



Southern Illinois Power Cooperative

11543 Lake of Egypt Road
Marion, IL 62959
(618) 964-1448 Fax (618) 964-1867

October 8, 2021

Illinois Environmental Protection Agency
DWPC - Permits MC#15
Attn: Part 845 Coal Combustion Residuals Rule Submittal
1021 North Grand Avenue East
Springfield, IL 62794-9276

**RE: SOUTHERN ILLINOIS POWER COOPERATIVE
MARION POWER PLANT
FORMER EMERY POND
DATA TRANSMITTAL OCTOBER 2021**

Dear Program Reviewer:

As required by 35 Illinois Administrative Code Part 845.610(b)(3)(D), please find enclosed the groundwater monitoring data collected in May 2021. This is the first round of data collected since the closure by removal of the former Emery Pond. Southern Illinois Power Cooperative will determine compliance with the groundwater protection standards following the fourth post-closure groundwater monitoring event, currently scheduled to be completed within the first quarter (January-March) of 2022.

Should you have any questions or comments regarding this Quarterly Progress Report, do not hesitate to contact me via my email address wwatson@sipower.com.

Sincerely,

Wendell Watson
Southern Illinois Power Cooperative

cc: Mark Haney - Golder Associates
Danielle Sylvia - Golder Associates



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The power of human connections

SIPC is an equal opportunity provider and employer.

July 01, 2021

Jason McLaurin
Southern Illinois Power Cooperation
11543 Lake of Egypt Road
Marion, IL 62959
TEL: (618) 964-1448
FAX:



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

RE: Groundwater Monitoring

WorkOrder: 21060006

Dear Jason McLaurin:

TEKLAB, INC received 6 samples on 6/1/2021 8:00:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Elizabeth A. Hurley
Project Manager
(618)344-1004 ex 33
ehurley@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

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Definitions

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Abbr Definition

- * Analytes on report marked with an asterisk are not NELAP accredited
- CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
- CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
- DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
- DNI Did not ignite
- DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
- ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
- IDPH IL Dept. of Public Health
- LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
- LCS D Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
- MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
- MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
- MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
- MW Molecular weight
- NC Data is not acceptable for compliance purposes
- ND Not Detected at the Reporting Limit
- NELAP NELAP Accredited
- PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
- RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
- RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
- SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
- Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
- TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
- TNTC Too numerous to count (> 200 CFU)



Definitions

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Qualifiers

- # - Unknown hydrocarbon
- C - RL shown is a Client Requested Quantitation Limit
- H - Holding times exceeded
- J - Analyte detected below quantitation limits
- ND - Not Detected at the Reporting Limit
- S - Spike Recovery outside recovery limits
- X - Value exceeds Maximum Contaminant Level
- B - Analyte detected in associated Method Blank
- E - Value above quantitation range
- I - Associated internal standard was outside method criteria
- M - Manual Integration used to determine area response
- R - RPD outside accepted recovery limits
- T - TIC(Tentatively identified compound)



Case Narrative

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Cooler Receipt Temp: 0.6 °C

An employee of Teklab, Inc. collected the sample(s).

This report was revised on July 1, 2021 per Danielle Sylvia (Golder Associates Inc.)'s request and Jason McLaurin's consent. The reason for the revision is to include LVL2 QC and MDLs. Please replace report dated June 30, 2021 with this report. EAH 7/1/21

Locations

Collinsville

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email jhriley@teklabinc.com

Collinsville Air

Address 5445 Horseshoe Lake Road
Collinsville, IL 62234-7425
Phone (618) 344-1004
Fax (618) 344-1005
Email EHurley@teklabinc.com

Springfield

Address 3920 Pintail Dr
Springfield, IL 62711-9415
Phone (217) 698-1004
Fax (217) 698-1005
Email KKlostermann@teklabinc.com

Chicago

Address 1319 Butterfield Rd.
Downers Grove, IL 60515
Phone (630) 324-6855
Fax
Email arenner@teklabinc.com

Kansas City

Address 8421 Nieman Road
Lenexa, KS 66214
Phone (913) 541-1998
Fax (913) 541-1998
Email jhriley@teklabinc.com



Accreditations

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2022	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2022	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2022	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2022	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2021	Collinsville
Arkansas	ADEQ	88-0966		3/14/2022	Collinsville
Illinois	IDPH	17584		5/31/2021	Collinsville
Kentucky	UST	0073		1/31/2022	Collinsville
Missouri	MDNR	00930		5/31/2021	Collinsville
Missouri	MDNR	930		1/31/2022	Collinsville



Laboratory Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Lab ID: 21060006-001

Client Sample ID: EBG

Matrix: GROUNDWATER

Collection Date: 05/31/2021 13:44

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		10	NTU	1	05/31/2021 13:44	R293760
SW-846 9040B FIELD									
pH	*	0	1.00		6.61		1	05/31/2021 13:44	R293760
<i>Field pH QC was completed but not recorded.</i>									
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		344	mg/L	1	06/03/2021 16:07	R291832
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	1		22	mg/L	1	06/09/2021 19:20	R293039
SW-846 9036 (TOTAL)									
Sulfate	NELAP	12	20		85	mg/L	2	06/10/2021 2:02	R293024
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.60	mg/L	1	06/01/2021 20:33	R291748
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		0.0505	mg/L	1	06/02/2021 20:42	177496
Boron	NELAP	0.0090	0.0200		< 0.0200	mg/L	1	06/02/2021 20:42	177496
Calcium	NELAP	0.0350	0.100		13.3	mg/L	1	06/02/2021 20:42	177496
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 16:31	177497
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 16:31	177497
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/22/2021 0:16	177497
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 16:31	177497
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	06/08/2021 16:31	177497
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	06/08/2021 16:31	177497
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 16:31	177497
Lithium	*	0.0015	0.0030		0.0207	mg/L	5	06/23/2021 19:10	177497
Molybdenum	NELAP	0.0006	0.0015		0.0145	mg/L	5	06/08/2021 16:31	177497
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 16:31	177497
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	06/08/2021 16:31	177497
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	06/03/2021 11:36	177506



Laboratory Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Lab ID: 21060006-002

Client Sample ID: EP-1

Matrix: GROUNDWATER

Collection Date: 05/31/2021 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		50	NTU	1	05/31/2021 12:20	R293760
SW-846 9040B FIELD									
pH	*	0	1.00		6.18		1	05/31/2021 12:20	R293760
<i>Field pH QC was completed but not recorded.</i>									
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		2500	mg/L	1	06/03/2021 16:08	R291832
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	1		44	mg/L	1	06/09/2021 19:28	R293039
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		1450	mg/L	50	06/10/2021 2:05	R293024
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.22	mg/L	1	06/01/2021 20:38	R291748
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		0.0216	mg/L	1	06/02/2021 20:47	177496
Boron	NELAP	0.0090	0.0200		0.816	mg/L	1	06/02/2021 20:47	177496
Calcium	NELAP	0.0350	0.100		478	mg/L	1	06/02/2021 20:47	177496
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 16:54	177497
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 16:54	177497
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/22/2021 0:39	177497
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 16:54	177497
Chromium	NELAP	0.0007	0.0020		< 0.0020	mg/L	5	06/22/2021 0:39	177497
Cobalt	NELAP	0.0001	0.0010		0.0012	mg/L	5	06/08/2021 16:54	177497
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 16:54	177497
Lithium	*	0.0015	0.0030		0.0141	mg/L	5	06/23/2021 19:21	177497
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	06/08/2021 16:54	177497
Selenium	NELAP	0.0006	0.0010		0.0015	mg/L	5	06/08/2021 16:54	177497
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	06/08/2021 16:54	177497
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	06/03/2021 11:43	177506



Laboratory Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Lab ID: 21060006-003

Client Sample ID: EP-2

Matrix: GROUNDWATER

Collection Date: 05/31/2021 11:44

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		7.3	NTU	1	05/31/2021 11:44	R293760
SW-846 9040B FIELD									
pH	*	0	1.00		5.74		1	05/31/2021 11:44	R293760
<i>Field pH QC was completed but not recorded.</i>									
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		2120	mg/L	1	06/03/2021 16:08	R291832
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	1		29	mg/L	1	06/09/2021 19:52	R293039
SW-846 9036 (TOTAL)									
Sulfate	NELAP	307	500		1370	mg/L	50	06/10/2021 2:10	R293024
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.62	mg/L	1	06/01/2021 20:40	R291748
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		0.0146	mg/L	1	06/03/2021 18:53	177502
Boron	NELAP	0.0090	0.0200		0.544	mg/L	1	06/03/2021 18:53	177502
Calcium	NELAP	0.0350	0.100		372	mg/L	1	06/03/2021 18:53	177502
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 4:11	177503
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 4:11	177503
Beryllium	NELAP	0.0002	0.0010		0.0011	mg/L	5	06/08/2021 4:11	177503
Cadmium	NELAP	0.0002	0.0010		0.0015	mg/L	5	06/08/2021 4:11	177503
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	06/08/2021 4:11	177503
Cobalt	NELAP	0.0001	0.0010		0.0017	mg/L	5	06/08/2021 4:11	177503
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:11	177503
Lithium	*	0.0015	0.0030		0.0206	mg/L	5	06/08/2021 4:11	177503
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	06/08/2021 4:11	177503
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:11	177503
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	06/08/2021 4:11	177503
<i>Sample result(s) for Lithium exceed 10 times the instrument blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	06/03/2021 11:45	177506



Laboratory Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Lab ID: 21060006-004

Client Sample ID: EP-3

Matrix: GROUNDWATER

Collection Date: 05/31/2021 11:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		10	NTU	1	05/31/2021 11:10	R293760
SW-846 9040B FIELD									
pH	*	0	1.00		6.13		1	05/31/2021 11:10	R293760
<i>Field pH QC was completed but not recorded.</i>									
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		692	mg/L	1	06/03/2021 16:08	R291832
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	5	10		127	mg/L	10	06/09/2021 20:13	R293039
SW-846 9036 (TOTAL)									
Sulfate	NELAP	61	100		148	mg/L	10	06/09/2021 20:13	R293024
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.22	mg/L	1	06/01/2021 20:42	R291748
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		0.0819	mg/L	1	06/03/2021 18:55	177502
Boron	NELAP	0.0090	0.0200		0.0556	mg/L	1	06/03/2021 18:55	177502
Calcium	NELAP	0.0350	0.100		40.6	mg/L	1	06/03/2021 18:55	177502
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 4:34	177503
Arsenic	NELAP	0.0004	0.0010		0.0075	mg/L	5	06/08/2021 4:34	177503
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 4:34	177503
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 4:34	177503
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	06/08/2021 4:34	177503
Cobalt	NELAP	0.0001	0.0010		0.0912	mg/L	5	06/08/2021 4:34	177503
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:34	177503
Lithium	*	0.0015	0.0030		0.0314	mg/L	5	06/08/2021 4:34	177503
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	06/08/2021 4:34	177503
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:34	177503
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	06/08/2021 4:34	177503
<i>Sample result(s) for Lithium exceed 10 times the instrument blank contamination. Data is reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	06/03/2021 11:48	177506



Laboratory Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Lab ID: 21060006-005

Client Sample ID: EP-4

Matrix: GROUNDWATER

Collection Date: 05/31/2021 10:12

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2130 B FIELD									
Turbidity	*	1.0	1.0		19	NTU	1	05/31/2021 10:12	R293760
SW-846 9040B FIELD									
pH	*	0	1.00		5.79		1	05/31/2021 10:12	R293760
<i>Field pH QC was completed but not recorded.</i>									
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20	R	1860	mg/L	1	06/03/2021 16:09	R291832
<i>RPD for DUP was outside control limits due to sample composition.</i>									
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	5	10		484	mg/L	10	06/09/2021 20:29	R293039
SW-846 9036 (TOTAL)									
Sulfate	NELAP	123	200		670	mg/L	20	06/10/2021 2:23	R293024
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		0.10	mg/L	1	06/01/2021 20:50	R291748
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		0.0248	mg/L	1	06/03/2021 19:05	177502
Boron	NELAP	0.0090	0.0200		11.9	mg/L	1	06/03/2021 19:05	177502
Calcium	NELAP	0.0350	0.100		179	mg/L	1	06/03/2021 19:05	177502
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 4:41	177503
Arsenic	NELAP	0.0004	0.0010		0.0075	mg/L	5	06/08/2021 4:41	177503
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 4:41	177503
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 4:41	177503
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	06/08/2021 4:41	177503
Cobalt	NELAP	0.0001	0.0010		0.287	mg/L	5	06/08/2021 4:41	177503
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:41	177503
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	06/08/2021 4:41	177503
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	06/08/2021 4:41	177503
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:41	177503
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	06/08/2021 4:41	177503
<i>Contamination present in the CCB for Lithium. Sample results below the reporting limit are reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	06/03/2021 12:06	177512



Laboratory Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Lab ID: 21060006-006

Client Sample ID: Equipment Blank

Matrix: AQUEOUS

Collection Date: 05/31/2021 0:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
STANDARD METHODS 2540 C (TOTAL) 1997, 2011									
Total Dissolved Solids	NELAP	16	20		< 20	mg/L	1	06/03/2021 16:10	R291832
STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011									
Chloride	NELAP	1	1		< 1	mg/L	1	06/09/2021 20:48	R293039
SW-846 9036 (TOTAL)									
Sulfate	NELAP	6	10		< 10	mg/L	1	06/09/2021 20:48	R293024
SW-846 9214 (TOTAL)									
Fluoride	NELAP	0.04	0.10		< 0.10	mg/L	1	06/01/2021 20:52	R291748
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)									
Barium	NELAP	0.0007	0.0025		< 0.0025	mg/L	1	06/03/2021 19:06	177502
Boron	NELAP	0.0090	0.0200		< 0.0200	mg/L	1	06/03/2021 19:06	177502
Calcium	NELAP	0.0350	0.100		< 0.100	mg/L	1	06/03/2021 19:06	177502
SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)									
Antimony	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 4:49	177503
Arsenic	NELAP	0.0004	0.0010		< 0.0010	mg/L	5	06/08/2021 4:49	177503
Beryllium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 4:49	177503
Cadmium	NELAP	0.0002	0.0010		< 0.0010	mg/L	5	06/08/2021 4:49	177503
Chromium	NELAP	0.0007	0.0015		< 0.0015	mg/L	5	06/08/2021 4:49	177503
Cobalt	NELAP	0.0001	0.0010		< 0.0010	mg/L	5	06/08/2021 4:49	177503
Lead	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:49	177503
Lithium	*	0.0015	0.0030		< 0.0030	mg/L	5	06/08/2021 4:49	177503
Molybdenum	NELAP	0.0006	0.0015		< 0.0015	mg/L	5	06/08/2021 4:49	177503
Selenium	NELAP	0.0006	0.0010		< 0.0010	mg/L	5	06/08/2021 4:49	177503
Thallium	NELAP	0.0010	0.0020		< 0.0020	mg/L	5	06/08/2021 4:49	177503
<i>Contamination present in the CCB for Lithium. Sample results below the reporting limit are reportable per the TNI Standard.</i>									
SW-846 7470A (TOTAL)									
Mercury	NELAP	0.00006	0.00020		< 0.00020	mg/L	1	06/03/2021 12:13	177512



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation
Client Project: Groundwater Monitoring

Work Order: 21060006
Report Date: 01-Jul-21

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R291832		SampType: MBLK		Units mg/L						
SampID: MBLK										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	06/03/2021
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	06/03/2021
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	06/03/2021
Total Dissolved Solids		20		< 20	16.00	0	0	-100	100	06/03/2021

Batch R291832		SampType: LCS		Units mg/L						
SampID: LCS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Dissolved Solids		20		956	1000	0	95.6	90	110	06/03/2021
Total Dissolved Solids		20		942	1000	0	94.2	90	110	06/03/2021
Total Dissolved Solids		20		968	1000	0	96.8	90	110	06/03/2021
Total Dissolved Solids		20		972	1000	0	97.2	90	110	06/03/2021

Batch R291832		SampType: DUP		Units mg/L							RPD Limit 5
SampID: 21060006-001ADUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20		332				344.0	3.55	06/03/2021	

Batch R291832		SampType: DUP		Units mg/L							RPD Limit 5
SampID: 21060006-005ADUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20	R	2000				1858	7.56	06/03/2021	

Batch R291832		SampType: DUP		Units mg/L							RPD Limit 5
SampID: 21041540-006BDUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20		860				838.0	2.59	06/03/2021	

Batch R291832		SampType: DUP		Units mg/L							RPD Limit 5
SampID: 21050931-006BDUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20		1430				1406	1.69	06/03/2021	



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

STANDARD METHODS 2540 C (TOTAL) 1997, 2011

Batch R291832		SampType: DUP		Units mg/L				RPD Limit 5			
SampID: 21051587-001ADUP											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Total Dissolved Solids		20	RH	380				414.0	8.56	06/03/2021	

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R293039		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		1		< 1	0.5000	0	0	-100	100	06/09/2021	

Batch R293039		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		1		20	20.00	0	101.7	90	110	06/09/2021	

Batch R293039		SampType: MS		Units mg/L							
SampID: 21041540-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		2		78	40.00	41.77	89.9	85	115	06/09/2021	

Batch R293039		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21041540-003BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		2		77	40.00	41.77	88.6	77.73	0.66	06/09/2021	

Batch R293039		SampType: MS		Units mg/L							
SampID: 21051708-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		1		33	20.00	13.90	94.2	85	115	06/09/2021	

Batch R293039		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21051708-001BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Chloride		1		33	20.00	13.90	93.4	32.74	0.46	06/09/2021	



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

STANDARD METHODS 4500-CL E (TOTAL) 1997, 2011

Batch R293039		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060006-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		10		309	200.0	127.1	91.1	85	115	06/09/2021	

Batch R293039		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 21060006-004AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		10		312	200.0	127.1	92.6	309.4	0.98	06/09/2021		

Batch R293039		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060082-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		1		41	20.00	21.74	96.8	85	115	06/10/2021	

Batch R293039		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 21060082-006AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		1		42	20.00	21.74	99.0	41.10	1.04	06/10/2021		

Batch R293039		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060206-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		10		370	200.0	181.2	94.3	85	115	06/09/2021	

Batch R293039		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 21060206-001AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		10		370	200.0	181.2	94.4	369.8	0.04	06/09/2021		

Batch R293039		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060297-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Chloride		100		2400	2000	431.5	98.5	85	115	06/09/2021	

Batch R293039		SampType: MSD		Units mg/L							RPD Limit 15	Date Analyzed
SampID: 21060297-001AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Chloride		100		2430	2000	431.5	100.0	2401	1.21	06/09/2021		



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation
Client Project: Groundwater Monitoring

Work Order: 21060006
Report Date: 01-Jul-21

SW-846 9036 (TOTAL)

Batch R293024		SampType: MBLK		Units mg/L							
SampID: ICB/MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		< 10	6.140	0	0	-100	100	06/09/2021	

Batch R293024		SampType: LCS		Units mg/L							
SampID: ICV/LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		19	20.00	0	93.5	90	110	06/09/2021	

Batch R293024		SampType: MS		Units mg/L							
SampID: 21041540-003BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		10		33	20.00	14.77	90.6	85	115	06/09/2021	

Batch R293024		SampType: MSD		Units mg/L							
SampID: 21041540-003BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		10		33	20.00	14.77	91.4	32.89	0.52	06/09/2021	

Batch R293024		SampType: MS		Units mg/L							
SampID: 21060006-004AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		321	200.0	147.6	86.9	85	115	06/09/2021	

Batch R293024		SampType: MSD		Units mg/L							
SampID: 21060006-004AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		328	200.0	147.6	90.2	321.4	2.00	06/09/2021	

Batch R293024		SampType: MS		Units mg/L							
SampID: 21060082-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		100		449	200.0	257.3	95.8	85	115	06/10/2021	

Batch R293024		SampType: MSD		Units mg/L							
SampID: 21060082-006AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Sulfate		100		455	200.0	257.3	98.7	448.8	1.29	06/10/2021	



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 9036 (TOTAL)

Batch R293024		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060332-001BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		500	E	3020	1000	2062	95.9	90	110	06/09/2021	

Batch R293024		SampType: MSD		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 21060332-001BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		500	E	3020	1000	2062	96.2	3021	0.09	06/09/2021		

Batch R293024		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060392-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Sulfate		20		78	40.00	37.71	100.9	85	115	06/09/2021	

Batch R293024		SampType: MSD		Units mg/L							RPD Limit 10	Date Analyzed
SampID: 21060392-001AMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Sulfate		20		80	40.00	37.71	104.5	78.07	1.82	06/09/2021		

SW-846 9214 (TOTAL)

Batch R291748		SampType: MBLK		Units mg/L							Date Analyzed
SampID: MBLK											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		< 0.10	0.0070	0	0	-100	100	06/01/2021	

Batch R291748		SampType: LCS		Units mg/L							Date Analyzed
SampID: LCS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		1.06	1.000	0	106.3	90	110	06/01/2021	

Batch R291748		SampType: MS		Units mg/L							Date Analyzed
SampID: 21041540-002BMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.27	2.000	0.3480	96.1	75	125	06/01/2021	



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 9214 (TOTAL)

Batch R291748		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21041540-002BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.40	2.000	0.3480	102.4	2.270	5.40	06/01/2021	

Batch R291748		SampType: MS		Units mg/L							Date Analyzed
SampID: 21050931-003AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.22	2.000	0.1580	103.0	75	125	06/01/2021	

Batch R291748		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21050931-003AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.16	2.000	0.1580	100.1	2.217	2.60	06/01/2021	

Batch R291748		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060006-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.62	2.000	0.5960	101.1	75	125	06/01/2021	

Batch R291748		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21060006-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.62	2.000	0.5960	101.3	2.618	0.15	06/01/2021	

Batch R291748		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060010-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.69	2.000	0.6940	99.7	75	125	06/01/2021	

Batch R291748		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21060010-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.68	2.000	0.6940	99.2	2.687	0.34	06/01/2021	

Batch R291748		SampType: MS		Units mg/L							Date Analyzed
SampID: 21060082-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.22	2.000	0.2280	99.4	75	125	06/02/2021	



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 9214 (TOTAL)

Batch R291748		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21060082-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.29	2.000	0.2280	103.2	2.216	3.33	06/02/2021	

Batch R291748		SampType: MS		Units mg/L							
SampID: 21060082-006AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.47	2.000	0.4300	102.0	75	125	06/02/2021	

Batch R291748		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21060082-006AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.49	2.000	0.4300	103.0	2.471	0.77	06/02/2021	

Batch R291748		SampType: MS		Units mg/L							
SampID: 21060153-001AMS											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Fluoride		0.10		2.79	2.000	0.7620	101.5	75	125	06/02/2021	

Batch R291748		SampType: MSD		Units mg/L				RPD Limit 15			
SampID: 21060153-001AMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Fluoride		0.10		2.80	2.000	0.7620	102.0	2.792	0.36	06/02/2021	

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 177496		SampType: MBLK		Units mg/L							
SampID: MBLK-177496											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	06/02/2021	
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	06/02/2021	
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	06/02/2021	

Batch 177496		SampType: LCS		Units mg/L							
SampID: LCS-177496											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed	
Barium		0.0025		2.10	2.000	0	105.0	85	115	06/02/2021	
Boron		0.0200		0.512	0.5000	0	102.3	85	115	06/02/2021	
Calcium		0.100		2.62	2.500	0	104.9	85	115	06/02/2021	



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 177496 SampType: MS Units mg/L
 SampID: 21041540-001CMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Calcium		0.100	S	111	2.500	109.7	67.2	75	125	06/02/2021

Batch 177496 SampType: MSD Units mg/L
 SampID: 21041540-001CMSD

RPD Limit 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Calcium		0.100	S	114	2.500	109.7	166.0	111.4	2.19	06/02/2021

Batch 177496 SampType: MS Units mg/L
 SampID: 21060006-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		2.15	2.000	0.05050	105.0	75	125	06/02/2021
Boron		0.0200		0.527	0.5000	0.01580	102.2	75	125	06/02/2021
Calcium		0.100		16.0	2.500	13.27	111.2	75	125	06/02/2021

Batch 177496 SampType: MSD Units mg/L
 SampID: 21060006-001BMSD

RPD Limit 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Barium		0.0025		2.12	2.000	0.05050	103.5	2.150	1.41	06/02/2021
Boron		0.0200		0.521	0.5000	0.01580	101.0	0.5266	1.09	06/02/2021
Calcium		0.100		15.8	2.500	13.27	101.6	16.05	1.51	06/02/2021

Batch 177502 SampType: MBLK Units mg/L
 SampID: MBLK-177502

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		< 0.0025	0.0007	0	0	-100	100	06/03/2021
Boron		0.0200		< 0.0200	0.0090	0	0	-100	100	06/03/2021
Calcium		0.100		< 0.100	0.0350	0	0	-100	100	06/03/2021

Batch 177502 SampType: LCS Units mg/L
 SampID: LCS-177502

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Barium		0.0025		2.08	2.000	0	104.0	85	115	06/03/2021
Boron		0.0200		0.509	0.5000	0	101.8	85	115	06/03/2021
Calcium		0.100		2.59	2.500	0	103.6	85	115	06/03/2021



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 177497 SampType: MBLK Units mg/L
 SampID: MBLK-177497

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	06/08/2021
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	06/08/2021
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	06/11/2021
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	06/08/2021
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	06/08/2021
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	06/08/2021
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	06/08/2021
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	06/11/2021
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	06/08/2021
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	06/08/2021
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	06/08/2021

Batch 177497 SampType: LCS Units mg/L
 SampID: LCS-177497

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.559	0.5000	0	111.7	85	115	06/08/2021
Arsenic		0.0010		0.562	0.5000	0	112.4	85	115	06/08/2021
Beryllium		0.0010		0.0495	0.0500	0	98.9	85	115	06/11/2021
Cadmium		0.0010		0.0511	0.0500	0	102.2	85	115	06/08/2021
Chromium		0.0015		0.201	0.2000	0	100.7	85	115	06/08/2021
Cobalt		0.0010		0.507	0.5000	0	101.5	85	115	06/08/2021
Lead		0.0010		0.528	0.5000	0	105.6	85	115	06/08/2021
Lithium	*	0.0030		0.519	0.5000	0	103.8	85	115	06/11/2021
Molybdenum		0.0015		0.522	0.5000	0	104.5	85	115	06/08/2021
Selenium		0.0010		0.554	0.5000	0	110.8	85	115	06/08/2021
Thallium		0.0020		0.257	0.2500	0	102.7	85	115	06/08/2021



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 177497 **SampType: MS** Units mg/L
 SampID: 21060006-001BMS

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.554	0.5000	0	110.8	75	125	06/08/2021
Arsenic		0.0010		0.552	0.5000	0	110.4	75	125	06/08/2021
Beryllium		0.0010		0.0527	0.0500	0	105.4	75	125	06/22/2021
Cadmium		0.0010		0.0512	0.0500	0	102.3	75	125	06/08/2021
Chromium		0.0015		0.198	0.2000	0	98.8	75	125	06/08/2021
Cobalt		0.0010		0.506	0.5000	0.0002296	101.1	75	125	06/08/2021
Lead		0.0010		0.552	0.5000	0	110.4	75	125	06/08/2021
Lithium	*	0.0030		0.578	0.5000	0.02074	111.4	75	125	06/23/2021
Molybdenum		0.0015		0.533	0.5000	0.01447	103.8	75	125	06/08/2021
Selenium		0.0010		0.539	0.5000	0	107.8	75	125	06/08/2021
Thallium		0.0020		0.263	0.2500	0	105.1	75	125	06/08/2021

Batch 177497 **SampType: MSD** Units mg/L
 SampID: 21060006-001BMSD

RPD Limit 20

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony		0.0010		0.548	0.5000	0	109.6	0.5542	1.16	06/08/2021
Arsenic		0.0010		0.547	0.5000	0	109.5	0.5520	0.85	06/08/2021
Beryllium		0.0010		0.0521	0.0500	0	104.2	0.05272	1.13	06/22/2021
Cadmium		0.0010		0.0504	0.0500	0	100.7	0.05115	1.55	06/08/2021
Chromium		0.0015		0.197	0.2000	0	98.7	0.1976	0.09	06/08/2021
Cobalt		0.0010		0.504	0.5000	0.0002296	100.8	0.5058	0.35	06/08/2021
Lead		0.0010		0.540	0.5000	0	107.9	0.5520	2.26	06/08/2021
Lithium	*	0.0030		0.589	0.5000	0.02074	113.6	0.5776	1.88	06/23/2021
Molybdenum		0.0015		0.530	0.5000	0.01447	103.0	0.5333	0.70	06/08/2021
Selenium		0.0010		0.531	0.5000	0	106.1	0.5390	1.55	06/08/2021
Thallium		0.0020		0.259	0.2500	0	103.7	0.2628	1.35	06/08/2021



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 177503 SampType: MBLK Units mg/L
 SampID: MBLK-177503

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		< 0.0010	0.0004	0	0	-100	100	06/08/2021
Arsenic		0.0010		< 0.0010	0.0004	0	0	-100	100	06/08/2021
Beryllium		0.0010		< 0.0010	0.0002	0	0	-100	100	06/08/2021
Cadmium		0.0010		< 0.0010	0.0001	0	0	-100	100	06/08/2021
Chromium		0.0015		< 0.0015	0.0007	0	0	-100	100	06/08/2021
Cobalt		0.0010		< 0.0010	0.0001	0	0	-100	100	06/08/2021
Lead		0.0010		< 0.0010	0.0006	0	0	-100	100	06/08/2021
Lithium	*	0.0030		< 0.0030	0.0015	0	0	-100	100	06/08/2021
Molybdenum		0.0015		< 0.0015	0.0006	0	0	-100	100	06/08/2021
Selenium		0.0010		< 0.0010	0.0006	0	0	-100	100	06/08/2021
Thallium		0.0020		< 0.0020	0.0010	0	0	-100	100	06/08/2021

Batch 177503 SampType: LCS Units mg/L
 SampID: LCS-177503

Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.537	0.5000	0	107.5	80	120	06/08/2021
Arsenic		0.0010		0.538	0.5000	0	107.5	80	120	06/08/2021
Beryllium		0.0010		0.0463	0.0500	0	92.6	80	120	06/08/2021
Cadmium		0.0010		0.0495	0.0500	0	99.0	80	120	06/08/2021
Chromium		0.0015		0.196	0.2000	0	97.9	80	120	06/08/2021
Cobalt		0.0010		0.490	0.5000	0	98.0	80	120	06/08/2021
Lead		0.0010		0.513	0.5000	0	102.5	80	120	06/08/2021
Lithium	*	0.0030		0.468	0.5000	0	93.6	80	120	06/08/2021
Molybdenum		0.0015		0.505	0.5000	0	101.1	80	120	06/08/2021
Selenium		0.0010		0.518	0.5000	0	103.6	80	120	06/08/2021
Thallium		0.0020		0.248	0.2500	0	99.2	80	120	06/08/2021



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 3005A, 6020A, METALS BY ICPMS (TOTAL)

Batch 177503		SampType: MS		Units mg/L						
SampID: 21060006-003BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony		0.0010		0.543	0.5000	0	108.6	75	125	06/08/2021
Arsenic		0.0010		0.549	0.5000	0.0007421	109.6	75	125	06/08/2021
Beryllium		0.0010		0.0486	0.0500	0.001109	95.0	75	125	06/08/2021
Cadmium		0.0010		0.0517	0.0500	0.001530	100.3	75	125	06/08/2021
Chromium		0.0015		0.192	0.2000	0.0007841	95.7	75	125	06/08/2021
Cobalt		0.0010		0.495	0.5000	0.001655	98.7	75	125	06/08/2021
Lead		0.0010		0.504	0.5000	0	100.8	75	125	06/08/2021
Lithium	*	0.0030		0.500	0.5000	0.02057	95.9	75	125	06/08/2021
Molybdenum		0.0015		0.527	0.5000	0	105.4	75	125	06/08/2021
Selenium		0.0010		0.518	0.5000	0	103.7	75	125	06/08/2021
Thallium		0.0020		0.243	0.2500	0	97.2	75	125	06/08/2021

Batch 177503		SampType: MSD		Units mg/L							RPD Limit 20	
SampID: 21060006-003BMSD												
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed		
Antimony		0.0010		0.537	0.5000	0	107.4	0.5432	1.11	06/08/2021		
Arsenic		0.0010		0.547	0.5000	0.0007421	109.3	0.5485	0.22	06/08/2021		
Beryllium		0.0010		0.0493	0.0500	0.001109	96.5	0.04861	1.50	06/08/2021		
Cadmium		0.0010		0.0514	0.0500	0.001530	99.8	0.05168	0.47	06/08/2021		
Chromium		0.0015		0.198	0.2000	0.0007841	98.4	0.1921	2.79	06/08/2021		
Cobalt		0.0010		0.496	0.5000	0.001655	98.9	0.4952	0.21	06/08/2021		
Lead		0.0010		0.505	0.5000	0	101.0	0.5039	0.23	06/08/2021		
Lithium	*	0.0030		0.511	0.5000	0.02057	98.0	0.5001	2.09	06/08/2021		
Molybdenum		0.0015		0.522	0.5000	0	104.4	0.5272	1.02	06/08/2021		
Selenium		0.0010		0.513	0.5000	0	102.6	0.5184	1.09	06/08/2021		
Thallium		0.0020		0.258	0.2500	0	103.1	0.2429	5.90	06/08/2021		

SW-846 7470A (TOTAL)

Batch 177506		SampType: MBLK		Units mg/L						
SampID: MBLK-177506										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	06/03/2021



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 7470A (TOTAL)

Batch 177506		SampType: LCS		Units mg/L						
SampID: LCS-177506										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00492	0.0050	0	98.4	85	115	06/03/2021

Batch 177506		SampType: MS		Units mg/L						
SampID: 21060006-001BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00507	0.0050	0	101.4	75	125	06/03/2021

Batch 177506		SampType: MSD		Units mg/L							RPD Limit 15
SampID: 21060006-001BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00497	0.0050	0	99.3	0.005068	2.05	06/03/2021	

Batch 177512		SampType: MBLK		Units mg/L						
SampID: MBLK-177512										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		< 0.00020	0.0001	0	0	-100	100	06/03/2021

Batch 177512		SampType: LCS		Units mg/L						
SampID: LCS-177512										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00514	0.0050	0	102.7	85	115	06/03/2021

Batch 177512		SampType: MS		Units mg/L						
SampID: 21060006-005BMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00416	0.0050	0	83.1	75	125	06/03/2021

Batch 177512		SampType: MSD		Units mg/L							RPD Limit 15
SampID: 21060006-005BMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00408	0.0050	0	81.6	0.004157	1.88	06/03/2021	

Batch 177512		SampType: MS		Units mg/L						
SampID: 21060082-006DMS										
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury		0.00020		0.00508	0.0050	0	101.7	75	125	06/03/2021



Quality Control Results

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

SW-846 7470A (TOTAL)

Batch 177512		SampType: MSD		Units mg/L				RPD Limit 15			Date Analyzed
SampID: 21060082-006DMSD											
Analyses	Cert	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed	
Mercury		0.00020		0.00504	0.0050	0	100.8	0.005083	0.82	06/03/2021	



Receiving Check List

<http://www.teklabinc.com/>

Client: Southern Illinois Power Cooperation

Work Order: 21060006

Client Project: Groundwater Monitoring

Report Date: 01-Jul-21

Carrier: Tim Mathis

Received By: ERH

Completed by: *Marvin L. Darling II*

Reviewed by: *Elizabeth A. Hurley*

On:

On:

01-Jun-21

01-Jun-21

Marvin L. Darling

Elizabeth A. Hurley

Pages to follow: Chain of custody

Extra pages included

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Temp °C 0.6
Type of thermal preservation?	None <input type="checkbox"/>	Ice <input checked="" type="checkbox"/>	Blue Ice <input type="checkbox"/>	Dry Ice <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Reported field parameters measured:	Field <input checked="" type="checkbox"/>	Lab <input type="checkbox"/>	NA <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
<i>When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.</i>				
Water - at least one vial per sample has zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials <input checked="" type="checkbox"/>	
Water - TOX containers have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No TOX containers <input checked="" type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>	
NPDES/CWA TCN interferences checked/treated in the field?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	

Any No responses must be detailed below or on the COC.

pH strip# 75145. ERH 6/1/21

Additional nitric acid (76862) was needed in EBG upon arrival at the laboratory. ERH 6/1/21

MS/MSD containers for EBG are field-labeled as EPG. ERH 6/1/21

CHAIN OF CUSTODY

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

pg. 1 of 1 Work order # 2100000

Client: Southern Illinois Power Cooperation
Address: 11543 Lake of Egypt Road
 Marion, IL 62959
City / State / Zip: Marion, IL 62959
Contact: Jason McLaurin (618) 964-1448
E-Mail: jmclaurin@spower.org

Samples on: ICE BLUE ICE NO ICE OTC DTC
Preserved in: LAB FIELD **FOR LAB USE ONLY**
Lab Notes: (S) 166 SAMPLE NO BY EMPLOYEE NOT MATCH
 2000 HWL (118802) ID: E41 CONTAINERS CONTAINED

Client Comments: E4 0/1/21
 ICP: Ba B C
 ICP/MS: Sb As Be Cd Cr Co Pb Li Mo Se Ti
 * MS/MSD

Are these samples known to be involved in litigation? If yes, a surcharge will apply Yes No
 Are these samples known to be hazardous? Yes No
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. Yes No

Project Name/Number	Sample Collector's Name	Billing Instructions		Date/Time Sampled	# and Type of Containers	
		Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)	Other		UNP	HNO3
Groundwater Monitoring	S. RILEY / M. MATTHEWS			5/31/21 1344	1	1
				5/31/21 1220	1	1
				5/31/21 1144	1	1
				5/31/21 1110	1	1
				5/31/21 1012	1	1
				EQUIPMENT BANK 5-31-21	1	1

Matrix	INDICATE ANALYSIS REQUESTED											
	Chloride	Field pH	Field Turbidity	Fluoride	ICP Metals	ICP/MS Metals	Mercury	Sulfate	TDS			
Groundwater	X	X	X	X	X	X	X	X	X	X	X	X
Aquatics												

Relinquished By	Date/Time	Received By	Date/Time
<i>[Signature]</i>	10.1.21 0850	<i>[Signature]</i>	09/17/21 0800