Dear Ms. Sweazy:

Enclosed are the analytical results for sample(s) received by the laboratory on May 23, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services Indianapolis
- Pace Analytical Services Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kenneth Hunt

Leuneth 9

kenneth.hunt@pacelabs.com

(317)228-3120 Project Manager

Enclosures

cc: Ms. Samanta Lax, ATC Group Services

Mr. Bryan Moeller, Duke Energy

Mr. Shane Neumann, Duke Energy Gibson

Mr. John Noel, ATC Group Services

Colton Palmer, Atlas Technical Consultants

Mr. Joshua Stowe, Duke Energy



(317)228-3100



CERTIFICATIONS

Project: Gibson SLF New Wells

Pace Project No.: 50374080

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601

ANAB DOD-ELAP Rad Accreditation #: L2417 ANABISO/IEC 17025:2017 Rad Cert#: L24170

Alabama Certification #: 41590

Arizona Certification #: AZ0734

Arkansas Certification

California Certification #: 2950 Colorado Certification #: PA01547

Connecticut Certification #: PH-0694

EPA Region 4 DW Rad

Florida/TNI Certification #: E87683

Georgia Certification #: C040

Guam Certification Hawaii Certification

Idaho Certification

Illinois Certification

Indiana Certification

Iowa Certification #: 391

Kansas Certification #: E-10358

Kentucky Certification #: KY90133

KY WW Permit #: KY0098221

KY WW Permit #: KY0000221

Louisiana DHH/TNI Certification #: LA010 Louisiana DEQ/TNI Certification #: 04086

Maine Certification #: 2023021

Maryland Certification #: 308

Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification #: 9991

Missouri Certification #: 235

Montana Certification #: Cert0082

Nebraska Certification #: NE-OS-29-14

Nevada Certification #: PA014572023-03

New Hampshire/TNI Certification #: 297622

New Jersey/TNI Certification #: PA051

New Mexico Certification #: PA01457

New York/TNI Certification #: 10888

North Carolina Certification #: 42706

North Dakota Certification #: R-190

Ohio EPA Rad Approval: #41249

Oregon/TNI Certification #: PA200002-015

Pennsylvania/TNI Certification #: 65-00282

Puerto Rico Certification #: PA01457 Rhode Island Certification #: 65-00282

South Dakota Certification

Tennessee Certification #: TN02867

Texas/TNI Certification #: T104704188-22-18

Utah/TNI Certification #: PA014572223-14

USDA Soil Permit #: 525-23-67-77263

Vermont Dept. of Health: ID# VT-0282

Virgin Island/PADEP Certification

Virginia/VELAP Certification #: 460198 Washington Certification #: C868

West Virginia DEP Certification #: 143

West Virginia DHHR Certification #: 9964C

Wisconsin Approve List for Rad

Pace Analytical Services Indianapolis

7726 Moller Road, Indianapolis, IN 46268

Illinois Accreditation #: 200074

Indiana Drinking Water Laboratory #: C-49-06

Kansas/TNI Certification #: E-10177

Kentucky UST Agency Interest #: 80226

Kentucky WW Laboratory ID #: 98019 Michigan Drinking Water Laboratory #9050 Ohio VAP Certified Laboratory #: CL0065

Oklahoma Laboratory #: 9204

Texas Certification #: T104704355

Washington Dept of Ecology #: C1081

Wisconsin Laboratory #: 999788130

USDA Foreign Soil Permit #: 525-23-13-23119 USDA Compliance Agreement #: IN-SL-22-001





SAMPLE SUMMARY

Project: Gibson SLF New Wells

Pace Project No.: 50374080

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50374080001	MW-112S	Water	05/23/24 09:50	05/23/24 20:56



SAMPLE ANALYTE COUNT

Project: Gibson SLF New Wells

Pace Project No.: 50374080

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50374080001	MW-112S	EPA 9056	ADM	3	PASI-I
		EPA 6010	ELK	14	PASI-I
		EPA 6010	NWB	14	PASI-I
		EPA 6020	DMT	6	PASI-I
		EPA 6020	MTM	6	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 7470	EAE	1	PASI-I
		EPA 8260	TMW	43	PASI-I
		EPA 903.1	CLM	1	PASI-PA
		EPA 904.0	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
		SM 2510B	QAK	1	PASI-I
		SM 2540C	SL	1	PASI-I
		EPA 410.4	AEL	1	PASI-I
		SM 4500-H+B	LHZ	1	PASI-I
		EPA 350.1	MTW	1	PASI-I
		EPA 353.2	ZM	1	PASI-I
		EPA 420.4	OAS	1	PASI-I

PASI-I = Pace Analytical Services - Indianapolis PASI-PA = Pace Analytical Services - Greensburg



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 9056
Description: 9056 IC Anions

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 9056 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 794414

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MS (Lab ID: 3634590)
 - Sulfate
- MSD (Lab ID: 3634591)
 - Sulfate



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 6010
Description: 6010 MET ICP

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 6010 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793486

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50374070022

P6: Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike

• MSD (Lab ID: 3630694)

Calcium



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 6010

Description: 6010 MET ICP, Dissolved

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 6010 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793779

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50374076001

P6: Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike

- MS (Lab ID: 3632004)
 - · Calcium, Dissolved



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 6020

Description: 6020 MET ICPMS

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 6020 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.2 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 6020

Description: 6020 MET ICPMS, Dissolved

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 6020 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 200.2 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 7470
Description: 7470 Mercury

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 7470 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 7470

Description: 7470 Mercury, Dissolved

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 7470 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 8260

Description: 8260/5030 MSV unpreserved

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 8260 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 792047

L1: Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

- LCS (Lab ID: 3624788)
 - lodomethane

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 792047

1d: Neither matrix spike nor matrix precision data could be provided for this analytical batch due to insufficient sample volume.

- BLANK (Lab ID: 3624787)
 - Dibromofluoromethane (S)



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 903.1

Description: 903.1 Radium 226

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 903.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 904.0

Description: 904.0 Radium 228

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 904.0 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: Total Radium Calculation

Description: Total Radium 228+226

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: SM 2510B

Description: 2510B Specific Conductance

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for SM 2510B by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: SM 2540C

Description: 2540C Total Dissolved Solids

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for SM 2540C by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 410.4 Description: 410.4 COD

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 410.4 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 793222

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50374033006,50374041002

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MSD (Lab ID: 3629783)
 - Chemical Oxygen Demand

M3: Matrix spike recovery was outside laboratory control limits due to matrix interferences.

- MS (Lab ID: 3629780)
 - Chemical Oxygen Demand
- MSD (Lab ID: 3629781)
 - Chemical Oxygen Demand

Additional Comments:



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: SM 4500-H+B

Description: 4500H+ pH, Electrometric

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for SM 4500-H+B by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.

• MW-112S (Lab ID: 50374080001)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 350.1
Description: 350.1 Ammonia

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 350.1 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



PROJECT NARRATIVE

Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 353.2

Description: 353.2 Nitrogen, NO2/NO3 unpres **Client:** Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 353.2 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:



PROJECT NARRATIVE

Project: Gibson SLF New Wells

Pace Project No.: 50374080

Method: EPA 420.4

Description: 420.4 Phenolics, Total

Client: Duke Energy Gibson Generating Station

Date: June 19, 2024

General Information:

1 sample was analyzed for EPA 420.4 by Pace Analytical Services Indianapolis. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 420.4 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 794398

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50374557005,50374563005

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 3634536)
 - Phenolics, Total Recoverable

M3: Matrix spike recovery was outside laboratory control limits due to matrix interferences.

- MS (Lab ID: 3634534)
 - Phenolics, Total Recoverable
- MSD (Lab ID: 3634535)
 - Phenolics, Total Recoverable

R1: RPD value was outside control limits.

- MSD (Lab ID: 3634535)
 - Phenolics, Total Recoverable

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

Sample: MW-112S	Lab ID: 503	74080001	Collected: 05/23/2	4 09:50	Received: 05	5/23/24 20:56	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9056 IC Anions	Analytical Meth	nod: EPA 90	956					
	Pace Analytica	l Services -	Indianapolis					
Chloride	9.7	mg/L	0.25	1		06/08/24 03:20	16887-00-6	
Fluoride	0.15	mg/L	0.10	1		06/08/24 03:20		
Sulfate	18.4	mg/L	0.25	1		06/08/24 03:20		
6010 MET ICP	Analytical Meth	nod: EPA 60	10 Preparation Meth	nod: EPA	A 3010			
	Pace Analytica	l Services -	Indianapolis					
Barium	0.034	mg/L	0.010	1	06/04/24 21:55	06/07/24 11:50	7440-39-3	
Boron	ND	mg/L	0.10	1	06/04/24 21:55			
Cadmium	ND	mg/L	0.0010	1	06/04/24 21:55			
Calcium	54.8	mg/L	1.0	1	06/04/24 21:55			
Chromium	ND	mg/L	0.010	1	06/04/24 21:55			
Copper	ND	mg/L	0.010	1	06/04/24 21:55			
ron	0.15	mg/L	0.10	1	06/04/24 21:55			
	ND	•	0.0050	1	06/04/24 21:55			
Lead		mg/L						
ithium	ND	mg/L	0.020	1	06/04/24 21:55			
/langanese	0.36	mg/L	0.010	1	06/04/24 21:55			
/lolybdenum	ND	mg/L	0.010	1	06/04/24 21:55			
Silver	ND	mg/L	0.010	1	06/04/24 21:55			
Sodium	4.0	mg/L	1.0	1	06/04/24 21:55			
Zinc	ND	mg/L	0.020	1	06/04/24 21:55	06/07/24 11:50	7440-66-6	
6010 MET ICP, Dissolved	Analytical Meth	nod: EPA 60	10 Preparation Meth	nod: EPA	A 3010			
	Pace Analytica	l Services -	Indianapolis					
Barium, Dissolved	0.035	mg/L	0.010	1	06/06/24 16:12	06/07/24 10:12	2 7440-39-3	
Boron, Dissolved	ND	mg/L	0.10	1	06/06/24 16:12	06/07/24 10:12	2 7440-42-8	
Cadmium, Dissolved	ND	mg/L	0.0010	1	06/06/24 16:12	06/07/24 10:12	2 7440-43-9	
Calcium, Dissolved	57.1	mg/L	1.0	1	06/06/24 16:12			
Chromium, Dissolved	ND	mg/L	0.010	1	06/06/24 16:12			
Copper, Dissolved	ND	mg/L	0.010	1	06/06/24 16:12			
ron, Dissolved	ND	mg/L	0.10	1	06/06/24 16:12			
ead, Dissolved	ND ND	•	0.0050	1	06/06/24 16:12			
-	ND ND	mg/L	0.0030		06/06/24 16:12			
Lithium, Dissolved		mg/L		1				
Manganese, Dissolved	0.36	mg/L	0.010	1	06/06/24 16:12			
Molybdenum, Dissolved	ND	mg/L	0.010	1	06/06/24 16:12			
Silver, Dissolved	ND	mg/L	0.010	1	06/06/24 16:12			
Sodium, Dissolved Zinc, Dissolved	4.1 ND	mg/L	1.0 0.020	1 1	06/06/24 16:12 06/06/24 16:12			
ino, Dissolveu		mg/L				00/07/24 10:12	· / 440-00-0	
6020 MET ICPMS	•		20 Preparation Meth	nod: EPA	A 200.2			
	Pace Analytica	l Services -	Indianapolis					
Antimony	ND	mg/L	0.0010	1	06/04/24 07:42	06/05/24 07:44	4 7440-36-0	
Arsenic	ND	mg/L	0.0010	1	06/04/24 07:42	06/05/24 07:44	4 7440-38-2	
Beryllium	ND	mg/L	0.00020	1	06/04/24 07:42	06/05/24 07:44	4 7440-41-7	
Cobalt	ND	mg/L	0.0010	1	06/04/24 07:42			
Selenium	ND	mg/L	0.0050	1	06/04/24 07:42			



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

Lab ID: 5037	74080001	Collected: 05/23/2	24 09:50	Received: 05	/23/24 20:56	Matrix: Water	
Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
Analytical Meth	od: EPA 60	020 Preparation Meth	nod: EPA	A 200.2			
Pace Analytical	Services -	Indianapolis					
ND	mg/L	0.0010	1	06/04/24 07:42	06/05/24 07:44	1 7440-28-0	
Analytical Meth	od: EPA 60	020 Preparation Meth	nod: EPA	\ 200.2			
Pace Analytical	l Services -	Indianapolis					
ND	mg/L	0.0010	1	06/04/24 07:42	06/06/24 05:48	3 7440-36-0	
ND	mg/L	0.0010	1	06/04/24 07:42	06/06/24 05:48	3 7440-38-2	
ND	mg/L	0.00020	1	06/04/24 07:42	06/07/24 06:38	3 7440-41-7	
ND	mg/L	0.0010	1	06/04/24 07:42	06/06/24 05:48	3 7440-48-4	
0.0012	mg/L	0.0010	1	06/04/24 07:42	06/06/24 05:48	3 7782-49-2	
ND	mg/L	0.0010	1	06/04/24 07:42	06/06/24 05:48	3 7440-28-0	
Analytical Meth	od: EPA 74	170 Preparation Meth	nod: EPA	٦ 7470			
Pace Analytical	Services -	Indianapolis					
ND	mg/L	0.00020	1	06/07/24 13:58	06/09/24 18:4	5 7439-97-6	
Analytical Meth	od: EPA 74	170 Preparation Meth	nod: EPA	٦ 7470			
•		•					
ND	mg/L	0.00020	1	06/07/24 14:06	06/09/24 21:0	7 7439-97-6	
Analytical Meth	od: EPA 82	260					
Pace Analytical	Services -	Indianapolis					
ND	ug/L	100	1		05/24/24 19:23	3 67-64-1	
ND	ug/L	50.0	1		05/24/24 19:23	3 107-02-8	
ND	ug/L	100	1		05/24/24 19:23	3 107-13-1	
ND	ug/L	5.0	1		05/24/24 19:23	3 71-43-2	
ND	ug/L	5.0	1		05/24/24 19:23	3 75-27-4	
ND	ug/L	5.0	1		05/24/24 19:23	3 75-25-2	
ND	ug/L	5.0	1		05/24/24 19:23	3 74-83-9	
ND	ug/L	25.0	1		05/24/24 19:23	3 78-93-3	
ND	ug/L	10.0	1		05/24/24 19:23	3 75-15-0	
ND	ug/L	5.0	1		05/24/24 19:23	3 56-23-5	
ND	-	5.0	1		05/24/24 19:23	3 108-90-7	
ND	- ·	5.0	1		05/24/24 19:23	3 75-00-3	
ND	•	50.0	1		05/24/24 19:23	3 110-75-8	
	-						
	_						
	-						
	_						
	_						
	_						
	_						
ND	ug/L	5.0	1		05/24/24 19:2	75-35-4	
ND	//	- ^	4		05/04/04 40 0	40004 04 5	
ND ND	ug/L ug/L	5.0 5.0	1 1		05/24/24 19:23 05/24/24 19:23		
	Results Analytical Meth Pace Analytical Meth Pace Analytical Meth Pace Analytical ND ND ND ND ND Analytical Meth Pace Analytical Meth Pace Analytical Meth Pace Analytical Meth Pace Analytical Meth Pace Analytical Meth Pace Analytical Meth Pace Analytical Meth Pace Analytical ND ND ND ND ND ND ND ND ND ND ND ND ND	Analytical Method: EPA 60 Pace Analytical Services - ND mg/L Analytical Method: EPA 60 Pace Analytical Services - ND mg/L ND mg/L ND mg/L ND mg/L ND mg/L ND mg/L ND mg/L Analytical Method: EPA 74 Pace Analytical Services - ND mg/L Analytical Method: EPA 74 Pace Analytical Services - ND mg/L Analytical Method: EPA 82 Pace Analytical Services - ND mg/L Analytical Method: EPA 82 Pace Analytical Services - ND mg/L Analytical Method: EPA 82 Pace Analytical Services - ND mg/L Analytical Method: EPA 82 Pace Analytical Services - ND ug/L	Results	Results	Results	Results	Results Units Report Limit DF Prepared Analyzed CAS No. Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 07:44 7440-28-0 Analytical Method: EPA 6020 Preparation Method: EPA 200.2 Pace Analytical Services - Indianapolis ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 05:48 7440-36-0 ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 05:48 7440-38-2 ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 05:48 7440-38-2 ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 05:48 7440-38-2 ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 05:48 7440-38-2 ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 05:48 7440-38-2 ND mg/L 0.0010 1 06/04/24 07:42 06/05/24 05:48 7440-38-2 ND mg/L 0.0010 1 06/04/24 07:42 06/06/24 05:48 7440-38-2 Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis ND mg/L 0.00020 1 06/07/24 13:58 06/09/24 18:45 7439-97-6 Analytical Method: EPA 7470 Preparation Method: EPA 7470 Pace Analytical Services - Indianapolis ND mg/L 0.00020 1 06/07/24 14:06 06/09/24 18:45 7439-97-6 Analytical Method: EPA 8260 Pace Analytical Services - Indianapolis ND ug/L 100 1 05/24/24 19:23 107-02-8 ND ug/L 50.0 1 05/24/24 19:23 71-43-2 ND ug/L 5.0 1 05/24/24 19:23 71-43-2 ND ug/L 5.0 1 05/24/24 19:23 71-43-2 ND ug/L 5.0 1 05/24/24 19:23 75-27-4 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND ug/L 5.0 1 05/24/24 19:23 78-93-3 ND u



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

Sample: MW-112S	Lab ID:	50374080001	Collected: 05/23/2	24 09:50	Received: 05	5/23/24 20:56 N	Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3260/5030 MSV unpreserved	Analytical I	Method: EPA 82	260					
	Pace Analy	ytical Services -	Indianapolis					
Ethyl methacrylate	NE) ug/L	100	1		05/24/24 19:23	97-63-2	
2-Hexanone	NE	•	25.0	1		05/24/24 19:23	591-78-6	
odomethane	NE	_	10.0	1		05/24/24 19:23	74-88-4	L1
Methylene Chloride	NE	ug/L	5.0	1		05/24/24 19:23	75-09-2	
I-Methyl-2-pentanone (MIBK)	NE	ug/L	25.0	1		05/24/24 19:23	108-10-1	
Styrene	NE	ug/L	5.0	1		05/24/24 19:23	100-42-5	
1,1,2,2-Tetrachloroethane	NE	ug/L	5.0	1		05/24/24 19:23	79-34-5	
Toluene Toluene	NE	ug/L	5.0	1		05/24/24 19:23	108-88-3	
,1,1-Trichloroethane	NE	ug/L	5.0	1		05/24/24 19:23	71-55-6	
,1,2-Trichloroethane	NE	ug/L	5.0	1		05/24/24 19:23	79-00-5	
Frichloroethene	NE	ug/L	5.0	1		05/24/24 19:23	79-01-6	
Trichlorofluoromethane	NE	ug/L	5.0	1		05/24/24 19:23	75-69-4	
1,2,3-Trichloropropane	NE	ug/L	5.0	1		05/24/24 19:23	96-18-4	
/inyl acetate	NE	ug/L	50.0	1		05/24/24 19:23	108-05-4	
/inyl chloride	NE	ug/L	2.0	1		05/24/24 19:23	75-01-4	
(ylene (Total)	NE	ug/L	10.0	1		05/24/24 19:23	1330-20-7	
Surrogates		_						
Dibromofluoromethane (S)	105	5 %.	82-128	1		05/24/24 19:23	1868-53-7	
I-Bromofluorobenzene (S)	98	3 %.	79-124	1		05/24/24 19:23	460-00-4	
oluene-d8 (S)	96	8 %.	73-122	1		05/24/24 19:23	2037-26-5	
2510B Specific Conductance	Analytical I	Method: SM 25	10B					
	Pace Analy	ytical Services -	Indianapolis					
Specific Conductance	416	umhos/cn	n 10.0	1		06/11/24 16:37		
2540C Total Dissolved Solids	Analytical I	Method: SM 25	40C					
	Pace Analy	ytical Services -	Indianapolis					
Total Dissolved Solids	210	mg/L	25.0	1		05/30/24 13:33		
410.4 COD	Analytical I	Method: EPA 41	I0.4 Preparation Met	hod: EPA	A 410.4			
	-	ytical Services -						
Chemical Oxygen Demand	NE	,	10.0	1	06/01/24 10:47	06/01/24 13:36		
4500H+ pH, Electrometric	Analytical	Method: SM 45	∩∩-H±B					
1300n+ pm, Electrometric	•	ytical Services -						
H at 25 Degrees C	6.7	7 Std. Units	0.10	1		06/10/24 12:03		НЗ
350.1 Ammonia	Analytical I	Method: EPA 35	50.1					
	Pace Analy	ytical Services -	Indianapolis					
Nitrogen, Ammonia	NE	mg/L	0.10	1		06/06/24 09:54	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical I	Method: EPA 35	53.2					
9 ,	•	ytical Services -						
litrogen, Nitrate	NE	mg/L	0.10	1		05/24/24 16:53	14797-55-8	
	112		3.10	•		20,2 ,,21 10.00		



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

Sample: MW-112S Lab ID: 50374080001 Collected: 05/23/24 09:50 Received: 05/23/24 20:56 Matrix: Water DF CAS No. **Parameters** Results Units Report Limit Prepared Analyzed Qual 420.4 Phenolics, Total Analytical Method: EPA 420.4 Preparation Method: EPA 420.4 Pace Analytical Services - Indianapolis ug/L Phenolics, Total Recoverable ND 20.0 06/07/24 10:00 06/07/24 16:58 64743-03-9



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 794414 Analysis Method: EPA 9056
QC Batch Method: EPA 9056 Analysis Description: 9056 IC Anions

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3634588 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting Qualifiers Parameter Units Result Limit Analyzed Chloride mg/L ND 0.25 06/07/24 19:11 Fluoride ND 0.10 06/07/24 19:11 mg/L Sulfate mg/L ND 0.25 06/07/24 19:11

LABORATORY CONTROL SAMPLE: 3634589 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 2.5 2.4 97 80-120 mg/L Fluoride 106 mg/L 1.1 80-120 1 Sulfate 5 5.0 mg/L 100 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3634590 3634591 MS MSD 50374041002 MSD Spike Spike MS MS MSD % Rec Max Parameter Qual Units Conc. Result % Rec % Rec **RPD** RPD Result Conc. Result Limits Chloride 82.5 107 107 25 25 96 97 80-120 0 15 mg/L Fluoride mg/L 2.1 1 1 3.2 3.2 110 110 80-120 0 15 Sulfate mg/L 49.1 5 5 54.1 54.0 101 99 80-120 0 15 E

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 793918 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3632398 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/L ND 0.00020 06/09/24 18:32

LABORATORY CONTROL SAMPLE: 3632399

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Mercury mg/L 0.005 0.0051 102 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3632400 3632401

MS MSD

50374082002 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Result ND 0.0047 20 Mercury mg/L 0.005 0.005 0.0050 93 101 75-125 8

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 794266 Analysis Method: EPA 7470

QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury Dissolved

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3633803 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury, Dissolved mg/L ND 0.00020 06/09/24 20:49

LABORATORY CONTROL SAMPLE: 3633804

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Mercury, Dissolved mg/L 0.005 0.0050 99 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3633805 3633806

MS MSD

50374192001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits

Mercury, Dissolved mg/L ND 0.005 0.005 0.0049 0.0049 98 98 75-125 0 20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 793486 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3630691 Matrix: Water

Associated Lab Samples: 50374080001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Barium	mg/L	ND	0.010	06/07/24 10:58	
Boron	mg/L	ND	0.10	06/07/24 10:58	
Cadmium	mg/L	ND	0.0010	06/07/24 10:58	
Calcium	mg/L	ND	1.0	06/07/24 10:58	
Chromium	mg/L	ND	0.010	06/07/24 10:58	
Copper	mg/L	ND	0.010	06/07/24 10:58	
Iron	mg/L	ND	0.10	06/07/24 10:58	
Lead	mg/L	ND	0.0050	06/07/24 10:58	
Lithium	mg/L	ND	0.020	06/07/24 10:58	
Manganese	mg/L	ND	0.010	06/07/24 10:58	
Molybdenum	mg/L	ND	0.010	06/07/24 10:58	
Silver	mg/L	ND	0.010	06/07/24 10:58	
Sodium	mg/L	ND	1.0	06/07/24 10:58	
Zinc	mg/L	ND	0.020	06/07/24 10:58	

LABORATORY CONTROL SAMPLE:	3630692					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Barium	mg/L	1	0.93	93	80-120	
Boron	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	1	0.97	97	80-120	
Calcium	mg/L	10	10.0	100	80-120	
Chromium	mg/L	1	0.98	98	80-120	
Copper	mg/L	1	0.93	93	80-120	
Iron	mg/L	10	9.3	93	80-120	
Lead	mg/L	1	0.97	97	80-120	
Lithium	mg/L	1	0.98	98	80-120	
Manganese	mg/L	1	1.0	100	80-120	
Molybdenum	mg/L	1	0.99	99	80-120	
Silver	mg/L	0.5	0.51	102	80-120	
Sodium	mg/L	10	9.5	95	80-120	
Zinc	mg/L	1	0.99	99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3630			3630694							
			MS	MSD								
		50374070022	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Barium	mg/L	0.059	1	1	0.98	0.99	92	93	75-125	2	20	
Boron	mg/L	5.3	1	1	6.2	6.1	94	87	75-125	1	20	
Cadmium	mg/L	ND	1	1	0.97	0.98	97	98	75-125	2	20	
Calcium	mg/L	187	10	10	195	194	75	71	75-125	0	20	P6
Chromium	mg/L	ND	1	1	0.95	0.96	95	96	75-125	1	20	
Copper	mg/L	ND	1	1	0.92	0.94	92	94	75-125	2	20	
Iron	mg/L	ND	10	10	9.0	9.1	90	90	75-125	1	20	
Lead	mg/L	ND	1	1	0.93	0.94	93	94	75-125	1	20	
Lithium	mg/L	ND	1	1	0.97	0.99	96	98	75-125	2	20	
Manganese	mg/L	0.84	1	1	1.8	1.8	95	94	75-125	0	20	
Molybdenum	mg/L	0.021	1	1	1.0	1.0	99	100	75-125	2	20	
Silver	mg/L	ND	0.5	0.5	0.51	0.52	103	103	75-125	1	20	
Sodium	mg/L	69.8	10	10	77.7	78.7	79	89	75-125	1	20	
Zinc	mg/L	ND	1	1	0.96	0.97	96	97	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 793779 Analysis Method: EPA 6010

QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3632002 Matrix: Water

Associated Lab Samples: 50374080001

Parameter Units Result Limit Analyzed Quality Barium, Dissolved mg/L ND 0.010 06/07/24 09:50	ifiers
Razium Dissolved mg/l ND 0.010 06/07/24.09:50	
Ballalli, Dissolved lig/E 11D 0.010 00/01/24 05.50	
Boron, Dissolved mg/L ND 0.10 06/07/24 09:50	
Cadmium, Dissolved mg/L ND 0.0010 06/07/24 09:50	
Calcium, Dissolved mg/L ND 1.0 06/07/24 09:50	
Chromium, Dissolved mg/L ND 0.010 06/07/24 09:50	
Copper, Dissolved mg/L ND 0.010 06/07/24 09:50	
Iron, Dissolved mg/L ND 0.10 06/07/24 09:50	
Lead, Dissolved mg/L ND 0.0050 06/07/24 09:50	
Lithium, Dissolved mg/L ND 0.020 06/07/24 09:50	
Manganese, Dissolved mg/L ND 0.010 06/07/24 09:50	
Molybdenum, Dissolved mg/L ND 0.010 06/07/24 09:50	
Silver, Dissolved mg/L ND 0.010 06/07/24 09:50	
Sodium, Dissolved mg/L ND 1.0 06/07/24 09:50	
Zinc, Dissolved mg/L ND 0.020 06/07/24 09:50	

LABORATORY CONTROL SAMPLE:	3632003					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Barium, Dissolved	mg/L		0.99	99	80-120	
Boron, Dissolved	mg/L	1	0.97	97	80-120	
Cadmium, Dissolved	mg/L	1	1.0	101	80-120	
Calcium, Dissolved	mg/L	10	10.3	103	80-120	
Chromium, Dissolved	mg/L	1	1.0	101	80-120	
Copper, Dissolved	mg/L	1	0.97	97	80-120	
Iron, Dissolved	mg/L	10	9.8	98	80-120	
Lead, Dissolved	mg/L	1	0.99	99	80-120	
Lithium, Dissolved	mg/L	1	1.0	101	80-120	
Manganese, Dissolved	mg/L	1	1.0	103	80-120	
Molybdenum, Dissolved	mg/L	1	1.0	103	80-120	
Silver, Dissolved	mg/L	0.5	0.51	102	80-120	
Sodium, Dissolved	mg/L	10	9.8	98	80-120	
Zinc, Dissolved	mg/L	1	1.0	103	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 3632	004 MS	MSD	3632005							
		50374076001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Barium, Dissolved	mg/L	0.050	1	1	0.96	1.0	91	96	75-125	6	20	
Boron, Dissolved	mg/L	ND	1	1	0.93	0.99	91	97	75-125	6	20	
Cadmium, Dissolved	mg/L	ND	1	1	0.94	0.99	94	99	75-125	5	20	
Calcium, Dissolved	mg/L	95.3	10	10	100	105	48	95	75-125	5	20	P6
Chromium, Dissolved	mg/L	ND	1	1	0.93	0.98	93	98	75-125	6	20	
Copper, Dissolved	mg/L	ND	1	1	0.90	0.95	90	95	75-125	6	20	
Iron, Dissolved	mg/L	1.7	10	10	10.6	11.2	90	96	75-125	6	20	
Lead, Dissolved	mg/L	ND	1	1	0.89	0.95	89	95	75-125	6	20	
Lithium, Dissolved	mg/L	ND	1	1	0.93	0.99	93	99	75-125	6	20	
Manganese, Dissolved	mg/L	0.23	1	1	1.2	1.2	93	99	75-125	5	20	
Molybdenum, Dissolved	mg/L	ND	1	1	0.96	1.0	95	101	75-125	6	20	
Silver, Dissolved	mg/L	ND	0.5	0.5	0.48	0.51	96	101	75-125	6	20	
Sodium, Dissolved	mg/L	7.8	10	10	16.5	17.4	87	95	75-125	5	20	
Zinc, Dissolved	mg/L	ND	1	1	0.94	0.99	94	99	75-125	5	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 793430 Analysis Method: EPA 6020
QC Batch Method: EPA 200.2 Analysis Description: 6020 MET

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3630533 Matrix: Water

Associated Lab Samples: 50374080001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.0010	06/05/24 06:33	
Arsenic	mg/L	ND	0.0010	06/05/24 06:33	
Beryllium	mg/L	ND	0.00020	06/05/24 06:33	
Cobalt	mg/L	ND	0.0010	06/05/24 06:33	
Selenium	mg/L	ND	0.0050	06/05/24 06:33	
Thallium	mg/L	ND	0.0010	06/05/24 06:33	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony	mg/L	0.04	0.042	106	80-120	
Arsenic	mg/L	0.04	0.040	99	80-120	
Beryllium	mg/L	0.04	0.039	98	80-120	
Cobalt	mg/L	0.04	0.042	105	80-120	
Selenium	mg/L	0.04	0.040	101	80-120	
Thallium	mg/L	0.04	0.041	103	80-120	

MATRIX SPIKE & MATRIX SI	PIKE DUPI	LICATE: 3630	535 MS	MSD	3630536							
		50374070004	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony	mg/L	ND	0.04	0.04	0.042	0.042	104	105	75-125	1	20	
Arsenic	mg/L	0.011	0.04	0.04	0.049	0.050	96	98	75-125	2	20	
Beryllium	mg/L	ND	0.04	0.04	0.040	0.040	99	99	75-125	0	20	
Cobalt	mg/L	0.0011	0.04	0.04	0.036	0.037	88	89	75-125	0	20	
Selenium	mg/L	0.0067	0.04	0.04	0.048	0.049	102	106	75-125	3	20	
Thallium	mg/L	ND	0.04	0.04	0.042	0.043	106	108	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 793427 Analysis Method: EPA 6020

QC Batch Method: EPA 200.2 Analysis Description: 6020 MET Dissolved

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3630521 Matrix: Water

Associated Lab Samples: 50374080001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Antimony, Dissolved	 mg/L	ND	0.0010	06/05/24 21:47	
Arsenic, Dissolved	mg/L	ND	0.0010	06/05/24 21:47	
Beryllium, Dissolved	mg/L	ND	0.00020	06/05/24 21:47	
Cobalt, Dissolved	mg/L	ND	0.0010	06/05/24 21:47	
Selenium, Dissolved	mg/L	ND	0.0010	06/05/24 21:47	
Thallium, Dissolved	mg/L	ND	0.0010	06/05/24 21:47	

LABORATORY CONTROL SAMPLE:	3630522					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Antimony, Dissolved	mg/L	0.04	0.042	105	80-120	
Arsenic, Dissolved	mg/L	0.04	0.040	101	80-120	
Beryllium, Dissolved	mg/L	0.04	0.038	96	80-120	
Cobalt, Dissolved	mg/L	0.04	0.041	103	80-120	
Selenium, Dissolved	mg/L	0.04	0.041	101	80-120	
Thallium, Dissolved	mg/L	0.04	0.039	96	80-120	

MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 3630			3630524							
		50374070009	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Antimony, Dissolved	mg/L	ND	0.04	0.04	0.042	0.042	106	106	75-125	0	20	
Arsenic, Dissolved	mg/L	0.013	0.04	0.04	0.053	0.053	102	100	75-125	1	20	
Beryllium, Dissolved	mg/L	ND	0.04	0.04	0.038	0.038	94	94	75-125	0	20	
Cobalt, Dissolved	mg/L	ND	0.04	0.04	0.038	0.039	94	94	75-125	1	20	
Selenium, Dissolved	mg/L	ND	0.04	0.04	0.040	0.037	100	94	75-125	7	20	
Thallium, Dissolved	mg/L	ND	0.04	0.04	0.038	0.039	96	97	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 792047 Analysis Method: EPA 8260

QC Batch Method: EPA 8260 Analysis Description: 8260 MSV unpreserved

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3624787 Matrix: Water

Associated Lab Samples: 50374080001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L		5.0	05/24/24 13:19	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	05/24/24 13:19	
1,1,2-Trichloroethane	ug/L	ND	5.0	05/24/24 13:19	
1,1-Dichloroethene	ug/L	ND	5.0	05/24/24 13:19	
1,2,3-Trichloropropane	ug/L	ND	5.0	05/24/24 13:19	
1,2-Dichloroethane	ug/L	ND	5.0	05/24/24 13:19	
1,2-Dichloroethene (Total)	ug/L	ND	5.0	05/24/24 13:19	
2-Butanone (MEK)	ug/L	ND	25.0	05/24/24 13:19	
2-Chloroethylvinyl ether	ug/L	ND	50.0	05/24/24 13:19	
2-Hexanone	ug/L	ND	25.0	05/24/24 13:19	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	25.0	05/24/24 13:19	
Acetone	ug/L	ND	100	05/24/24 13:19	
Acrolein	ug/L	ND	50.0	05/24/24 13:19	
Acrylonitrile	ug/L	ND	100	05/24/24 13:19	
Benzene	ug/L	ND	5.0	05/24/24 13:19	
Bromodichloromethane	ug/L	ND	5.0	05/24/24 13:19	
Bromoform	ug/L	ND	5.0	05/24/24 13:19	
Bromomethane	ug/L	ND	5.0	05/24/24 13:19	
Carbon disulfide	ug/L	ND	10.0	05/24/24 13:19	
Carbon tetrachloride	ug/L	ND	5.0	05/24/24 13:19	
Chlorobenzene	ug/L	ND	5.0	05/24/24 13:19	
Chloroethane	ug/L	ND	5.0	05/24/24 13:19	
Chloroform	ug/L	ND	5.0	05/24/24 13:19	
Chloromethane	ug/L	ND	5.0	05/24/24 13:19	
cis-1,3-Dichloropropene	ug/L	ND	5.0	05/24/24 13:19	
Dibromochloromethane	ug/L	ND	5.0	05/24/24 13:19	
Dibromomethane	ug/L	ND	5.0	05/24/24 13:19	
Dichlorodifluoromethane	ug/L	ND	5.0	05/24/24 13:19	
Ethyl methacrylate	ug/L	ND	100	05/24/24 13:19	
Ethylbenzene	ug/L	ND	5.0	05/24/24 13:19	
lodomethane	ug/L	ND	10.0	05/24/24 13:19	
Methylene Chloride	ug/L	ND	5.0	05/24/24 13:19	
Styrene	ug/L	ND	5.0	05/24/24 13:19	
Toluene	ug/L	ND	5.0	05/24/24 13:19	
trans-1,3-Dichloropropene	ug/L	ND	5.0	05/24/24 13:19	
Trichloroethene	ug/L	ND	5.0	05/24/24 13:19	
Trichlorofluoromethane	ug/L	ND	5.0	05/24/24 13:19	
Vinyl acetate	ug/L	ND	50.0	05/24/24 13:19	
Vinyl chloride	ug/L	ND	2.0	05/24/24 13:19	
Xylene (Total)	ug/L	ND	10.0	05/24/24 13:19	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

METHOD BLANK: 3624787 Matrix: Water

Associated Lab Samples: 50374080001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4-Bromofluorobenzene (S)	%.	98	79-124	05/24/24 13:19	
Dibromofluoromethane (S)	%.	103	82-128	05/24/24 13:19	1d
Toluene-d8 (S)	%.	95	73-122	05/24/24 13:19	

LABORATORY CONTROL SAMPLE:	3624788					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.8	102	71-126	
,1,2,2-Tetrachloroethane	ug/L	50	47.3	95	70-126	
,1,2-Trichloroethane	ug/L	50	50.8	102	79-125	
,1-Dichloroethene	ug/L	50	49.2	98	71-130	
,2,3-Trichloropropane	ug/L	50	49.1	98	74-127	
2-Dichloroethane	ug/L	50	49.5	99	72-123	
2-Dichloroethene (Total)	ug/L	100	104	104	75-122	
Butanone (MEK)	ug/L	250	220	88	67-135	
Chloroethylvinyl ether	ug/L	250	194	78	45-144	
Hexanone	ug/L	250	246	98	65-135	
Methyl-2-pentanone (MIBK)	ug/L	250	250	100	69-136	
cetone	ug/L	250	202	81	34-156	
crolein	ug/L	1000	946	95	59-191	
crylonitrile	ug/L	250	252	101	67-146	
enzene	ug/L	50	52.3	105	76-122	
omodichloromethane	ug/L	50	55.2	110	80-126	
omoform	ug/L	50	54.7	109	77-124	
omomethane	ug/L	50	81.5	163	10-175	
rbon disulfide	ug/L	50	45.5	91	69-121	
rbon tetrachloride	ug/L	50	54.1	108	73-127	
llorobenzene	ug/L	50	50.7	101	76-118	
loroethane	ug/L	50	50.9	102	36-162	
loroform	ug/L	50	51.4	103	78-121	
loromethane	ug/L	50	48.6	97	37-143	
-1,3-Dichloropropene	ug/L	50	56.5	113	76-132	
bromochloromethane	ug/L	50	56.4	113	79-130	
oromomethane	ug/L	50	53.9	108	79-124	
ichlorodifluoromethane	ug/L	50	26.7	53	29-126	
hyl methacrylate	ug/L	50	56.2J	112	78-137	
hylbenzene	ug/L	50	53.8	108	76-120	
domethane	ug/L	50	84.0	168	10-148 L	.1
ethylene Chloride	ug/L	50	50.7	101	71-121	
yrene	ug/L	50	52.4	105	80-121	
luene	ug/L	50	50.1	100	74-118	
ns-1,3-Dichloropropene	ug/L	50	57.8	116	77-126	
ichloroethene	ug/L	50	51.6	103	74-125	
chlorofluoromethane	ug/L	50	48.0	96	64-138	

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REPORT OF LABORATORY ANALYSIS

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Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

LABORATORY CONTROL SAMPLE:	3624788					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Vinyl acetate	ug/L	200	263	131	74-154	
Vinyl chloride	ug/L	50	47.5	95	55-139	
Xylene (Total)	ug/L	150	150	100	73-119	
4-Bromofluorobenzene (S)	%.			102	79-124	
Dibromofluoromethane (S)	%.			102	82-128	
Toluene-d8 (S)	%.			98	73-122	

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Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 794730 Analysis Method: SM 2510B

QC Batch Method: SM 2510B Analysis Description: 2510B Specific Conductance

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3636381 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Specific Conductance umhos/cm ND 10.0 06/11/24 16:26

LABORATORY CONTROL SAMPLE: 3636382

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Specific Conductance umhos/cm 1410 1330 94 90-110

SAMPLE DUPLICATE: 3636383

Parameter Units Specific Conductance umhos/cm 50374078001 Dup Max Result RPD Qualifiers Specific Conductance 1532 Specific Conductance Dup Specific Conductance Specific Conducta

SAMPLE DUPLICATE: 3636384

Date: 06/19/2024 09:03 AM

50374090007 Dup Max RPD RPD Parameter Units Result Result Qualifiers 749 748 0 20 Specific Conductance umhos/cm

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 792718 Analysis Method: SM 2540C

QC Batch Method: SM 2540C Analysis Description: 2540C Total Dissolved Solids

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3627536 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Total Dissolved Solids mg/L ND 25.0 05/30/24 13:26

LABORATORY CONTROL SAMPLE: 3627537

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units **Total Dissolved Solids** mg/L 300 271 90 80-120

SAMPLE DUPLICATE: 3627538

Parameter Units Result Result RPD RPD Qualifiers

Total Dissolved Solids mg/L 1640 1640 0 10

SAMPLE DUPLICATE: 3627539

Date: 06/19/2024 09:03 AM

50374070022 Dup Max RPD RPD Parameter Units Result Result Qualifiers Total Dissolved Solids 916 932 2 10 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

QC Batch: 793222 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3629778 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Chemical Oxygen Demand mg/L ND 10.0 06/01/24 13:36

LABORATORY CONTROL SAMPLE: 3629779

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Chemical Oxygen Demand 49.5 49.0 99 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3629780 3629781

MSD MS 50374041002 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Result **RPD** RPD Qual Result Conc. Conc. % Rec % Rec Limits

Chemical Oxygen Demand mg/L 42.9 49.5 49.5 85.4 79.9 86 75 90-110 7 20 M3

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3629782 3629783

MS MSD 50374033006 MS MSD MS MSD % Rec Spike Spike Max RPD RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits Qual 91 Chemical Oxygen Demand 16.9 49.5 49.5 62.0 58.2 83 90-110 6 20 M0 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 794738 Analysis Method: SM 4500-H+B
QC Batch Method: SM 4500-H+B Analysis Description: 4500H+B pH

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

SAMPLE DUPLICATE: 3636408

 Parameter
 Units
 50374077001 Result
 Dup Result
 Max RPD
 RPD
 Qualifiers

 pH at 25 Degrees C
 Std. Units
 9.0
 9.1
 1
 2 H3

SAMPLE DUPLICATE: 3636409

Date: 06/19/2024 09:03 AM

50374090005 Dup Max Parameter Units Result Result **RPD RPD** Qualifiers 7.1 pH at 25 Degrees C 7.1 0 2 H3 Std. Units

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Nitrogen, Ammonia

Date: 06/19/2024 09:03 AM

QUALITY CONTROL DATA

Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 794097 Analysis Method: EPA 350.1

QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3633163 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Ammonia mg/L ND 0.10 06/06/24 09:17

LABORATORY CONTROL SAMPLE: 3633164

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units mg/L Nitrogen, Ammonia 5.2 103 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3633165 3633166

mg/L

MSD MS 50374049001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Conc. Limits 0.31 5 103 20 Nitrogen, Ammonia mg/L 5 5.5 5.4 102 90-110

 MATRIX SPIKE SAMPLE:
 3633167
 50374090001
 Spike
 MS
 MS
 % Rec

 Parameter
 Units
 Result
 Conc.
 Result
 % Rec
 Limits
 Qualifiers

0.41

5

5.6

104

90-110

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 791950 Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3624225 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Nitrogen, Nitrate mg/L ND 0.10 05/24/24 16:28

LABORATORY CONTROL SAMPLE: 3624226

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Nitrogen, Nitrate mg/L 1 1.1 107 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3624227 3624228

MS MSD

50374070014 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result % Rec % Rec **RPD** RPD Qual Result Limits Nitrogen, Nitrate ND 107 20 mg/L 1 1.1 1.1 108 90-110

3

MATRIX SPIKE SAMPLE: 3624229

Date: 06/19/2024 09:03 AM

% Rec 50374075001 MS MS Spike Qualifiers Parameter Units Result Conc. Result % Rec Limits ND Nitrogen, Nitrate 1 1.1 106 90-110 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 794398 Analysis Method: EPA 420.4

QC Batch Method: EPA 420.4 Analysis Description: 420.4 Phenolics

Laboratory: Pace Analytical Services - Indianapolis

Associated Lab Samples: 50374080001

METHOD BLANK: 3634532 Matrix: Water

Associated Lab Samples: 50374080001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Phenolics, Total Recoverable ug/L ND 20.0 06/07/24 16:54

LABORATORY CONTROL SAMPLE: 3634533

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Phenolics, Total Recoverable 46.4 93 90-110 ug/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3634534 3634535

MSD MS 50374557005 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result **RPD** RPD Qual Result % Rec % Rec Limits Phenolics, Total 0.0055J 20 M3,R1 ug/L 50 50 72.8 53.3 135 90-110 31 Recoverable mg/L

MATRIX SPIKE SAMPLE: 3634536

Date: 06/19/2024 09:03 AM

50374563005 Spike MS MS % Rec Parameter Limits Units Result Conc. Result % Rec Qualifiers Phenolics, Total Recoverable 0.018J mg/L ug/L 50 55.1 74 90-110 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Pace Project No.: 50374080

Sample: MW-112S PWS:	Lab ID: 5037 Site ID:	4080001 Collected: 05/23/24 09:50 Sample Type:	Received:	05/23/24 20:56	Matrix: Water	
Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical	Services - Greensburg				
Radium-226	EPA 903.1	-0.116U ± 0.508 (1.05) C:NA T:94%	pCi/L	06/18/24 15:20	6 13982-63-3	
	Pace Analytical	Services - Greensburg				
Radium-228	EPA 904.0	0.542U ± 0.393 (0.775) C:85% T:88%	pCi/L	06/13/24 11:34	1 15262-20-1	
	Pace Analytical	Services - Greensburg				
Total Radium	Total Radium Calculation	0.542U ± 0.901 (1.83)	pCi/L	06/18/24 16:4	1 7440-14-4	



QUALITY CONTROL - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 672713 Analysis Method: EPA 903.1

QC Batch Method: EPA 903.1 Analysis Description: 903.1 Radium-226

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 50374080001

METHOD BLANK: 3275057 Matrix: Water

Associated Lab Samples: 50374080001

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-226
 0.173 ± 0.241 (0.402) C:NA T:93%
 pCi/L
 06/18/24 15:14

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL - RADIOCHEMISTRY

Project: Gibson SLF New Wells

Pace Project No.: 50374080

QC Batch: 672715 Analysis Method: EPA 904.0

QC Batch Method: EPA 904.0 Analysis Description: 904.0 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 50374080001

METHOD BLANK: 3275075 Matrix: Water

Associated Lab Samples: 50374080001

 Parameter
 Act ± Unc (MDC) Carr Trac
 Units
 Analyzed
 Qualifiers

 Radium-228
 0.456 ± 0.323 (0.621) C:85% T:87%
 pCi/L
 06/13/24 11:32

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: Gibson SLF New Wells

Pace Project No.: 50374080

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

RPD value was outside control limits.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

R1

Date: 06/19/2024 09:03 AM

1d	Neither matrix spike nor matrix precision data could be provided for this analytical batch due to insufficient sample volume.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Gibson SLF New Wells

Pace Project No.: 50374080

Date: 06/19/2024 09:03 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50374080001	MW-112S	EPA 9056	794414	_	
50374080001	MW-112S	EPA 3010	793486	EPA 6010	794442
50374080001	MW-112S	EPA 3010	793779	EPA 6010	794419
50374080001	MW-112S	EPA 200.2	793430	EPA 6020	793754
50374080001	MW-112S	EPA 200.2	793427	EPA 6020	793752
50374080001	MW-112S	EPA 7470	793918	EPA 7470	794644
50374080001	MW-112S	EPA 7470	794266	EPA 7470	794646
50374080001	MW-112S	EPA 8260	792047		
50374080001	MW-112S	EPA 903.1	672713		
50374080001	MW-112S	EPA 904.0	672715		
50374080001	MW-112S	Total Radium Calculation	676701		
50374080001	MW-112S	SM 2510B	794730		
50374080001	MW-112S	SM 2540C	792718		
50374080001	MW-112S	EPA 410.4	793222	EPA 410.4	793226
50374080001	MW-112S	SM 4500-H+B	794738		
50374080001	MW-112S	EPA 350.1	794097		
60374080001	MW-112S	EPA 353.2	791950		
0374080001	MW-112S	EPA 420.4	794398	EPA 420.4	794510

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

ection	A ed Client Information:	Section B Required P	roject	t Info	rmation:						tion C		ation	:						W	0	# :	5	0	37	74	40	8	0			1	٦	
ompar		Report To:	Coll	leen S	Sweazy					Atte	ntion:	Α	ccou	nts Pa	yable					Ш	Ш	III	1111	П									_	
ddress	GIBSON GENERATING STATION	Copy To:	*							_	npany	Name	e: D	uke E	nergy					Ш	Ш	Ш		П	Ш	Ш								
	rille, IN 47665	-	1 4	_						_	ress:							_		503	740	080	• " "	ш	ш	ш	•							
	colleen.sweazy@duke-energy.com	Purchase O			0.5						e Quo																							
hone:	317-838-2161 Fax:	Project Nan	ie:	Gib	son SLF	New Wells	5				e Prof			992 L		neth.h	unt@	pace	elaps.	COIII,				-										
Reques	ted Due Date: Standard	Project #:		_						raci	e Piùi	IIC #.	3	992 [ine	/				Post	ua nta	od Am	alysis F	iltoro	4 171	N/A			IN					
	MATRIX	CODE	es to left)	COMP)		COLLI	ECTED		NO			F	Pres	ervat	ives			N/A		neq	Y	I An	llysis r	intere	4(1)									
	Drinking Water Waste V Product	Water DW WT fater WW P	valid code	GRAB G=					OLLECTIC				1	T				st	1		T		ctance	D 410.4		PA	PA	S/N)					\dagger	
ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / , -) Sample lds must be unique Soul/Soli Wipe Air Other Tissue	OL WP AR OT TS	MATRIX CODE (see	SAMPLE TYPE (G	ST	TIME	DATE	TIME	SAMPLE TEMP AT	# OF CONTAINERS	Unpreserved	H2SO4	SONIL DH	NaOH	Na2S203	Methanol		Analyses Te	VOC 8280		Diss Metals FF *	TDS 2540C	pH 4500, Conduc 2510B, Nitrate-3	50.1/0	Phenolics 420.4	Ra 226 Sub Pace	Ra 228 Sub Pace®	Residual Chlorine						
1	MW-109S		WT							12	6 2	2 4					Ī			x x		х	Х	Х			х		L					
2	MW-111S		WT							12	6 2	2 4					1		x ;	x x	x	x	X	×	×	x	x							
3	MW-112S		WI	_	Sh3	950					6 2	2 4	I				1	ı		x x			Х	X			х							
4	GBS_SHARE-FD-2024		wı	r						12	6 2	2 4	+	1			4	-	X :	x x	X	х	Х	x	х	х	х	4	L					
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12	ADDITIONAL COMMENTS		RELIN	NQUIS	HED BY	AFFILIATIO	ON .	DAT	E		TIME				ACCI	EPTED	BY/	AFFI	LIATIO	ON			DAT	E		TIME			SAI	MPLE CO	NDITION	s		
Metal	s 6010:(Ba, B, Cd, Cr, Cu, Fe, Pb, Mn, Mo, Ag, Zn, Ca,	Na, Li) 5/	Bla	et	sant.	6		5h	3	1	70		_	H	1		4							-	2	1		77/		\Box				
	ate 353.2 Short Hold (48 hours)	0			-0	ky	+	50		10	51	-	-	0	1			_	_			-	50		æ	26		Ech		-	4	5	+	
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						PRI	NT Name	of SAMP	LER:		291	5 7	5	da	ck	250	n,	/ ₇	H DA	ATE S	igned	d:	51	13-	24			TEMP in C	Received on	lce (Y/N) Custody	Sealed	Sampes Intacto	51 of	53



SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining content	s: 5/23	124	20.5	6 TBH	_				
1. Courier: FED EX UPS CLIENT PACE			OTHER	5. Packing Material:	☐Bubble Wrap	☐ Bubb	le Bags		
2. Custody Seal on Cogler/Box Present: Yes	□ No				☐ None	Othe	(9)5	α	
(If yes)Seals Intact: Yes \(\square\) No (leave blan	k if no seals w	vere pres	ent)	6. Ice Type:	☐ Blue ☐ None	Э			
3. Thermometer: 12345678 ABCD 4. Cooler Temperature(s):	EFGH			7. Was the PM notified of Cooler temp should be abo		□Yes	□No		
(Initial/Corrected) RECORD TEMPS OF ALL COOLERS REC	EIVED (use Com	ments belo	ow to add more)	8. EZ Bottle Order?	Yes No				
				If yes but not on COC what is the EZ Bottle Order Number?:					
All	discrepanci	es will be	written out in the c	omments section below.					
	Yes	No				Yes	No	N/A	
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico) Short Hold Time Analysis (48 hours or less)? Analysis: No3-353.7			CHECKED?: Exception any container with a Circle HNO3 (<2) (12SO4	ing acid/base preservation hations: VOA, coliform, LLHg, septum cap or preserved with (<2) NaOH (>10) NaOH/Z to pH recommendations will be	O&G, RAD CHEM, and th HCI.				
			count form	to pri recommendations will be	e noted on the container				
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:		Residual Chlorine (Check (SVOC 625 Pest/PCB	608)	Present	Absent	N/A	
Rush TAT Requested (4 days or less):			Residual Chlorine (Check (Total/Amenable/Free	Cyanide)				
Custody Signatures Present?			Headspace Wiscons	in Sulfide?				/	
Containers Intact?:	//		Headspace in VOA November See Containter Cou			Present	Absent	No VOA Vials Sent	524
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID			Trip Blank Present?				(
Extra labels on Terracore Vials? (soils only)		/	Trip Blank Custody	Seals?:				/	
COMMENTS:									

that are out of conformance **

			MeOH (only)	1	ı	1				AMB	ER G	1 488						DI	_AST	10					ОТН	JED			Nitric	Sulfuric	Sodium Hydroxide	Sodium Hydroxide/ ZnAc
			DI		-					AMD	EK G	LAGG							ASI	10					Oir	IEK			Red	Yellow	Green	Black
CO0 Line	WGFU	WGKU BG1U	- J.	DG9H VG9H	VOA VIAL HS	neson Deson	VG9T	AGOU	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	5	N Z	20	30	3N	3F	38	38	3Z	ССЗН	3F	nge		rix	LINO	110004	N-011	
Iten	1 3	₹8	R	9 9	>6mm	98	5	AG	AG	AG	AG	AG	AG	AG	BP1U	BP1N	ВР2U	ВРЗО	BP3N	ВРЗЕ	BP3S	ВРЗВ	BP3Z	S	CG3F	Syri Kit		Matrix	<2	<2 <2	NaOH >10	NaOH/Zn Ac >9
1																																
2																																
3		I				3						1				2		7	1	L	-							67	V	V		
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Container Codes

	Gla	ISS	
DG9H	40mL HCl amber voa vial	BG1T	glass
DG9P	40mL TSP amber vial	BG1U	1L unpreserved glass
DG9S	40mL H2SO4 amber vial	CG3U	250mL Unpres Clear Glass
DG9T	40mL Na Thio amber vial	AG0U	100mL unpres amber glass
DG9U	40mL unpreserved amber vial	AG1H	1L HCl amber glass
VG9H	40mL HCl clear vial	AG1S	1L H2SO4 amber glass
VG9T	40mL Na Thio. clear vial	AG1T	1L Na Thiosulfate amber glass
VG9U	40mL unpreserved clear vial	AG1U	1liter unpres amber glass
I	40mL w/hexane wipe vial	AG2N	500mL HNO3 amber glass
NGKU	8oz unpreserved clear jar	AG2S	500mL H2SO4 amber glass
NGFU	4oz clear soil jar	AG2U	500mL unpres amber glass
JGFU	4oz unpreserved amber wide	AG3S	250mL H2SO4 amber glass
CG3H	250mL clear glass HCI	AG3SF	250mL H2SO4 amb glass -field filtered
CG3F	250mL clear glass HCl, Field Filter	AG3U	250mL unpres amber glass
BG1H	1L HCl clear glass	AG3B	250mL NaOH amber glass
BG1S	1L H2SO4 clear glass		

			Plastic
BP1B 1L NaC	OH plastic	BP4U	125mL unpreserved plastic
BP1N 1L HN	D3 plastic	BP4N	125mL HNO3 plastic
BP1S 1L H2S	O4 plastic	BP4S	125mL H2SO4 plastic
BP1U 1L unp	reserved plastic		Miscellaneous
BP1Z 1L NaC	OH, Zn, Ac		wiiscenaneous
BP2N 500mL	HNO3 plastic	Syring	ge Kit LL Cr+6 sampling kit
BP2C 500mL	NaOH plastic	ZPLO	Ziploc Bag
BP2S 500mL	H2SO4 plastic	R	Terracore Kit
BP2U 500mL	unpreserved plastic	SP5T	120mL Coliform Sodium Thiosulfate
BP2Z 500mL	NaOH, Zn Ac	GN	General Container
BP3B 250mL	NaOH plastic	U	Summa Can (air sample)
	HNO3 plastic	WT	Water
BP3F 250mL HI	NO3 plastic-field filtered	SL	Solid
BP3U 250mL	unpreserved plastic	OL:	Oil
BP3S 250mL	H2SO4 plastic	NAL	Non-aqueous liquid
BP3Z 250mL l	NaOH, ZnAc plastic	WP	Wipe
BP3R 250mL Ur	pres. FF SO4/OH buffer		

From: WEAVER, TROY

To: <u>Sweazy, Colleen; Hummel, Lindsey</u>

Cc: <u>John Noel</u>

Subject: RE: [EXTERNAL] RE: Gibson well install and abandonments

Date: Tuesday, May 23, 2023 8:07:20 AM

Attachments: <u>image001.png</u>

image002.png

Good morning, Colleen.

Yes, it is acceptable for the Gibson RWS I landfill to collect additional background data on a semiannual schedule, at this time.

I understand why you ask if this CCR RWS I has to include the full list under 329 IAC 10-29-10(a), but since the rule specifies this list, we recommend that you include the full list. This is likely how the RWS I handled background sampling in the past. (FYI – the list is/may be more applicable to a non-municipal landfill, but it is just how the rule was wrote back in the day).

Thanks for your attention to this matter.

Trov



Troy Weaver Geologist 1 Geology Section - Permits Branch Office of Land Quality

317-233-2430 • tweaver@idem.IN.gov

Indiana Department of Environmental Management 100 N. Senate Avenue, Indianapolis, IN 46204

https://www.in.gov/idem/waste/

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From: Sweazy, Colleen <Colleen.Sweazy@duke-energy.com>

Sent: Thursday, May 18, 2023 12:25 PM

To: WEAVER, TROY <TWEAVER@idem.IN.gov>; Hummel, Lindsey <LHummel@idem.IN.gov>

Cc: John Noel < john.noel@oneatlas.com>

Subject: RE: [EXTERNAL] RE: Gibson well install and abandonments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Hi Troy,

I had a few follow up questions on the well installation work at the SALF. No huge rush on a response for these.

-We anticipate construction completion of new cells to wrap up around July, 2025. That said, it appears we have time to conduct the 4 quarterly background sampling events as part of our regular

semiannual sampling. This would decrease additional sampling mobilizations and lower project costs a bit. Does this approach work for you to collect background samples semiannually?

-Understand the sampling parameters in IAC 10-29-10 are different from the typical CCR monitoring parameters. Wanted to verify we are supposed to collect VOC's that are stated in 10-29-10(2), which may be related to municipal waste landfills? Or are we only to sample the inorganic parameters?

Regards,

Colleen

From: WEAVER, TROY < TWEAVER@idem.IN.gov>
Sent: Wednesday, May 17, 2023 11:44 AM

To: Sweazy, Colleen < <u>Colleen.Sweazy@duke-energy.com</u>>; Hummel, Lindsey

<<u>LHummel@idem.IN.gov</u>>

Cc: John Noel <<u>john.noel@oneatlas.com</u>>

Subject: [EXTERNAL] RE: Gibson well install and abandonments

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Great, thank you for the update, Colleen.



Troy Weaver Geologist 1 Geology Section - Permits Branch Office of Land Quality

317-233-2430 • <u>tweaver@idem.IN.gov</u>

Indiana Department of Environmental Management 100 N. Senate Avenue, Indianapolis, IN 46204

https://www.in.gov/idem/waste/

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From: Sweazy, Colleen < Colleen. Sweazy@duke-energy.com >

Sent: Wednesday, May 17, 2023 12:24 PM

To: WEAVER, TROY < TWEAVER@idem.IN.gov >; Hummel, Lindsey < LHummel@idem.IN.gov >

Cc: John Noel < john.noel@oneatlas.com > **Subject:** Gibson well install and abandonments

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Troy and Lindsey,

Although we are working through several weather delays on site, we plan to begin well and piezometer installation, abandonment, and conversion activities soon for Gibson South Landfill and Gibson North Ash Pond. Wanted to provide an updated on these activities that have IDEM approved work plans.

Let me know if you have any questions,

Colleen