From:	Dan Figac
To:	IDEM OLQ Solid Waste Permits Submittals
Cc:	Fracetti, Juliana; Monroe, Lucas H; IDEM Permits Geology Electronic Data File; nmuller@republicservices.com; acox@republicservices.com; Ellen O"Neil; Timothy Bannister; Joshua Pigg
Subject:	Sycamore Ridge LF, FP#84-06 November 2023 Semi-Annual GW Report
Date:	Tuesday, July 2, 2024 3:55:33 PM
Attachments:	Outlook-Inline ima.png Sycamore Ridge Landfill FP# 84-06 2024-07-02.pdf SRLF_IDEM_202405.txt

Juliana and Lucas, on behalf of Sycamore Ridge Landfill, attached is the subject report. Also attached for geologydata@idem.in.gov is the EDF for the sampling event. If you have any questions, don't hesitate to call or email.

Thank you,

Dan Figac
Geologist

SESCO Group
5154 E 65th St
Indianapolis, IN 46220
sescogroup.com

Dan's Cell: 317-523-4753

REPUBLIC SERVICES

Sustainability in Action

July 2, 2024

Juliana Fracetti, Permit Manager
Indiana Department of Environmental Management
Office of Land Quality
Solid Waste Permits
IGCN 1101
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

RE: Ground Water Quality Monitoring Report for May 2024 Event
Sycamore Ridge Landfill, Vigo County; FP#84-06

Dear Ms. Fracetti,

The report for ground water monitoring conducted in May 2024 is attached.

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 need additional information, please call Tim Bannister, SESCO Group, at 317-372-4640.

Sincerely,

Nathan C. Muller, CHMM
Environmental Manager

Enc.

cc: Lucas Monroe, IDEM (via email)
Alan Cox, Sycamore Ridge Landfill (for site record)

SESCO group

Environmental Solutions

July 2, 2024

Mr. Nathan Muller
Republic Services, Inc.
832 Langsdale Avenue
Indianapolis, Indiana 46202

RE: Ground Water Quality Monitoring Report for May 2024 Event
Sycamore Ridge Landfill, Vigo County, FP#84-06

Dear Mr. Muller,

In accordance with 329 IAC 10-21, a semi-annual ground water monitoring event was conducted at the above referenced facility on May 14-16, 2024. A report for the groundwater sampling is attached.

A copy of the laboratory and field data from the monitoring event and a PDF of the monitoring report are being transmitted electronically to IDEM (geologydata@idem.in.gov), as provided in the facility's solid waste permit.

If you have any questions or comments regarding this report, please call me at (317) 372-4640.

Sincerely,

Timothy A. Bannister, LPG#1850
Senior Project Manager

Enclosure

GROUND WATER QUALITY MONITORING REPORT
MAY 2024 SEMI-ANNUAL SAMPLING EVENT

Sycamore Ridge Landfill
5621 E. Cottom Drive
Pimento, Indiana 47866
Vigo County
FP# 84-06
SESCO Project #4527

Prepared By:

5154 E 65th Street
Indianapolis, Indiana 46220

July 2024

SYCAMORE RIDGE LANDFILL, FP#84-06
GROUND WATER QUALITY MONITORING REPORT
FOR MAY 2024 SEMI-ANNUAL EVENT

TABLE OF CONTENTS **Page No.**

LIST OF FIGURES (following text)

LIST OF TABLES (following figures)

LIST OF APPENDICES

1.0 INTRODUCTION

This semi-annual ground water monitoring report provides information from semi-annual sampling conducted on May 14-16, 2024, at the Sycamore Ridge Landfill. Sampling was conducted by SESCO Group. Laboratory analyses were conducted by Pace Analytical Services.

In compliance with 329 IAC 10-21-1(s), this report includes:

- Ground water potentiometric maps including static water level elevations;
- Laboratory report(s) with chain(s) of custody;
- Field data sheets; and,
- A statistical evaluation.

A copy of the laboratory and field data is being transmitted electronically to IDEM, as provided in the facility's solid waste permit.

2.0 WELL INFORMATION AND WATER LEVEL MAPPING

Wells comprising the monitoring network are listed in **Table 1**. Ground water level observations are listed on the Potentiometric Surface Map (**Figure 1**).

The ground water flow direction for the May event is similar to historical, i.e., from the southeast to the west and northwest.

The Sycamore Ridge Landfill is located within a reclaimed strip-mine. For purposes of landfill ground water monitoring requirements, the uppermost monitorable unit is the mine spoil/shot rock that occupies the uppermost 75 to 100 feet of the subsurface.

Historical potentiometric surface maps from the site indicate the ground water flow direction across the facility is typically in the north to northwest direction, towards a final cut lake from a strip-mine.

3.0 SAMPLE IDENTIFICATION AND INFORMATION

Sample identification numbers in the laboratory results correspond to well identification numbers, with the following exceptions:

Well ID	Lab Sample ID	Sample Date
MW-8 (duplicate)	MW-29	05/2024
MW-12 (duplicate)	MW-33	05/2024

Samples from the required monitoring wells (see **Table 1**) were analyzed for the detection constituents (Tables 1A and 1B) of 329 IAC 10-21 for the May 2024 event.

4.0 QA/QC SAMPLES AND RESULTS

Two (2) field duplicates (at MW-8 and MW-12), an equipment blank (for all constituents), a trip blank (for Table 1A VOCs), a field blank (for all constituents), and matrix spike/matrix spike duplicate samples were collected and analyzed for the May 2024 event.

Table 2 provides a duplicate evaluation. RPDs were less than approximately 20% for all constituents.

5.0 DATA EVALUATION PROCEDURES AND RESULTS

5.1 Procedures

According to the site's Statistical Evaluation Plan (StEP) Addendum (September 2023), statistical analysis is based on intrawell methodology utilizing CUSUM, and standardized mean values displayed as control charts for each parameter/well pair with a background detection frequency greater than 25%. The control charts utilize the most normal of non-transformed or log-transformed data, but if a trend was detected in the background data, a Mann-Kendall trend analysis is used in lieu of a control chart. Where the detection frequency was less than 25%, sample concentrations are compared to non-parametric prediction limits. The September 2023 StEP Addendum evaluated background data through May 2023 and determined outliers for that data. In addition to outliers that were determined by statistical testing, dissolved iron values prior to May 2010 were set as outliers in the StEP Addendum. IDEM approved the StEP Addendum by letter dated December 3, 2021. The next update of the background will include data through May 2025. MW-6 and MW-7 were added to the monitoring program in 2021. Background data is being collected and the wells now have five sets of results.

Statistical analyses for the May 2024 data were performed utilizing the Sanitas software, which offers improved graphics capabilities over the software used prior to May 2020. Settings in Sanitas were set to mimic as closely as possible the previously used analyses.

In addition to the above statistical analyses, the results were compared to Federal Maximum Contaminant Levels (MCLs) and Secondary Maximum Contaminant Levels (SMCLs) (see **Table 3**).

5.2 Results

Laboratory analytical results are provided in **Appendix 1** followed by the field data sheets in **Appendix 2**. Statistical output is in **Appendix 3**. There were no detections of VOCs in the monitoring well samples and no primary drinking water standards were exceeded for 329 IAC 10-21 Table 1A parameters. Dissolved arsenic was detected above the MCL (10 ug/L) at MW-8 (10.5/11.1 ug/L), MW-9R (12.1 ug/L), MW-11 (19.7 ug/L), and MW-12 (10.3 ug/L). Exceedances are discussed in **Section 6**.

For parameters lacking a long-term trend in each well's background, a control chart summary and control charts/ intrawell prediction limit charts are provided at the beginning of **Appendix 3**. The summary lists the various statistical data, including % non-detects and transformation.

For parameters that the StEP Addendum identified as having a positive long-term trend in a well's background (see **Table 4** of this report), a trend test summary page and Sen's Slope charts are provided in **Appendix 3** following the control charts. The trends were evaluated based on the more recent data since November 2016. Results for those datasets having a long-term trend are shown in **Table 4**. Well/parameter pairs that show a recent positive trend are highlighted in yellow and are therefore also included as an SSI in **Table 5**.

6.0 DISCUSSION OF EXCEEDANCES

6.1 Statistical Exceedances

Table 5 lists the statistically significant increases (SSIs) for the May 2024 sampling event based on recent trends and the control chart results. There was a significant positive recent trend for four results not subject to control chart testing (see yellow-highlighted results in **Table 4**): ammonia at MW-1R, chloride at MW-13 (bg), dissolved manganese at MW-9R, and sodium at MW-9R. There were no control chart exceedances listed by Sanitas for results subject to trend testing. The following discussions of exceedances are presented as demonstrations under the provisions of 329 IAC 10-21-9 to show that the SSIs are an artifact of the statistical techniques, database limitations, and variations in groundwater quality unrelated to the waste disposal.

MW-13 is a background monitoring well at a significant distance from the waste. Winter road deicing is a likely source of chloride as concentrations have decreased since the November 2022 event. Ammonia levels have decreased even further since the May 2023 sampling event and were not detected for the current sampling event.

Although there are recent upward trends for ammonia and chloride in MW-1R, the concentrations remain at very low levels and are both below historic concentrations observed at up gradient well MW-13.

Dissolved manganese showed a recent positive trend at MW-9R. In addition to other metals, manganese can be elevated in mine spoil areas. Chloride and ammonia are both very low at this well for the current event:

Well:	Ammonia (mg/L):	Chloride (mg/L):
MW-1R	0.57	19.0
MW-9R	<0.02	13.8

Dissolved sodium exhibited a recent positive trend at MW-9R. The dissolved sodium at MW-9R is less than that observed in upgradient MW-13 and as noted above, chloride and ammonia are

low at MW-9R. Therefore, the increasing sodium at MW-9R is likely due to upgradient influences. VOCs were not detected.

6.2 MCL/SMCL Exceedances

Table 3 lists Federal MCL/SMCL exceedances for the current data. SMCL levels are listed for aesthetic considerations rather than health-based concerns.

The only MCL exceedance was for dissolved arsenic. Dissolved arsenic was detected above the MCL at MW-8, MW-9R, MW-11, and MW-12 for May 2024. Arsenic had been detected prior to the deposition of waste in an upgradient cell, and arsenic is also a common component of coal mine spoil terrains, like the terrain found at Sycamore Ridge. Also, in previous events, dissolved arsenic had exceeded the MCL in several downgradient monitoring wells. Because of the naturally occurring arsenic, the consistent historical detections, and low levels of ammonia and chloride in these wells, the MCL exceedances are not considered a result of waste disposal at the site.

Similarly, the May 2024 ground water concentrations were compared to the SMCLs. Four (4) parameters (sulfate, dissolved iron, dissolved manganese, and total dissolved solids) exceeded the respective SMCLs on a near site-wide basis.

Sulfate, manganese, and iron are common, naturally occurring materials that are typically found in soil/mine spoil and in ground water associated with strip mined areas. Similarly, the total dissolved solids concentration is related to the preceding concentrations since they make up part of the dissolved solids. The dissolved manganese, dissolved iron, and total dissolved solids concentrations have historically exceeded the SMCLs at Sycamore Ridge since the onset of ground water sampling.

Because the MCL/SMCL exceedances are naturally occurring parameters typical of coal mine spoil that were generally present at levels exceeding the MCL/SMCL prior to landfill development, and/or the May 2024 concentrations are within historical background ranges, no further action is proposed.

7.0 SUMMARY

For the current sampling event:

- No VOCs were detected in the ground water samples; and,
- Exceedances are attributable to the mine spoil environment and road deicing activities.

Appendix 1

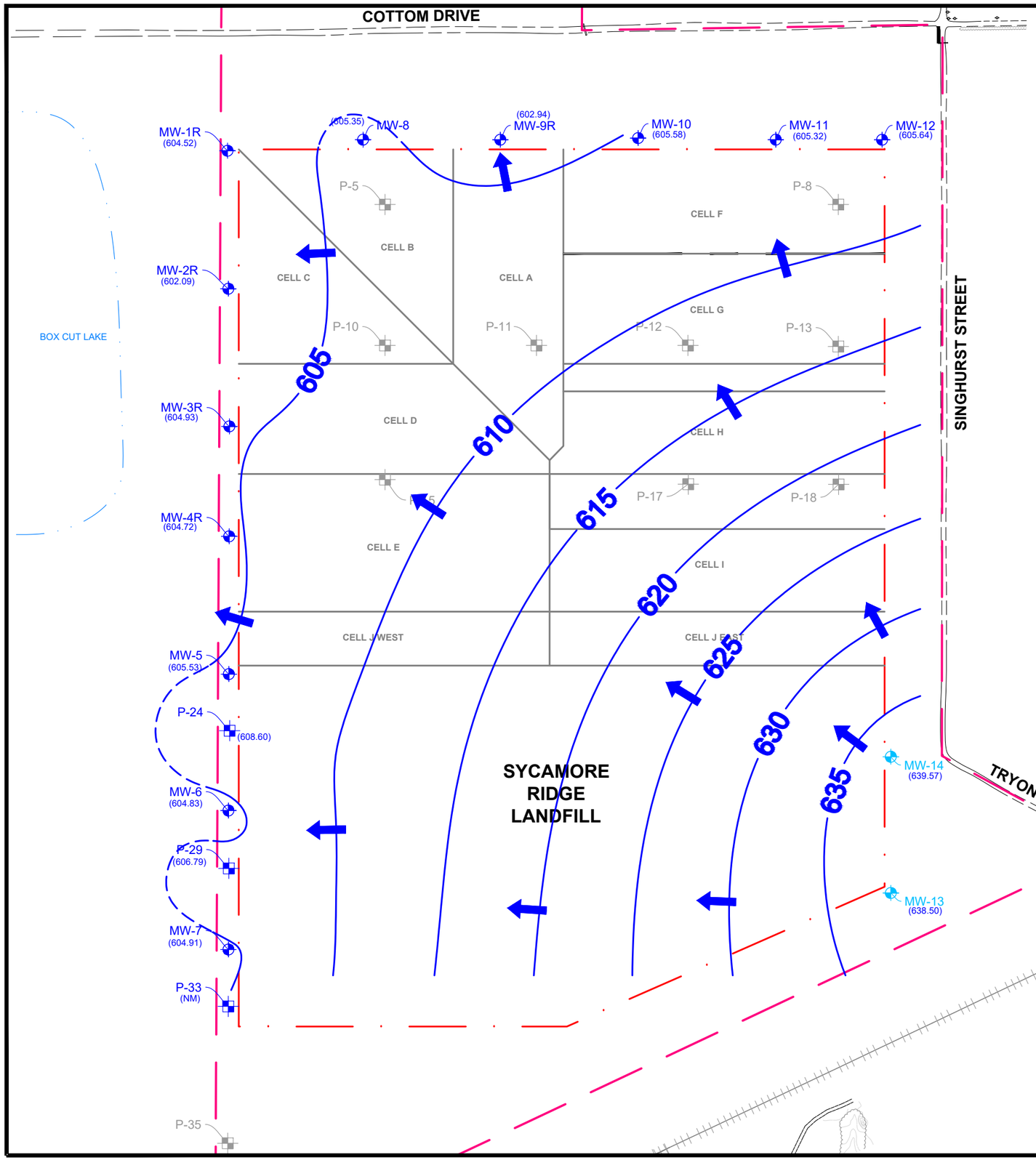
Laboratory Reports

Appendix 2

Field Data Sheets

Appendix 3

Statistical Output



WELL ID	DATE	TIME	GROUND ELEVATION (FT. MSL)	DATUM ELEVATION (FT. MSL)	DEPTH TO WATER (FT)	GROUND WATER ELEVATION (FT. MSL)
MW-10	5/14/2024	5:53 PM	645.6	647.75	42.17	605.58
MW-11	5/14/2024	5:58 PM	636.5	639.3	33.98	605.32
MW-12	5/14/2024	6:05 PM	627.4	629.95	24.31	605.64
MW-13	5/14/2024	10:30 AM	670.7	672.55	34.05	638.50
MW-14	5/14/2024	11:35 AM	670.2	672.45	32.88	639.57
MW-1R	5/14/2024	6:12 PM	643	645.07	40.55	604.52
MW-2R	5/14/2024	6:08 PM	649.3	651.72	49.63	602.09
MW-3R	5/14/2024	4:55 PM	652.3	654.62	49.69	604.93
MW-4R	5/14/2024	4:00 PM	653.6	656.6	51.88	604.72
MW-5	5/14/2024	2:15 PM	657	659.63	54.10	605.53
MW-6	5/14/2024	1:30 PM	657.1	659.06	54.23	604.83
MW-7	5/14/2024	12:40 PM	657	659.48	54.57	604.91
MW-8	5/14/2024	5:45 PM	649.1	651.38	46.03	605.35
MW-9R	5/14/2024	5:50 PM	648.4	650.49	47.55	602.94
P-24	5/14/2024	1:12 PM	656.4	658.8	50.20	608.60
P-29	5/14/2024	1:10 PM	657.5	659.6	52.81	606.79

SCALE IN FEET
0 200 400
1" = 400'- 0"

LEGEND

- MONITORING WELL UPGRADIENT
- MONITORING WELL DOWNGRADIENT
- PIEZOMETER DOWNGRADIENT
- PIEZOMETER ABANDONED/DESTROYED
- PROPERTY BOUNDARY
- SOLID WASTE BOUNDARY
- CELL BOUNDARY
- RAILROAD
- TREES
- (100.00) GROUNDWATER ELEVATION
- (NM) NOT MEASURED
- GROUNDWATER FLOW
- CONTOUR LINE
- CONTOUR INTERVAL - 5 FOOT

POTENTIOMETRIC SURFACE MAP
MAY 14, 2024

SYCAMORE RIDGE LANDFILL
VIGO COUNTY, INDIANA

DRAWN BY: SWB REVIEWED BY: TAB	DATE: 06-24-2024	PROJECT # 4527	FIGURE # 1

SESCO group

Table 1
Ground Water Monitoring Network
Sycamore Ridge Landfill
May 2024

Well Identification	Hydraulic Location
MW-1R	down
MW-2R	down
MW-3R	down
MW-4R	down
MW-5	down
MW-6*	down
MW-7*	down
MW-8	down
MW-9R	down
MW-10	down
MW-11	down
MW-12	down
MW-13	up
MW-14	up
P-24**	down
P-29**	down

*- currently sampled for background water quality only
**-currently used for water levels only

TABLE 2: DUPLICATE ANALYTICAL RESULTS SUMMARY
SYCAMORE RIDGE LANDFILL
May 2024

WellName	Constituent	Duplicate	Regular	RDP%
MW-12	1,1,1,2-Tetrachloroethane(ug/L)	<1	<1	0.0
MW-12	1,1,1-Trichloroethane(ug/L)	<1	<1	0.0
MW-12	1,1,2,2-Tetrachloroethane(ug/L)	<1	<1	0.0
MW-12	1,1,2-Trichloroethane(ug/L)	<1	<1	0.0
MW-12	1,1-Dichloroethane(ug/L)	<1	<1	0.0
MW-12	1,1-Dichloroethylene(ug/L)	<1	<1	0.0
MW-12	1,2-Dichlorobenzene(o)(ug/L)	<1	<1	0.0
MW-12	1,2-Dichloroethane(ug/L)	<1	<1	0.0
MW-12	1,2-Dichloropropane(ug/L)	<1	<1	0.0
MW-12	1,4-Dichlorobenzene(p)(ug/L)	<1	<1	0.0
MW-12	Alkalinity(mg/L)	522	519	-0.6
MW-12	Ammonia(mg/L)	0.92	1	8.3
MW-12	Arsenic (Dissolved)(ug/L)	12.1	14.5	18.0
MW-12	Benzene(ug/L)	<1	<1	0.0
MW-12	Bicarbonate alkalinity(mg/L)	522	519	-0.6
MW-12	Bromomethane(ug/L)	<2	<2	0.0
MW-12	Cadmium (Dissolved)(ug/L)	<3	<3	0.0
MW-12	Calcium (Dissolved)(ug/L)	183000	180000	-1.7
MW-12	Carbon tetrachloride(ug/L)	<1	<1	0.0
MW-12	Carbonate alkalinity(mg/L)	<20	<20	0.0
MW-12	Chloride(mg/L)	22.5	23.6	4.8
MW-12	Chlorobenzene(ug/L)	<1	<1	0.0
MW-12	Chloroethane(ug/L)	<1	<1	0.0
MW-12	Chloroform(ug/L)	<1	<1	0.0
MW-12	Chloromethane(ug/L)	<1	<1	0.0
MW-12	Chromium (Dissolved)(ug/L)	<5	<5	0.0
MW-12	cis-1,2-Dichloroethylene(ug/L)	<1	<1	0.0
MW-12	cis-1,3-Dichloropropylene(ug/L)	<1	<1	0.0
MW-12	Copper (Dissolved)(ug/L)	<10	<10	0.0
MW-12	Ethyl Benzene(ug/L)	<1	<1	0.0
MW-12	Iron (Dissolved)(ug/L)	5340	5330	-0.2
MW-12	Magnesium (Dissolved)(ug/L)	78000	77700	-0.4
MW-12	Manganese (Dissolved)(ug/L)	1870	1850	-1.1
MW-12	Methylene chloride(ug/L)	<3	<3	0.0
MW-12	Potassium (Dissolved)(ug/L)	3550	3520	-0.8
MW-12	Sodium (Dissolved)(ug/L)	77500	77500	0.0
MW-12	Styrene(ug/L)	<1	<1	0.0
MW-12	Sulfate(mg/L)	504	495	-1.8
MW-12	Tetrachloroethylene(ug/L)	<1	<1	0.0
MW-12	Toluene(ug/L)	<1	<1	0.0
MW-12	Total dissolved solids(mg/L)	1170	1240	5.8
MW-12	Total solids(mg/L)	2470	2410	-2.5
MW-12	trans-1,2-Dichloroethylene(ug/L)	<1	<1	0.0
MW-12	trans-1,3-Dichloropropylene(ug/L)	<1	<1	0.0
MW-12	Trichloroethylene(ug/L)	<1	<1	0.0
MW-12	Trichlorofluoromethane(ug/L)	<5	<5	0.0
MW-12	Vinyl chloride(ug/L)	<2	<2	0.0
MW-12	Xylenes (Total)(ug/L)	<2	<2	0.0
MW-8	1,1,1,2-Tetrachloroethane(ug/L)	<1	<1	0.0
MW-8	1,1,1-Trichloroethane(ug/L)	<1	<1	0.0
MW-8	1,1,2,2-Tetrachloroethane(ug/L)	<1	<1	0.0
MW-8	1,1,2-Trichloroethane(ug/L)	<1	<1	0.0
MW-8	1,1-Dichloroethane(ug/L)	<1	<1	0.0
MW-8	1,1-Dichloroethylene(ug/L)	<1	<1	0.0
MW-8	1,2-Dichlorobenzene(o)(ug/L)	<1	<1	0.0
MW-8	1,2-Dichloroethane(ug/L)	<1	<1	0.0
MW-8	1,2-Dichloropropane(ug/L)	<1	<1	0.0

TABLE 2: DUPLICATE ANALYTICAL RESULTS SUMMARY
SYCAMORE RIDGE LANDFILL
May 2024

WellName	Constituent	Duplicate	Regular	RDP%
MW-8	1,4-Dichlorobenzene(p)(ug/L)	<1	<1	0.0
MW-8	Alkalinity(mg/L)	527	528	0.2
MW-8	Ammonia(mg/L)	0.35	0.39	10.8
MW-8	Arsenic (Dissolved)(ug/L)	10.5	11.1	5.6
MW-8	Benzene(ug/L)	<1	<1	0.0
MW-8	Bicarbonate alkalinity(mg/L)	527	528	0.2
MW-8	Bromomethane(ug/L)	<2	<2	0.0
MW-8	Cadmium (Dissolved)(ug/L)	<3	<3	0.0
MW-8	Calcium (Dissolved)(ug/L)	235000	234000	-0.4
MW-8	Carbon tetrachloride(ug/L)	<1	<1	0.0
MW-8	Carbonate alkalinity(mg/L)	<20	<20	0.0
MW-8	Chloride(mg/L)	22.6	22.1	-2.2
MW-8	Chlorobenzene(ug/L)	<1	<1	0.0
MW-8	Chloroethane(ug/L)	<1	<1	0.0
MW-8	Chloroform(ug/L)	<1	<1	0.0
MW-8	Chloromethane(ug/L)	<1	<1	0.0
MW-8	Chromium (Dissolved)(ug/L)	<5	<5	0.0
MW-8	cis-1,2-Dichloroethylene(ug/L)	<1	<1	0.0
MW-8	cis-1,3-Dichloropropylene(ug/L)	<1	<1	0.0
MW-8	Copper (Dissolved)(ug/L)	<10	<10	0.0
MW-8	Ethyl Benzene(ug/L)	<1	<1	0.0
MW-8	Iron (Dissolved)(ug/L)	1970	2000	1.5
MW-8	Magnesium (Dissolved)(ug/L)	93000	94600	1.7
MW-8	Manganese (Dissolved)(ug/L)	1870	1900	1.6
MW-8	Methylene chloride(ug/L)	<3	<3	0.0
MW-8	Potassium (Dissolved)(ug/L)	3670	3780	3.0
MW-8	Sodium (Dissolved)(ug/L)	55700	57400	3.0
MW-8	Styrene(ug/L)	<1	<1	0.0
MW-8	Sulfate(mg/L)	656	621	-5.5
MW-8	Tetrachloroethylene(ug/L)	<1	<1	0.0
MW-8	Toluene(ug/L)	<1	<1	0.0
MW-8	Total dissolved solids(mg/L)	1410	1480	4.8
MW-8	Total solids(mg/L)	2240	2330	3.9
MW-8	trans-1,2-Dichloroethylene(ug/L)	<1	<1	0.0
MW-8	trans-1,3-Dichloropropylene(ug/L)	<1	<1	0.0
MW-8	Trichloroethylene(ug/L)	<1	<1	0.0
MW-8	Trichlorofluoromethane(ug/L)	<5	<5	0.0
MW-8	Vinyl chloride(ug/L)	<2	<2	0.0
MW-8	Xylenes (Total)(ug/L)	<2	<2	0.0

Table 3: MCL/SMCL Exceedances
Sycamore Ridge Landfill
May 2024

Species	Well Name	Sample Type	Concentration	Lab Units	MCL	SMCL	MCL Units
Arsenic (Dissolved)	MW-11	Regular	19.5	ug/L	0.01		mg/L
Arsenic (Dissolved)	MW-12	Regular	12.1	ug/L	0.01		mg/L
Arsenic (Dissolved)	MW-12	Duplicate	14.5	ug/L	0.01		mg/L
Arsenic (Dissolved)	MW-8	Regular	10.5	ug/L	0.01		mg/L
Arsenic (Dissolved)	MW-8	Duplicate	11.1	ug/L	0.01		mg/L
Arsenic (Dissolved)	MW-9R	Regular	12.1	ug/L	0.01		mg/L
Iron (Dissolved)	MW-11	Regular	4800	ug/L		0.3	mg/L
Iron (Dissolved)	MW-12	Regular	5340	ug/L		0.3	mg/L
Iron (Dissolved)	MW-12	Duplicate	5330	ug/L		0.3	mg/L
Iron (Dissolved)	MW-1R	Regular	865	ug/L		0.3	mg/L
Iron (Dissolved)	MW-2R	Regular	2010	ug/L		0.3	mg/L
Iron (Dissolved)	MW-3R	Regular	551	ug/L		0.3	mg/L
Iron (Dissolved)	MW-5	Regular	3480	ug/L		0.3	mg/L
Iron (Dissolved)	MW-6	Regular	718	ug/L		0.3	mg/L
Iron (Dissolved)	MW-7	Regular	1280	ug/L		0.3	mg/L
Iron (Dissolved)	MW-8	Regular	2000	ug/L		0.3	mg/L
Iron (Dissolved)	MW-8	Duplicate	1970	ug/L		0.3	mg/L
Iron (Dissolved)	MW-9R	Regular	3220	ug/L		0.3	mg/L
Manganese (Dissolved)	MW-10	Regular	1920	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-11	Regular	1200	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-12	Regular	1850	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-12	Duplicate	1870	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-14	Regular	1390	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-1R	Regular	1150	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-2R	Regular	1320	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-3R	Regular	501	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-4R	Regular	2160	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-5	Regular	2440	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-6	Regular	2320	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-7	Regular	2240	ug/L		0.05	mg/L

Table 3: MCL/SMCL Exceedances
Sycamore Ridge Landfill
May 2024

Species	Well Name	Sample Type	Concentration	Lab Units	MCL	SMCL	MCL Units
Manganese (Dissolved)	MW-8	Regular	1900	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-8	Duplicate	1870	ug/L		0.05	mg/L
Manganese (Dissolved)	MW-9R	Regular	2220	ug/L		0.05	mg/L
Sulfate	MW-10	Regular	761	mg/L		250	mg/L
Sulfate	MW-11	Regular	433	mg/L		250	mg/L
Sulfate	MW-12	Regular	495	mg/L		250	mg/L
Sulfate	MW-12	Duplicate	504	mg/L		250	mg/L
Sulfate	MW-13	Regular	370	mg/L		250	mg/L
Sulfate	MW-1R	Regular	650	mg/L		250	mg/L
Sulfate	MW-2R	Regular	717	mg/L		250	mg/L
Sulfate	MW-3R	Regular	764	mg/L		250	mg/L
Sulfate	MW-4R	Regular	1050	mg/L		250	mg/L
Sulfate	MW-5	Regular	492	mg/L		250	mg/L
Sulfate	MW-6	Regular	683	mg/L		250	mg/L
Sulfate	MW-7	Regular	588	mg/L		250	mg/L
Sulfate	MW-8	Regular	621	mg/L		250	mg/L
Sulfate	MW-8	Duplicate	656	mg/L		250	mg/L
Sulfate	MW-9R	Regular	659	mg/L		250	mg/L
Total dissolved solids	MW-10	Regular	1600	mg/L		500	mg/L
Total dissolved solids	MW-11	Regular	1090	mg/L		500	mg/L
Total dissolved solids	MW-12	Regular	1170	mg/L		500	mg/L
Total dissolved solids	MW-12	Duplicate	1240	mg/L		500	mg/L
Total dissolved solids	MW-13	Regular	765	mg/L		500	mg/L
Total dissolved solids	MW-1R	Regular	1490	mg/L		500	mg/L
Total dissolved solids	MW-2R	Regular	1520	mg/L		500	mg/L
Total dissolved solids	MW-3R	Regular	1450	mg/L		500	mg/L
Total dissolved solids	MW-4R	Regular	1880	mg/L		500	mg/L
Total dissolved solids	MW-5	Regular	1170	mg/L		500	mg/L
Total dissolved solids	MW-6	Regular	1550	mg/L		500	mg/L

Table 3: MCL/SMCL Exceedances
Sycamore Ridge Landfill
May 2024

Species	Well Name	Sample Type	Concentration	Lab Units	MCL	SMCL	MCL Units
Total dissolved solids	MW-7	Regular	1190	mg/L		500	mg/L
Total dissolved solids	MW-8	Regular	1480	mg/L		500	mg/L
Total dissolved solids	MW-8	Duplicate	1410	mg/L		500	mg/L
Total dissolved solids	MW-9R	Regular	1420	mg/L		500	mg/L

Table 4: Significant Trends
Sycamore Ridge Landfill
May 2024

Constituent Name	Well	Long Term Slope	Significant Long Term Trend	Significant Positive Recent Trend*
Ammonia-N (mg/L)	MW-11	-0.01579	Negative	No
Ammonia-N (mg/L)	MW-12	0.02235	Positive	No
Ammonia-N (mg/L)	MW-13 (bg)	-0.01459	Negative	No
Ammonia-N (mg/L)	MW-14 (bg)	-0.002	Negative	No
Ammonia-N (mg/L)	MW-1R	0.006678	Positive	Yes
Ammonia-N (mg/L)	MW-4R	0.006695	Positive	No
Ammonia-N (mg/L)	MW-8	-0.00466	Negative	No
Chloride (mg/L)	MW-10	0.2281	Positive	No
Chloride (mg/L)	MW-11	0.6618	Positive	No
Chloride (mg/L)	MW-12	0.3532	Positive	No
Chloride (mg/L)	MW-13 (bg)	0.3335	Positive	Yes
Chloride (mg/L)	MW-14 (bg)	0.4914	Positive	No
Chloride (mg/L)	MW-1R	0.2757	Positive	No
Chloride (mg/L)	MW-2R	0.2006	Positive	No
Chloride (mg/L)	MW-4R	0.09859	Positive	No
Chloride (mg/L)	MW-8	0.5068	Positive	No
Chloride (mg/L)	MW-9R	0.4362	Positive	No
Dissolved Chromium (ug/L)	MW-2R	-0.2701	Negative	No
Dissolved Chromium (ug/L)	MW-3R	-0.2772	Negative	No
Dissolved Iron (ug/L)	MW-12	-2117	Negative	No
Dissolved Iron (ug/L)	MW-13 (bg)	-3.327	Negative	No
Dissolved Iron (ug/L)	MW-1R	59.84	Positive	No
Dissolved Iron (ug/L)	MW-3R	89.49	Positive	No
Dissolved Iron (ug/L)	MW-8	119	Positive	No
Dissolved Manganese (ug/L)	MW-10	33.1	Positive	No
Dissolved Manganese (ug/L)	MW-11	-132.3	Negative	No
Dissolved Manganese (ug/L)	MW-12	-109.6	Negative	No
Dissolved Manganese (ug/L)	MW-13 (bg)	-11.35	Negative	No
Dissolved Manganese (ug/L)	MW-14 (bg)	-41.61	Negative	No
Dissolved Manganese (ug/L)	MW-2R	-6.475	Negative	No
Dissolved Manganese (ug/L)	MW-3R	-33.81	Negative	No
Dissolved Manganese (ug/L)	MW-8	55.89	Positive	No
Dissolved Manganese (ug/L)	MW-9R	64.24	Positive	Yes
Sodium (ug/L)	MW-11	-2265	Negative	No
Sodium (ug/L)	MW-12	-1599	Negative	No
Sodium (ug/L)	MW-13 (bg)	402.6	Positive	No
Sodium (ug/L)	MW-1R	1710	Positive	No
Sodium (ug/L)	MW-3R	-1402	Negative	No

Table 4: Significant Trends
Sycamore Ridge Landfill
May 2024

Constituent Name	Well	Long Term Slope	Significant Long Term Trend	Significant Positive Recent Trend*
Sodium (ug/L)	MW-4R	-1717	Negative	No
Sodium (ug/L)	MW-8	1375	Positive	No
Sodium (ug/L)	MW-9R	1357	Positive	Yes
Sulfate (mg/L)	MW-13 (bg)	4.204	Positive	No
Sulfate (mg/L)	MW-14 (bg)	-0.619	Negative	No
Sulfate (mg/L)	MW-4R	-57.4	Negative	No
Sulfate (mg/L)	MW-8	13.58	Positive	No
Sulfate (mg/L)	MW-9R	14.28	Positive	No

*Recent Trends based on data from 11/2016 for parameter/well combinations with significant long term trends and less than 75% non-detects in StEP.

Table 5: Statistically Significant Increases
Sycamore Ridge Landfill
May 2024

Constituent Name	Well	May Result	Type of Exceedance
Ammonia-N (mg/L)	MW-1R	0.57	Recent Significant Positive Trend*
Chloride (mg/L)	MW-13 (bg)	13.8	Recent Significant Positive Trend*
Dissolved Manganese (mg/L)	MW-9R	2.22	Recent Significant Positive Trend*
Sodium (mg/L)	MW-9R	54.4	Recent Significant Positive Trend*

*Recent Trends based on data from 11/2016

Appendix 1

Laboratory Reports

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

June 02, 2024

Environmental Manager
Republic Services, Inc. - Sycamore Ridge Landfill
5621 Cottom Drive
Pimento, IN 47866

RE: Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Dear Environmental Manager:

Enclosed are the analytical results for sample(s) received by the laboratory on May 17, 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

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

Sincerely,

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

Enclosures

cc: Mr. Alan Cox, Republic Services, Inc.
Trihydro, Trihydro

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

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

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50373602001	**MW-1R**	Water	05/15/24 09:45	05/17/24 13:20
50373602002	**MW-2R**	Water	05/15/24 08:50	05/17/24 13:20
50373602003	**MW-3R**	Water	05/14/24 17:30	05/17/24 13:20
50373602004	**MW-4R**	Water	05/14/24 16:40	05/17/24 13:20
50373602005	**MW-5**	Water	05/14/24 15:50	05/17/24 13:20
50373602006	**MW-6**	Water	05/14/24 14:05	05/17/24 13:20
50373602007	**MW-7**	Water	05/14/24 13:15	05/17/24 13:20
50373602008	**MW-8**	Water	05/15/24 10:40	05/17/24 13:20
50373602009	**MW-9R**	Water	05/15/24 11:35	05/17/24 13:20
50373602010	**MW-10**	Water	05/15/24 12:30	05/17/24 13:20
50373602011	**MW-11**	Water	05/15/24 13:30	05/17/24 13:20
50373602012	**MW-12**	Water	05/15/24 14:15	05/17/24 13:20
50373602013	**MW-13**	Water	05/14/24 11:15	05/17/24 13:20
50373602014	**MW-14**	Water	05/14/24 12:20	05/17/24 13:20
50373602015	**MW-29**	Water	05/15/24 08:00	05/17/24 13:20
50373602016	**MW-33**	Water	05/15/24 08:00	05/17/24 13:20
50373602017	**Field Blank**	Water	05/15/24 14:30	05/17/24 13:20
50373602018	**Equipment Blank**	Water	05/15/24 14:35	05/17/24 13:20
50373602019	**Trip Blank**	Water	05/15/24 08:00	05/17/24 13:20

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50373602001	**MW-1R**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602002	**MW-2R**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602003	**MW-3R**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602004	**MW-4R**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602005	**MW-5**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602006	**MW-6**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602007	**MW-7**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602008	**MW-8**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602009	**MW-9R**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602010	**MW-10**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602011	**MW-11**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602012	**MW-12**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602013	**MW-13**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602014	**MW-14**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602015	**MW-29**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602016	**MW-33**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM-4500-NH3 G	OAS	1	PASI-I
50373602017	**Field Blank**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602018	**Equipment Blank**	EPA 9056	ADM	2	PASI-I
		EPA 6010	ABH	10	PASI-I
		EPA 5030B/8260	ALA	33	PASI-I
		SM 2320B	DAW	3	PASI-I
		SM 2540B	SL	1	PASI-I
		SM 2540C	SL	1	PASI-I
		SM-4500-NH3 G	OAS	1	PASI-I
50373602019	**Trip Blank**	EPA 5030B/8260	TAY	33	PASI-I

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50373602001	**MW-1R**					
EPA 9056	Chloride	19.0	mg/L	2.5	05/27/24 18:42	
EPA 9056	Sulfate	650	mg/L	25.0	05/27/24 18:59	
EPA 6010	Arsenic, Dissolved	6.2	ug/L	5.0	05/19/24 19:50	
EPA 6010	Calcium, Dissolved	220000	ug/L	1000	05/19/24 22:22	
EPA 6010	Iron, Dissolved	865	ug/L	100	05/19/24 19:50	
EPA 6010	Magnesium, Dissolved	103000	ug/L	500	05/19/24 19:50	
EPA 6010	Manganese, Dissolved	1150	ug/L	10.0	05/19/24 19:50	
EPA 6010	Potassium, Dissolved	6090	ug/L	500	05/19/24 19:50	
EPA 6010	Sodium, Dissolved	72100	ug/L	1000	05/19/24 19:50	
SM 2320B	Alkalinity, Total as CaCO3	566	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	566	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1530	mg/L	20.0	05/22/24 06:47	
SM 2540C	Total Dissolved Solids	1490	mg/L	20.0	05/21/24 12:21	
SM-4500-NH3 G	Nitrogen, Ammonia	0.57	mg/L	0.020	05/24/24 12:55	
50373602002	**MW-2R**					
EPA 9056	Chloride	14.2	mg/L	2.5	05/27/24 19:15	
EPA 9056	Sulfate	717	mg/L	25.0	05/27/24 19:32	
EPA 6010	Arsenic, Dissolved	7.4	ug/L	5.0	05/19/24 19:52	
EPA 6010	Calcium, Dissolved	250000	ug/L	1000	05/19/24 22:24	
EPA 6010	Iron, Dissolved	2010	ug/L	100	05/19/24 19:52	
EPA 6010	Magnesium, Dissolved	100000	ug/L	500	05/19/24 19:52	
EPA 6010	Manganese, Dissolved	1320	ug/L	10.0	05/19/24 19:52	
EPA 6010	Potassium, Dissolved	5470	ug/L	500	05/19/24 19:52	
EPA 6010	Sodium, Dissolved	63300	ug/L	1000	05/19/24 19:52	
SM 2320B	Alkalinity, Total as CaCO3	477	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	477	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1770	mg/L	20.0	05/22/24 06:47	
SM 2540C	Total Dissolved Solids	1520	mg/L	20.0	05/21/24 12:21	
SM-4500-NH3 G	Nitrogen, Ammonia	0.47	mg/L	0.020	05/24/24 12:56	
50373602003	**MW-3R**					
EPA 9056	Chloride	17.2	mg/L	2.5	05/27/24 19:48	
EPA 9056	Sulfate	764	mg/L	25.0	05/27/24 20:05	
EPA 6010	Arsenic, Dissolved	5.5	ug/L	5.0	05/19/24 19:54	
EPA 6010	Calcium, Dissolved	240000	ug/L	1000	05/19/24 22:26	
EPA 6010	Iron, Dissolved	551	ug/L	100	05/19/24 19:54	
EPA 6010	Magnesium, Dissolved	106000	ug/L	500	05/19/24 19:54	
EPA 6010	Manganese, Dissolved	501	ug/L	10.0	05/19/24 19:54	
EPA 6010	Potassium, Dissolved	6090	ug/L	500	05/19/24 19:54	
EPA 6010	Sodium, Dissolved	46900	ug/L	1000	05/19/24 19:54	
SM 2320B	Alkalinity, Total as CaCO3	528	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	528	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1680	mg/L	20.0	05/21/24 16:31	
SM 2540C	Total Dissolved Solids	1450	mg/L	20.0	05/20/24 11:39	
50373602004	**MW-4R**					
EPA 9056	Chloride	12.2	mg/L	2.5	05/27/24 20:21	
EPA 9056	Sulfate	1050	mg/L	25.0	05/27/24 20:37	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50373602004	**MW-4R**					
EPA 6010	Calcium, Dissolved	295000	ug/L	1000	05/19/24 22:28	
EPA 6010	Iron, Dissolved	170	ug/L	100	05/19/24 19:56	
EPA 6010	Magnesium, Dissolved	152000	ug/L	500	05/19/24 19:56	
EPA 6010	Manganese, Dissolved	2160	ug/L	10.0	05/19/24 19:56	
EPA 6010	Potassium, Dissolved	9090	ug/L	500	05/19/24 19:56	
EPA 6010	Sodium, Dissolved	63200	ug/L	1000	05/19/24 19:56	
SM 2320B	Alkalinity, Total as CaCO3	561	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	561	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	2110	mg/L	20.0	05/21/24 16:32	
SM 2540C	Total Dissolved Solids	1880	mg/L	20.0	05/20/24 11:39	
SM-4500-NH3 G	Nitrogen, Ammonia	0.17	mg/L	0.020	05/24/24 13:01	
50373602005	**MW-5**					
EPA 9056	Chloride	11.0	mg/L	2.5	05/27/24 21:27	
EPA 9056	Sulfate	492	mg/L	25.0	05/27/24 21:43	
EPA 6010	Arsenic, Dissolved	7.0	ug/L	5.0	05/19/24 19:57	
EPA 6010	Calcium, Dissolved	212000	ug/L	1000	05/19/24 22:29	
EPA 6010	Iron, Dissolved	3480	ug/L	100	05/19/24 19:57	
EPA 6010	Magnesium, Dissolved	80400	ug/L	500	05/19/24 19:57	
EPA 6010	Manganese, Dissolved	2440	ug/L	10.0	05/19/24 19:57	
EPA 6010	Potassium, Dissolved	3440	ug/L	500	05/19/24 19:57	
EPA 6010	Sodium, Dissolved	28700	ug/L	1000	05/19/24 19:57	
SM 2320B	Alkalinity, Total as CaCO3	459	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	459	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1240	mg/L	20.0	05/21/24 16:32	
SM 2540C	Total Dissolved Solids	1170	mg/L	20.0	05/20/24 11:39	
SM-4500-NH3 G	Nitrogen, Ammonia	0.22	mg/L	0.020	05/24/24 13:02	
50373602006	**MW-6**					
EPA 9056	Chloride	13.1	mg/L	2.5	05/27/24 22:00	
EPA 9056	Sulfate	683	mg/L	25.0	05/27/24 22:16	
EPA 6010	Arsenic, Dissolved	5.3	ug/L	5.0	05/19/24 19:59	
EPA 6010	Calcium, Dissolved	294000	ug/L	1000	05/19/24 22:31	
EPA 6010	Iron, Dissolved	718	ug/L	100	05/19/24 19:59	
EPA 6010	Magnesium, Dissolved	106000	ug/L	500	05/19/24 19:59	
EPA 6010	Manganese, Dissolved	2320	ug/L	10.0	05/19/24 19:59	
EPA 6010	Potassium, Dissolved	2590	ug/L	500	05/19/24 19:59	
EPA 6010	Sodium, Dissolved	33500	ug/L	1000	05/19/24 19:59	
SM 2320B	Alkalinity, Total as CaCO3	451	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	451	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	3930	mg/L	20.0	05/21/24 16:32	
SM 2540C	Total Dissolved Solids	1550	mg/L	20.0	05/20/24 11:41	
SM-4500-NH3 G	Nitrogen, Ammonia	0.11	mg/L	0.020	05/24/24 13:04	
50373602007	**MW-7**					
EPA 9056	Chloride	15.4	mg/L	2.5	05/27/24 22:32	
EPA 9056	Sulfate	588	mg/L	25.0	05/27/24 22:49	
EPA 6010	Arsenic, Dissolved	6.7	ug/L	5.0	05/19/24 20:01	
EPA 6010	Calcium, Dissolved	176000	ug/L	500	05/19/24 20:01	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50373602007	**MW-7**					
EPA 6010	Iron, Dissolved	1280	ug/L	100	05/19/24 20:01	
EPA 6010	Magnesium, Dissolved	92000	ug/L	500	05/19/24 20:01	
EPA 6010	Manganese, Dissolved	2240	ug/L	10.0	05/19/24 20:01	
EPA 6010	Potassium, Dissolved	2310	ug/L	500	05/19/24 20:01	
EPA 6010	Sodium, Dissolved	34300	ug/L	1000	05/19/24 20:01	
SM 2320B	Alkalinity, Total as CaCO3	373	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	373	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1930	mg/L	20.0	05/21/24 16:32	
SM 2540C	Total Dissolved Solids	1190	mg/L	20.0	05/20/24 11:41	
SM-4500-NH3 G	Nitrogen, Ammonia	0.25	mg/L	0.020	05/24/24 13:05	
50373602008	**MW-8**					
EPA 9056	Chloride	22.1	mg/L	2.5	05/27/24 23:22	
EPA 9056	Sulfate	621	mg/L	25.0	05/27/24 23:38	
EPA 6010	Arsenic, Dissolved	11.1	ug/L	5.0	05/19/24 20:03	
EPA 6010	Calcium, Dissolved	234000	ug/L	1000	05/19/24 22:33	
EPA 6010	Iron, Dissolved	2000	ug/L	100	05/19/24 20:03	
EPA 6010	Magnesium, Dissolved	94600	ug/L	500	05/19/24 20:03	
EPA 6010	Manganese, Dissolved	1900	ug/L	10.0	05/19/24 20:03	
EPA 6010	Potassium, Dissolved	3780	ug/L	500	05/19/24 20:03	
EPA 6010	Sodium, Dissolved	57400	ug/L	1000	05/19/24 20:03	
SM 2320B	Alkalinity, Total as CaCO3	528	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	528	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	2330	mg/L	20.0	05/22/24 06:47	
SM 2540C	Total Dissolved Solids	1480	mg/L	20.0	05/21/24 12:21	
SM-4500-NH3 G	Nitrogen, Ammonia	0.39	mg/L	0.020	05/24/24 13:06	
50373602009	**MW-9R**					
EPA 9056	Chloride	22.9	mg/L	2.5	05/28/24 01:02	
EPA 9056	Sulfate	659	mg/L	25.0	05/28/24 01:19	
EPA 6010	Arsenic, Dissolved	12.1	ug/L	5.0	05/19/24 20:08	
EPA 6010	Calcium, Dissolved	245000	ug/L	1000	05/19/24 22:35	
EPA 6010	Iron, Dissolved	3220	ug/L	100	05/19/24 20:08	
EPA 6010	Magnesium, Dissolved	95800	ug/L	500	05/19/24 20:08	
EPA 6010	Manganese, Dissolved	2220	ug/L	10.0	05/19/24 20:08	
EPA 6010	Potassium, Dissolved	3850	ug/L	500	05/19/24 20:08	
EPA 6010	Sodium, Dissolved	54400	ug/L	1000	05/19/24 20:08	
SM 2320B	Alkalinity, Total as CaCO3	533	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	533	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1530	mg/L	20.0	05/22/24 06:47	
SM 2540C	Total Dissolved Solids	1420	mg/L	20.0	05/21/24 12:22	
SM-4500-NH3 G	Nitrogen, Ammonia	0.37	mg/L	0.020	05/24/24 13:08	
50373602010	**MW-10**					
EPA 9056	Chloride	22.7	mg/L	0.25	05/28/24 01:36	
EPA 9056	Sulfate	761	mg/L	25.0	05/28/24 02:10	
EPA 6010	Calcium, Dissolved	234000	ug/L	1000	05/19/24 22:37	
EPA 6010	Iron, Dissolved	258	ug/L	100	05/19/24 20:10	
EPA 6010	Magnesium, Dissolved	99400	ug/L	500	05/19/24 20:10	

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50373602010	**MW-10**					
EPA 6010	Manganese, Dissolved	1920	ug/L	10.0	05/19/24 20:10	
EPA 6010	Potassium, Dissolved	4330	ug/L	500	05/19/24 20:10	
EPA 6010	Sodium, Dissolved	69700	ug/L	1000	05/19/24 20:10	
SM 2320B	Alkalinity, Total as CaCO3	465	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	465	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1690	mg/L	20.0	05/22/24 06:48	
SM 2540C	Total Dissolved Solids	1600	mg/L	20.0	05/21/24 12:22	
SM-4500-NH3 G	Nitrogen, Ammonia	0.52	mg/L	0.020	05/24/24 13:09	
50373602011	**MW-11**					
EPA 9056	Chloride	12.9	mg/L	2.5	05/28/24 02:26	
EPA 9056	Sulfate	433	mg/L	2.5	05/28/24 02:26	
EPA 6010	Arsenic, Dissolved	19.5	ug/L	5.0	05/19/24 20:12	
EPA 6010	Calcium, Dissolved	213000	ug/L	1000	05/19/24 22:38	
EPA 6010	Iron, Dissolved	4800	ug/L	100	05/19/24 20:12	
EPA 6010	Magnesium, Dissolved	91000	ug/L	500	05/19/24 20:12	
EPA 6010	Manganese, Dissolved	1200	ug/L	10.0	05/19/24 20:12	
EPA 6010	Potassium, Dissolved	3850	ug/L	500	05/19/24 20:12	
EPA 6010	Sodium, Dissolved	71700	ug/L	1000	05/19/24 20:12	
SM 2320B	Alkalinity, Total as CaCO3	456	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	456	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	1240	mg/L	20.0	05/22/24 06:48	
SM 2540C	Total Dissolved Solids	1090	mg/L	20.0	05/21/24 12:22	
SM-4500-NH3 G	Nitrogen, Ammonia	0.53	mg/L	0.020	05/24/24 13:10	
50373602012	**MW-12**					
EPA 9056	Chloride	23.6	mg/L	2.5	05/28/24 04:24	
EPA 9056	Sulfate	495	mg/L	25.0	05/28/24 04:41	
EPA 6010	Arsenic, Dissolved	14.5	ug/L	5.0	05/19/24 20:14	
EPA 6010	Calcium, Dissolved	180000	ug/L	500	05/19/24 20:14	
EPA 6010	Iron, Dissolved	5330	ug/L	100	05/19/24 20:14	
EPA 6010	Magnesium, Dissolved	77700	ug/L	500	05/19/24 20:14	
EPA 6010	Manganese, Dissolved	1850	ug/L	10.0	05/19/24 20:14	
EPA 6010	Potassium, Dissolved	3520	ug/L	500	05/19/24 20:14	
EPA 6010	Sodium, Dissolved	77500	ug/L	1000	05/19/24 20:14	
SM 2320B	Alkalinity, Total as CaCO3	519	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	519	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	2410	mg/L	20.0	05/22/24 06:48	
SM 2540C	Total Dissolved Solids	1240	mg/L	20.0	05/21/24 12:23	
SM-4500-NH3 G	Nitrogen, Ammonia	1.0	mg/L	0.020	05/24/24 13:11	
50373602013	**MW-13**					
EPA 9056	Chloride	13.8	mg/L	2.5	05/28/24 03:00	
EPA 9056	Sulfate	370	mg/L	2.5	05/28/24 03:00	
EPA 6010	Calcium, Dissolved	90900	ug/L	500	05/19/24 20:21	
EPA 6010	Magnesium, Dissolved	48700	ug/L	500	05/19/24 20:21	
EPA 6010	Potassium, Dissolved	2620	ug/L	500	05/19/24 20:21	
EPA 6010	Sodium, Dissolved	60800	ug/L	1000	05/19/24 20:21	
SM 2320B	Alkalinity, Total as CaCO3	243	mg/L	20.0	05/23/24 21:05	

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50373602013	**MW-13**					
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	243	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	844	mg/L	10.0	05/21/24 16:33	
SM 2540C	Total Dissolved Solids	765	mg/L	10.0	05/20/24 11:42	
50373602014	**MW-14**					
EPA 9056	Chloride	73.6	mg/L	2.5	05/28/24 07:13	
EPA 9056	Sulfate	52.5	mg/L	2.5	05/28/24 07:13	
EPA 6010	Arsenic, Dissolved	6.1	ug/L	5.0	05/19/24 20:22	
EPA 6010	Calcium, Dissolved	13700	ug/L	500	05/19/24 20:22	
EPA 6010	Iron, Dissolved	291	ug/L	100	05/19/24 20:22	
EPA 6010	Magnesium, Dissolved	10900	ug/L	500	05/19/24 20:22	
EPA 6010	Manganese, Dissolved	1390	ug/L	10.0	05/19/24 20:22	
EPA 6010	Sodium, Dissolved	46200	ug/L	1000	05/19/24 20:22	
SM 2320B	Alkalinity, Total as CaCO3	49.0	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	49.0	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	270	mg/L	10.0	05/21/24 16:33	
SM 2540C	Total Dissolved Solids	270	mg/L	10.0	05/20/24 11:42	
50373602015	**MW-29**					
EPA 9056	Chloride	22.6	mg/L	2.5	05/28/24 07:30	
EPA 9056	Sulfate	656	mg/L	25.0	05/28/24 07:47	
EPA 6010	Arsenic, Dissolved	10.5	ug/L	5.0	05/19/24 20:24	
EPA 6010	Calcium, Dissolved	235000	ug/L	1000	05/19/24 22:44	
EPA 6010	Iron, Dissolved	1970	ug/L	100	05/19/24 20:24	
EPA 6010	Magnesium, Dissolved	93000	ug/L	500	05/19/24 20:24	
EPA 6010	Manganese, Dissolved	1870	ug/L	10.0	05/19/24 20:24	
EPA 6010	Potassium, Dissolved	3670	ug/L	500	05/19/24 20:24	
EPA 6010	Sodium, Dissolved	55700	ug/L	1000	05/19/24 20:24	
SM 2320B	Alkalinity, Total as CaCO3	527	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	527	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	2240	mg/L	20.0	05/22/24 06:49	
SM 2540C	Total Dissolved Solids	1410	mg/L	20.0	05/21/24 11:52	
SM-4500-NH3 G	Nitrogen, Ammonia	0.35	mg/L	0.020	05/24/24 13:20	
50373602016	**MW-33**					
EPA 9056	Chloride	22.5	mg/L	2.5	05/28/24 08:04	
EPA 9056	Sulfate	504	mg/L	25.0	05/28/24 08:20	
EPA 6010	Arsenic, Dissolved	12.1	ug/L	5.0	05/19/24 20:30	
EPA 6010	Calcium, Dissolved	183000	ug/L	500	05/19/24 20:30	
EPA 6010	Iron, Dissolved	5340	ug/L	100	05/19/24 20:30	
EPA 6010	Magnesium, Dissolved	78000	ug/L	500	05/19/24 20:30	
EPA 6010	Manganese, Dissolved	1870	ug/L	10.0	05/19/24 20:30	
EPA 6010	Potassium, Dissolved	3550	ug/L	500	05/19/24 20:30	
EPA 6010	Sodium, Dissolved	77500	ug/L	1000	05/19/24 20:30	
SM 2320B	Alkalinity, Total as CaCO3	522	mg/L	20.0	05/23/24 21:05	
SM 2320B	Alkalinity,Bicarbonate (CaCO3)	522	mg/L	20.0	05/23/24 21:05	
SM 2540B	Total Solids	2470	mg/L	20.0	05/22/24 06:49	
SM 2540C	Total Dissolved Solids	1170	mg/L	20.0	05/21/24 11:52	
SM-4500-NH3 G	Nitrogen, Ammonia	0.92	mg/L	0.020	05/24/24 13:22	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **EPA 9056**
Description: 9056 IC Anions
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

General Information:
18 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.

Additional Comments:

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **EPA 6010**
Description: 6010 MET ICP, Dissolved
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

General Information:
18 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: 790798

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50373602012

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

- MS (Lab ID: 3618902)
  - Calcium, Dissolved
  - Magnesium, Dissolved
  - Sodium, Dissolved
- MSD (Lab ID: 3618903)
  - Calcium, Dissolved

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **EPA 5030B/8260**
Description: 8260 MSV Low Level
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

General Information:
19 samples were analyzed for EPA 5030B/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: 791967

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: 3624293)
  - 1,1,2,2-Tetrachloroethane
  - Bromomethane

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

QC Batch: 791967

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50373251001

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

- MS (Lab ID: 3624294)
  - 1,1,2,2-Tetrachloroethane
- MSD (Lab ID: 3624295)
  - 1,1,2,2-Tetrachloroethane

R1: RPD value was outside control limits.

- MSD (Lab ID: 3624295)

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **EPA 5030B/8260**
Description: 8260 MSV Low Level
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

QC Batch: 791967

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50373251001

R1: RPD value was outside control limits.

- Bromomethane

Additional Comments:

Analyte Comments:

QC Batch: 791967

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

- MS (Lab ID: 3624294)
  - 1,1,2,2-Tetrachloroethane

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

General Information:
18 samples were analyzed for SM 2320B 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.

Additional Comments:

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **SM 2540B**
Description: 2540B Total Solids
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

General Information:
18 samples were analyzed for SM 2540B 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.

Additional Comments:

Analyte Comments:

QC Batch: 791309

PL: The minimum mass of dried residue of 2.5 mg could not be obtained using the routine sample volume of 100 mL.

- Equipment Blank (Lab ID: 50373602018)
  - Total Solids
- Field Blank (Lab ID: 50373602017)
  - Total Solids

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **SM 2540C**
Description: 2540C Total Dissolved Solids
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

General Information:
18 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.

QC Batch: 791039

R1: RPD value was outside control limits.

- DUP (Lab ID: 3619738)
  - Total Dissolved Solids

Additional Comments:

Analyte Comments:

QC Batch: 791039

PL: The minimum mass of dried residue of 2.5 mg could not be obtained using the routine sample volume of 100 mL.

- Equipment Blank (Lab ID: 50373602018)
  - Total Dissolved Solids
- Field Blank (Lab ID: 50373602017)
  - Total Dissolved Solids

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

PROJECT NARRATIVE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Method: **SM-4500-NH3 G**
Description: 4500 Ammonia Water Low Level
Client: Republic Services - Indiana Landfills
Date: June 02, 2024

General Information:
18 samples were analyzed for SM-4500-NH3 G 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.

QC Batch: 791862

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 50373602012,50373602016

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

- MS (Lab ID: 3623714)
  - Nitrogen, Ammonia
- MSD (Lab ID: 3623713)
  - Nitrogen, Ammonia

Additional Comments:

Analyte Comments:

QC Batch: 791862

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- Equipment Blank (Lab ID: 50373602018)
  - Nitrogen, Ammonia
- Field Blank (Lab ID: 50373602017)
  - Nitrogen, Ammonia
- MW-14 (Lab ID: 50373602014)
  - Nitrogen, Ammonia

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

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-1R **Lab ID: 50373602001** Collected: 05/15/24 09:45 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**19.0**	mg/L	2.5	10		05/27/24 18:42	16887-00-6	
Sulfate	**650**	mg/L	25.0	100		05/27/24 18:59	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**6.2**	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:50	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 19:50	7440-43-9	
Calcium, Dissolved	**220000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:22	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:50	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:50	7440-50-8	
Iron, Dissolved	**865**	ug/L	100	1	05/19/24 18:58	05/19/24 19:50	7439-89-6	
Magnesium, Dissolved	**103000**	ug/L	500	1	05/19/24 18:58	05/19/24 19:50	7439-95-4	
Manganese, Dissolved	**1150**	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:50	7439-96-5	
Potassium, Dissolved	**6090**	ug/L	500	1	05/19/24 18:58	05/19/24 19:50	7440-09-7	
Sodium, Dissolved	**72100**	ug/L	1000	1	05/19/24 18:58	05/19/24 19:50	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 16:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 16:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 16:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 16:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 16:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 16:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 16:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 16:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 16:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 16:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 16:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 16:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 16:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 16:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 16:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 16:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 16:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 16:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 16:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 16:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 16:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 16:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 16:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 16:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 16:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 16:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 16:24	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-1R **Lab ID: 50373602001** Collected: 05/15/24 09:45 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 16:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 16:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 16:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	106	%.	79-124	1		05/23/24 16:24	460-00-4	
Dibromofluoromethane (S)	117	%.	82-128	1		05/23/24 16:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 16:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**566**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**566**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**1530**	mg/L	20.0	1		05/22/24 06:47		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1490**	mg/L	20.0	1		05/21/24 12:21		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.57**	mg/L	0.020	1		05/24/24 12:55	7664-41-7	

Sample: MW-2R **Lab ID: 50373602002** Collected: 05/15/24 08:50 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**14.2**	mg/L	2.5	10		05/27/24 19:15	16887-00-6	
Sulfate	**717**	mg/L	25.0	100		05/27/24 19:32	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**7.4**	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:52	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 19:52	7440-43-9	
Calcium, Dissolved	**250000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:24	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:52	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:52	7440-50-8	
Iron, Dissolved	**2010**	ug/L	100	1	05/19/24 18:58	05/19/24 19:52	7439-89-6	
Magnesium, Dissolved	**100000**	ug/L	500	1	05/19/24 18:58	05/19/24 19:52	7439-95-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-2R **Lab ID: 50373602002** Collected: 05/15/24 08:50 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Manganese, Dissolved	**1320**	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:52	7439-96-5	
Potassium, Dissolved	**5470**	ug/L	500	1	05/19/24 18:58	05/19/24 19:52	7440-09-7	
Sodium, Dissolved	**63300**	ug/L	1000	1	05/19/24 18:58	05/19/24 19:52	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 16:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 16:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 16:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 16:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 16:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 16:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 16:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 16:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 16:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 16:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 16:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 16:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 16:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 16:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 16:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 16:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 16:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 16:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 16:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 16:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 16:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 16:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 16:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 16:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 16:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 16:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 16:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 16:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 16:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 16:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	108	%.	79-124	1		05/23/24 16:54	460-00-4	
Dibromofluoromethane (S)	119	%.	82-128	1		05/23/24 16:54	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 16:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**477**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**477**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-2R **Lab ID: 50373602002** Collected: 05/15/24 08:50 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540B Total Solids	Analytical Method: SM 2540B Pace Analytical Services - Indianapolis							
Total Solids	**1770**	mg/L	20.0	1		05/22/24 06:47		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1520**	mg/L	20.0	1		05/21/24 12:21		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.47**	mg/L	0.020	1		05/24/24 12:56	7664-41-7	

Sample: MW-3R **Lab ID: 50373602003** Collected: 05/14/24 17:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Chloride	**17.2**	mg/L	2.5	10		05/27/24 19:48	16887-00-6	
Sulfate	**764**	mg/L	25.0	100		05/27/24 20:05	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**5.5**	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:54	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 19:54	7440-43-9	
Calcium, Dissolved	**240000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:26	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:54	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:54	7440-50-8	
Iron, Dissolved	**551**	ug/L	100	1	05/19/24 18:58	05/19/24 19:54	7439-89-6	
Magnesium, Dissolved	**106000**	ug/L	500	1	05/19/24 18:58	05/19/24 19:54	7439-95-4	
Manganese, Dissolved	**501**	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:54	7439-96-5	
Potassium, Dissolved	**6090**	ug/L	500	1	05/19/24 18:58	05/19/24 19:54	7440-09-7	
Sodium, Dissolved	**46900**	ug/L	1000	1	05/19/24 18:58	05/19/24 19:54	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 17:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 17:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 17:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 17:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 17:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 17:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 17:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 17:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 17:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 17:24	75-34-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-3R **Lab ID: 50373602003** Collected: 05/14/24 17:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 17:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 17:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 17:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 17:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 17:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 17:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 17:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 17:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 17:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 17:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 17:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 17:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 17:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 17:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 17:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 17:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 17:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 17:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 17:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 17:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/23/24 17:24	460-00-4	
Dibromofluoromethane (S)	117	%.	82-128	1		05/23/24 17:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 17:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**528**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**528**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**1680**	mg/L	20.0	1		05/21/24 16:31		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1450**	mg/L	20.0	1		05/20/24 11:39		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	ND	mg/L	0.020	1		05/24/24 12:57	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-4R **Lab ID: 50373602004** Collected: 05/14/24 16:40 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**12.2**	mg/L	2.5	10		05/27/24 20:21	16887-00-6	
Sulfate	**1050**	mg/L	25.0	100		05/27/24 20:37	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:56	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 19:56	7440-43-9	
Calcium, Dissolved	**295000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:28	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:56	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:56	7440-50-8	
Iron, Dissolved	**170**	ug/L	100	1	05/19/24 18:58	05/19/24 19:56	7439-89-6	
Magnesium, Dissolved	**152000**	ug/L	500	1	05/19/24 18:58	05/19/24 19:56	7439-95-4	
Manganese, Dissolved	**2160**	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:56	7439-96-5	
Potassium, Dissolved	**9090**	ug/L	500	1	05/19/24 18:58	05/19/24 19:56	7440-09-7	
Sodium, Dissolved	**63200**	ug/L	1000	1	05/19/24 18:58	05/19/24 19:56	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 17:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 17:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 17:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 17:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 17:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 17:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 17:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 17:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 17:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 17:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 17:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 17:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 17:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 17:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 17:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 17:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 17:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 17:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 17:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 17:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 17:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 17:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 17:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 17:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 17:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 17:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 17:54	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-4R **Lab ID: 50373602004** Collected: 05/14/24 16:40 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 17:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 17:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 17:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104	%.	79-124	1		05/23/24 17:54	460-00-4	
Dibromofluoromethane (S)	110	%.	82-128	1		05/23/24 17:54	1868-53-7	
Toluene-d8 (S)	95	%.	73-122	1		05/23/24 17:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**561**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**561**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**2110**	mg/L	20.0	1		05/21/24 16:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1880**	mg/L	20.0	1		05/20/24 11:39		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.17**	mg/L	0.020	1		05/24/24 13:01	7664-41-7	

Sample: MW-5 **Lab ID: 50373602005** Collected: 05/14/24 15:50 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**11.0**	mg/L	2.5	10		05/27/24 21:27	16887-00-6	
Sulfate	**492**	mg/L	25.0	100		05/27/24 21:43	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**7.0**	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:57	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 19:57	7440-43-9	
Calcium, Dissolved	**212000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:29	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:57	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:57	7440-50-8	
Iron, Dissolved	**3480**	ug/L	100	1	05/19/24 18:58	05/19/24 19:57	7439-89-6	
Magnesium, Dissolved	**80400**	ug/L	500	1	05/19/24 18:58	05/19/24 19:57	7439-95-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-5 **Lab ID: 50373602005** Collected: 05/14/24 15:50 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Manganese, Dissolved	**2440**	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:57	7439-96-5	
Potassium, Dissolved	**3440**	ug/L	500	1	05/19/24 18:58	05/19/24 19:57	7440-09-7	
Sodium, Dissolved	**28700**	ug/L	1000	1	05/19/24 18:58	05/19/24 19:57	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 18:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 18:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 18:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 18:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 18:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 18:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 18:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 18:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 18:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 18:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 18:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 18:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 18:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 18:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 18:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 18:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 18:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 18:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 18:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 18:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 18:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 18:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 18:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 18:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 18:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 18:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 18:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 18:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 18:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 18:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104	%.	79-124	1		05/23/24 18:24	460-00-4	
Dibromofluoromethane (S)	97	%.	82-128	1		05/23/24 18:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 18:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**459**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**459**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-5 **Lab ID: 50373602005** Collected: 05/14/24 15:50 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540B Total Solids	Analytical Method: SM 2540B Pace Analytical Services - Indianapolis							
Total Solids	**1240**	mg/L	20.0	1		05/21/24 16:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1170**	mg/L	20.0	1		05/20/24 11:39		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.22**	mg/L	0.020	1		05/24/24 13:02	7664-41-7	

Sample: MW-6 **Lab ID: 50373602006** Collected: 05/14/24 14:05 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Chloride	**13.1**	mg/L	2.5	10		05/27/24 22:00	16887-00-6	
Sulfate	**683**	mg/L	25.0	100		05/27/24 22:16	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**5.3**	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:59	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 19:59	7440-43-9	
Calcium, Dissolved	**294000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:31	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 19:59	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:59	7440-50-8	
Iron, Dissolved	**718**	ug/L	100	1	05/19/24 18:58	05/19/24 19:59	7439-89-6	
Magnesium, Dissolved	**106000**	ug/L	500	1	05/19/24 18:58	05/19/24 19:59	7439-95-4	
Manganese, Dissolved	**2320**	ug/L	10.0	1	05/19/24 18:58	05/19/24 19:59	7439-96-5	
Potassium, Dissolved	**2590**	ug/L	500	1	05/19/24 18:58	05/19/24 19:59	7440-09-7	
Sodium, Dissolved	**33500**	ug/L	1000	1	05/19/24 18:58	05/19/24 19:59	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 18:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 18:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 18:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 18:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 18:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 18:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 18:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 18:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 18:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 18:54	75-34-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-6 **Lab ID: 50373602006** Collected: 05/14/24 14:05 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 18:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 18:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 18:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 18:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 18:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 18:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 18:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 18:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 18:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 18:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 18:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 18:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 18:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 18:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 18:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 18:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 18:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 18:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 18:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 18:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/23/24 18:54	460-00-4	
Dibromofluoromethane (S)	107	%.	82-128	1		05/23/24 18:54	1868-53-7	
Toluene-d8 (S)	97	%.	73-122	1		05/23/24 18:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**451**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**451**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**3930**	mg/L	20.0	1		05/21/24 16:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1550**	mg/L	20.0	1		05/20/24 11:41		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.11**	mg/L	0.020	1		05/24/24 13:04	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-7 **Lab ID: 50373602007** Collected: 05/14/24 13:15 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**15.4**	mg/L	2.5	10		05/27/24 22:32	16887-00-6	
Sulfate	**588**	mg/L	25.0	100		05/27/24 22:49	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**6.7**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:01	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:01	7440-43-9	
Calcium, Dissolved	**176000**	ug/L	500	1	05/19/24 18:58	05/19/24 20:01	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:01	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:01	7440-50-8	
Iron, Dissolved	**1280**	ug/L	100	1	05/19/24 18:58	05/19/24 20:01	7439-89-6	
Magnesium, Dissolved	**92000**	ug/L	500	1	05/19/24 18:58	05/19/24 20:01	7439-95-4	
Manganese, Dissolved	**2240**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:01	7439-96-5	
Potassium, Dissolved	**2310**	ug/L	500	1	05/19/24 18:58	05/19/24 20:01	7440-09-7	
Sodium, Dissolved	**34300**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:01	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 19:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 19:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 19:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 19:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 19:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 19:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 19:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 19:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 19:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 19:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 19:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 19:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 19:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 19:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 19:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 19:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 19:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 19:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 19:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 19:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 19:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 19:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 19:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 19:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 19:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 19:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 19:24	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-7 **Lab ID: 50373602007** Collected: 05/14/24 13:15 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 19:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 19:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 19:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/23/24 19:24	460-00-4	
Dibromofluoromethane (S)	108	%.	82-128	1		05/23/24 19:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 19:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**373**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**373**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**1930**	mg/L	20.0	1		05/21/24 16:32		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1190**	mg/L	20.0	1		05/20/24 11:41		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.25**	mg/L	0.020	1		05/24/24 13:05	7664-41-7	

Sample: MW-8 **Lab ID: 50373602008** Collected: 05/15/24 10:40 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**22.1**	mg/L	2.5	10		05/27/24 23:22	16887-00-6	
Sulfate	**621**	mg/L	25.0	100		05/27/24 23:38	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**11.1**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:03	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:03	7440-43-9	
Calcium, Dissolved	**234000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:33	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:03	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:03	7440-50-8	
Iron, Dissolved	**2000**	ug/L	100	1	05/19/24 18:58	05/19/24 20:03	7439-89-6	
Magnesium, Dissolved	**94600**	ug/L	500	1	05/19/24 18:58	05/19/24 20:03	7439-95-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-8 **Lab ID: 50373602008** Collected: 05/15/24 10:40 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Manganese, Dissolved	**1900**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:03	7439-96-5	
Potassium, Dissolved	**3780**	ug/L	500	1	05/19/24 18:58	05/19/24 20:03	7440-09-7	
Sodium, Dissolved	**57400**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:03	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 19:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 19:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 19:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 19:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 19:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 19:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 19:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 19:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 19:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 19:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 19:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 19:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 19:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 19:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 19:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 19:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 19:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 19:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 19:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 19:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 19:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 19:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 19:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 19:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 19:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 19:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 19:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 19:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 19:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 19:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	107	%.	79-124	1		05/23/24 19:54	460-00-4	
Dibromofluoromethane (S)	118	%.	82-128	1		05/23/24 19:54	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 19:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**528**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**528**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-8 **Lab ID: 50373602008** Collected: 05/15/24 10:40 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540B Total Solids	Analytical Method: SM 2540B Pace Analytical Services - Indianapolis							
Total Solids	**2330**	mg/L	20.0	1		05/22/24 06:47		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1480**	mg/L	20.0	1		05/21/24 12:21		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.39**	mg/L	0.020	1		05/24/24 13:06	7664-41-7	

Sample: MW-9R **Lab ID: 50373602009** Collected: 05/15/24 11:35 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Chloride	**22.9**	mg/L	2.5	10		05/28/24 01:02	16887-00-6	
Sulfate	**659**	mg/L	25.0	100		05/28/24 01:19	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**12.1**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:08	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:08	7440-43-9	
Calcium, Dissolved	**245000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:35	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:08	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:08	7440-50-8	
Iron, Dissolved	**3220**	ug/L	100	1	05/19/24 18:58	05/19/24 20:08	7439-89-6	
Magnesium, Dissolved	**95800**	ug/L	500	1	05/19/24 18:58	05/19/24 20:08	7439-95-4	
Manganese, Dissolved	**2220**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:08	7439-96-5	
Potassium, Dissolved	**3850**	ug/L	500	1	05/19/24 18:58	05/19/24 20:08	7440-09-7	
Sodium, Dissolved	**54400**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:08	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 20:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 20:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 20:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 20:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 20:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 20:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 20:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 20:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 20:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 20:24	75-34-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-9R **Lab ID: 50373602009** Collected: 05/15/24 11:35 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 20:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 20:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 20:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 20:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 20:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 20:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 20:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 20:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 20:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 20:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 20:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 20:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 20:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 20:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 20:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 20:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 20:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 20:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 20:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 20:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/23/24 20:24	460-00-4	
Dibromofluoromethane (S)	113	%.	82-128	1		05/23/24 20:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 20:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**533**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**533**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**1530**	mg/L	20.0	1		05/22/24 06:47		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1420**	mg/L	20.0	1		05/21/24 12:22		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.37**	mg/L	0.020	1		05/24/24 13:08	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-10 **Lab ID: 50373602010** Collected: 05/15/24 12:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**22.7**	mg/L	0.25	1		05/28/24 01:36	16887-00-6	
Sulfate	**761**	mg/L	25.0	100		05/28/24 02:10	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:10	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:10	7440-43-9	
Calcium, Dissolved	**234000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:37	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:10	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:10	7440-50-8	
Iron, Dissolved	**258**	ug/L	100	1	05/19/24 18:58	05/19/24 20:10	7439-89-6	
Magnesium, Dissolved	**99400**	ug/L	500	1	05/19/24 18:58	05/19/24 20:10	7439-95-4	
Manganese, Dissolved	**1920**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:10	7439-96-5	
Potassium, Dissolved	**4330**	ug/L	500	1	05/19/24 18:58	05/19/24 20:10	7440-09-7	
Sodium, Dissolved	**69700**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:10	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 20:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 20:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 20:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 20:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 20:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 20:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 20:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 20:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 20:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 20:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 20:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 20:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 20:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 20:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 20:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 20:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 20:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 20:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 20:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 20:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 20:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 20:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 20:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 20:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 20:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 20:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 20:54	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-10 **Lab ID: 50373602010** Collected: 05/15/24 12:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 20:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 20:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 20:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	106	%.	79-124	1		05/23/24 20:54	460-00-4	
Dibromofluoromethane (S)	114	%.	82-128	1		05/23/24 20:54	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 20:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**465**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**465**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**1690**	mg/L	20.0	1		05/22/24 06:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1600**	mg/L	20.0	1		05/21/24 12:22		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.52**	mg/L	0.020	1		05/24/24 13:09	7664-41-7	

Sample: MW-11 **Lab ID: 50373602011** Collected: 05/15/24 13:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**12.9**	mg/L	2.5	10		05/28/24 02:26	16887-00-6	
Sulfate	**433**	mg/L	2.5	10		05/28/24 02:26	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**19.5**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:12	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:12	7440-43-9	
Calcium, Dissolved	**213000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:38	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:12	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:12	7440-50-8	
Iron, Dissolved	**4800**	ug/L	100	1	05/19/24 18:58	05/19/24 20:12	7439-89-6	
Magnesium, Dissolved	**91000**	ug/L	500	1	05/19/24 18:58	05/19/24 20:12	7439-95-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-11 **Lab ID: 50373602011** Collected: 05/15/24 13:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Manganese, Dissolved	**1200**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:12	7439-96-5	
Potassium, Dissolved	**3850**	ug/L	500	1	05/19/24 18:58	05/19/24 20:12	7440-09-7	
Sodium, Dissolved	**71700**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:12	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 21:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 21:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 21:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 21:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 21:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 21:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 21:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 21:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 21:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 21:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 21:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 21:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 21:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 21:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 21:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 21:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 21:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 21:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 21:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 21:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 21:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 21:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 21:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 21:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 21:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 21:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 21:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 21:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 21:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 21:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104	%.	79-124	1		05/23/24 21:24	460-00-4	
Dibromofluoromethane (S)	111	%.	82-128	1		05/23/24 21:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 21:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**456**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**456**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-11 **Lab ID: 50373602011** Collected: 05/15/24 13:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540B Total Solids	Analytical Method: SM 2540B Pace Analytical Services - Indianapolis							
Total Solids	**1240**	mg/L	20.0	1		05/22/24 06:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1090**	mg/L	20.0	1		05/21/24 12:22		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.53**	mg/L	0.020	1		05/24/24 13:10	7664-41-7	

Sample: MW-12 **Lab ID: 50373602012** Collected: 05/15/24 14:15 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Chloride	**23.6**	mg/L	2.5	10		05/28/24 04:24	16887-00-6	
Sulfate	**495**	mg/L	25.0	100		05/28/24 04:41	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**14.5**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:14	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:14	7440-43-9	
Calcium, Dissolved	**180000**	ug/L	500	1	05/19/24 18:58	05/19/24 20:14	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:14	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:14	7440-50-8	
Iron, Dissolved	**5330**	ug/L	100	1	05/19/24 18:58	05/19/24 20:14	7439-89-6	
Magnesium, Dissolved	**77700**	ug/L	500	1	05/19/24 18:58	05/19/24 20:14	7439-95-4	
Manganese, Dissolved	**1850**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:14	7439-96-5	
Potassium, Dissolved	**3520**	ug/L	500	1	05/19/24 18:58	05/19/24 20:14	7440-09-7	
Sodium, Dissolved	**77500**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:14	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/24/24 00:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/24/24 00:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/24/24 00:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/24/24 00:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/24/24 00:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/24/24 00:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/24/24 00:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/24/24 00:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/24/24 00:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/24/24 00:54	75-34-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-12 **Lab ID: 50373602012** Collected: 05/15/24 14:15 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
1,2-Dichloroethane	ND	ug/L	1.0	1		05/24/24 00:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/24/24 00:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/24 00:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/24 00:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/24/24 00:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/24 00:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/24 00:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/24/24 00:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/24/24 00:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/24/24 00:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/24 00:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/24 00:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/24/24 00:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/24/24 00:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/24/24 00:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/24/24 00:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/24/24 00:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/24/24 00:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/24/24 00:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/24/24 00:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	103	%.	79-124	1		05/24/24 00:54	460-00-4	
Dibromofluoromethane (S)	101	%.	82-128	1		05/24/24 00:54	1868-53-7	
Toluene-d8 (S)	95	%.	73-122	1		05/24/24 00:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**519**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**519**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**2410**	mg/L	20.0	1		05/22/24 06:48		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1240**	mg/L	20.0	1		05/21/24 12:23		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**1.0**	mg/L	0.020	1		05/24/24 13:11	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-13 **Lab ID: 50373602013** Collected: 05/14/24 11:15 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**13.8**	mg/L	2.5	10		05/28/24 03:00	16887-00-6	
Sulfate	**370**	mg/L	2.5	10		05/28/24 03:00	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:21	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:21	7440-43-9	
Calcium, Dissolved	**90900**	ug/L	500	1	05/19/24 18:58	05/19/24 20:21	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:21	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:21	7440-50-8	
Iron, Dissolved	ND	ug/L	100	1	05/19/24 18:58	05/19/24 20:21	7439-89-6	
Magnesium, Dissolved	**48700**	ug/L	500	1	05/19/24 18:58	05/19/24 20:21	7439-95-4	
Manganese, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:21	7439-96-5	
Potassium, Dissolved	**2620**	ug/L	500	1	05/19/24 18:58	05/19/24 20:21	7440-09-7	
Sodium, Dissolved	**60800**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:21	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 21:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 21:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 21:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 21:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 21:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 21:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 21:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 21:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 21:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 21:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 21:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 21:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 21:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 21:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 21:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 21:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 21:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 21:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 21:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 21:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 21:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 21:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 21:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 21:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 21:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 21:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 21:54	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-13 **Lab ID: 50373602013** Collected: 05/14/24 11:15 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 21:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 21:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 21:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	104	%.	79-124	1		05/23/24 21:54	460-00-4	
Dibromofluoromethane (S)	106	%.	82-128	1		05/23/24 21:54	1868-53-7	
Toluene-d8 (S)	97	%.	73-122	1		05/23/24 21:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**243**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**243**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**844**	mg/L	10.0	1		05/21/24 16:33		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**765**	mg/L	10.0	1		05/20/24 11:42		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	ND	mg/L	0.020	1		05/24/24 13:18	7664-41-7	

Sample: MW-14 **Lab ID: 50373602014** Collected: 05/14/24 12:20 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**73.6**	mg/L	2.5	10		05/28/24 07:13	16887-00-6	
Sulfate	**52.5**	mg/L	2.5	10		05/28/24 07:13	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**6.1**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:22	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:22	7440-43-9	
Calcium, Dissolved	**13700**	ug/L	500	1	05/19/24 18:58	05/19/24 20:22	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:22	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:22	7440-50-8	
Iron, Dissolved	**291**	ug/L	100	1	05/19/24 18:58	05/19/24 20:22	7439-89-6	
Magnesium, Dissolved	**10900**	ug/L	500	1	05/19/24 18:58	05/19/24 20:22	7439-95-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-14 **Lab ID: 50373602014** Collected: 05/14/24 12:20 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Manganese, Dissolved	**1390**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:22	7439-96-5	
Potassium, Dissolved	ND	ug/L	500	1	05/19/24 18:58	05/19/24 20:22	7440-09-7	
Sodium, Dissolved	**46200**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:22	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 22:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 22:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 22:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 22:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 22:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 22:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 22:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 22:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 22:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 22:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 22:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 22:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 22:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 22:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 22:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 22:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 22:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 22:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 22:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 22:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 22:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 22:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 22:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 22:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 22:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 22:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 22:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 22:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 22:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 22:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	107	%.	79-124	1		05/23/24 22:24	460-00-4	
Dibromofluoromethane (S)	118	%.	82-128	1		05/23/24 22:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 22:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**49.0**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**49.0**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-14 **Lab ID: 50373602014** Collected: 05/14/24 12:20 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540B Total Solids	Analytical Method: SM 2540B Pace Analytical Services - Indianapolis							
Total Solids	**270**	mg/L	10.0	1		05/21/24 16:33		
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**270**	mg/L	10.0	1		05/20/24 11:42		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	ND	mg/L	0.040	2		05/24/24 14:54	7664-41-7	D3

Sample: MW-29 **Lab ID: 50373602015** Collected: 05/15/24 08:00 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Chloride	**22.6**	mg/L	2.5	10		05/28/24 07:30	16887-00-6	
Sulfate	**656**	mg/L	25.0	100		05/28/24 07:47	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**10.5**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:24	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:24	7440-43-9	
Calcium, Dissolved	**235000**	ug/L	1000	2	05/19/24 18:58	05/19/24 22:44	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:24	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:24	7440-50-8	
Iron, Dissolved	**1970**	ug/L	100	1	05/19/24 18:58	05/19/24 20:24	7439-89-6	
Magnesium, Dissolved	**93000**	ug/L	500	1	05/19/24 18:58	05/19/24 20:24	7439-95-4	
Manganese, Dissolved	**1870**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:24	7439-96-5	
Potassium, Dissolved	**3670**	ug/L	500	1	05/19/24 18:58	05/19/24 20:24	7440-09-7	
Sodium, Dissolved	**55700**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:24	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 22:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 22:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 22:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 22:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 22:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 22:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 22:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 22:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 22:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 22:54	75-34-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-29 **Lab ID: 50373602015** Collected: 05/15/24 08:00 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 22:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 22:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 22:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 22:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 22:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 22:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 22:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 22:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 22:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 22:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 22:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 22:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 22:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 22:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 22:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 22:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 22:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 22:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 22:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 22:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/23/24 22:54	460-00-4	
Dibromofluoromethane (S)	111	%.	82-128	1		05/23/24 22:54	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 22:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**527**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**527**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**2240**	mg/L	20.0	1		05/22/24 06:49		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1410**	mg/L	20.0	1		05/21/24 11:52		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.35**	mg/L	0.020	1		05/24/24 13:20	7664-41-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-33 **Lab ID: 50373602016** Collected: 05/15/24 08:00 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	**22.5**	mg/L	2.5	10		05/28/24 08:04	16887-00-6	
Sulfate	**504**	mg/L	25.0	100		05/28/24 08:20	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	**12.1**	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:30	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:30	7440-43-9	
Calcium, Dissolved	**183000**	ug/L	500	1	05/19/24 18:58	05/19/24 20:30	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:30	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:30	7440-50-8	
Iron, Dissolved	**5340**	ug/L	100	1	05/19/24 18:58	05/19/24 20:30	7439-89-6	
Magnesium, Dissolved	**78000**	ug/L	500	1	05/19/24 18:58	05/19/24 20:30	7439-95-4	
Manganese, Dissolved	**1870**	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:30	7439-96-5	
Potassium, Dissolved	**3550**	ug/L	500	1	05/19/24 18:58	05/19/24 20:30	7440-09-7	
Sodium, Dissolved	**77500**	ug/L	1000	1	05/19/24 18:58	05/19/24 20:30	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 23:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 23:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 23:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 23:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 23:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 23:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 23:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 23:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 23:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 23:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 23:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 23:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 23:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 23:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 23:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 23:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 23:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 23:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 23:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 23:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 23:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 23:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 23:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 23:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 23:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 23:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 23:24	79-01-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: MW-33 **Lab ID: 50373602016** Collected: 05/15/24 08:00 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 23:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 23:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 23:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/23/24 23:24	460-00-4	
Dibromofluoromethane (S)	108	%.	82-128	1		05/23/24 23:24	1868-53-7	
Toluene-d8 (S)	96	%.	73-122	1		05/23/24 23:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	**522**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	**522**	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	**2470**	mg/L	20.0	1		05/22/24 06:49		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	**1170**	mg/L	20.0	1		05/21/24 11:52		
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	**0.92**	mg/L	0.020	1		05/24/24 13:22	7664-41-7	

Sample: Field Blank **Lab ID: 50373602017** Collected: 05/15/24 14:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056							
	Pace Analytical Services - Indianapolis							
Chloride	ND	mg/L	0.25	1		05/27/24 23:55	16887-00-6	
Sulfate	ND	mg/L	0.25	1		05/27/24 23:55	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:31	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:31	7440-43-9	
Calcium, Dissolved	ND	ug/L	500	1	05/19/24 18:58	05/19/24 20:31	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:31	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:31	7440-50-8	
Iron, Dissolved	ND	ug/L	100	1	05/19/24 18:58	05/19/24 20:31	7439-89-6	
Magnesium, Dissolved	ND	ug/L	500	1	05/19/24 18:58	05/19/24 20:31	7439-95-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: Field Blank **Lab ID: 50373602017** Collected: 05/15/24 14:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
	Pace Analytical Services - Indianapolis							
Manganese, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:31	7439-96-5	
Potassium, Dissolved	ND	ug/L	500	1	05/19/24 18:58	05/19/24 20:31	7440-09-7	
Sodium, Dissolved	ND	ug/L	1000	1	05/19/24 18:58	05/19/24 20:31	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/23/24 23:54	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/23/24 23:54	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/23/24 23:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/23/24 23:54	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/23/24 23:54	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/23/24 23:54	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/23/24 23:54	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 23:54	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/23/24 23:54	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/23/24 23:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/23/24 23:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/23/24 23:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 23:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/23/24 23:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/23/24 23:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 23:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/23/24 23:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/23/24 23:54	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/23/24 23:54	75-09-2	
Styrene	ND	ug/L	1.0	1		05/23/24 23:54	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 23:54	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/23/24 23:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/23/24 23:54	127-18-4	
Toluene	ND	ug/L	1.0	1		05/23/24 23:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/23/24 23:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/23/24 23:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/23/24 23:54	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/23/24 23:54	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/23/24 23:54	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/23/24 23:54	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/23/24 23:54	460-00-4	
Dibromofluoromethane (S)	115	%.	82-128	1		05/23/24 23:54	1868-53-7	
Toluene-d8 (S)	95	%.	73-122	1		05/23/24 23:54	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	ND	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: Field Blank **Lab ID: 50373602017** Collected: 05/15/24 14:30 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2540B Total Solids	Analytical Method: SM 2540B Pace Analytical Services - Indianapolis							
Total Solids	ND	mg/L	10.0	1		05/22/24 06:49		PL
2540C Total Dissolved Solids	Analytical Method: SM 2540C Pace Analytical Services - Indianapolis							
Total Dissolved Solids	ND	mg/L	10.0	1		05/21/24 11:52		PL
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	ND	mg/L	0.040	2		05/24/24 14:55	7664-41-7	D3

Sample: Equipment Blank **Lab ID: 50373602018** Collected: 05/15/24 14:35 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 IC Anions	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Chloride	ND	mg/L	0.25	1		05/28/24 10:02	16887-00-6	
Sulfate	ND	mg/L	0.25	1		05/28/24 10:02	14808-79-8	
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Indianapolis							
Arsenic, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:33	7440-38-2	
Cadmium, Dissolved	ND	ug/L	3.0	1	05/19/24 18:58	05/19/24 20:33	7440-43-9	
Calcium, Dissolved	ND	ug/L	500	1	05/19/24 18:58	05/19/24 20:33	7440-70-2	
Chromium, Dissolved	ND	ug/L	5.0	1	05/19/24 18:58	05/19/24 20:33	7440-47-3	
Copper, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:33	7440-50-8	
Iron, Dissolved	ND	ug/L	100	1	05/19/24 18:58	05/19/24 20:33	7439-89-6	
Magnesium, Dissolved	ND	ug/L	500	1	05/19/24 18:58	05/19/24 20:33	7439-95-4	
Manganese, Dissolved	ND	ug/L	10.0	1	05/19/24 18:58	05/19/24 20:33	7439-96-5	
Potassium, Dissolved	ND	ug/L	500	1	05/19/24 18:58	05/19/24 20:33	7440-09-7	
Sodium, Dissolved	ND	ug/L	1000	1	05/19/24 18:58	05/19/24 20:33	7440-23-5	
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/24/24 00:24	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/24/24 00:24	74-83-9	
Carbon tetrachloride	ND	ug/L	1.0	1		05/24/24 00:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/24/24 00:24	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/24/24 00:24	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/24/24 00:24	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/24/24 00:24	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/24/24 00:24	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/24/24 00:24	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/24/24 00:24	75-34-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: Equipment Blank **Lab ID: 50373602018** Collected: 05/15/24 14:35 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260							
	Pace Analytical Services - Indianapolis							
1,2-Dichloroethane	ND	ug/L	1.0	1		05/24/24 00:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/24/24 00:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/24 00:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/24 00:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/24/24 00:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/24 00:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/24 00:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/24/24 00:24	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/24/24 00:24	75-09-2	
Styrene	ND	ug/L	1.0	1		05/24/24 00:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/24 00:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/24 00:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	1		05/24/24 00:24	127-18-4	
Toluene	ND	ug/L	1.0	1		05/24/24 00:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/24/24 00:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/24/24 00:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/24/24 00:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/24/24 00:24	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/24/24 00:24	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/24/24 00:24	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	105	%.	79-124	1		05/24/24 00:24	460-00-4	
Dibromofluoromethane (S)	109	%.	82-128	1		05/24/24 00:24	1868-53-7	
Toluene-d8 (S)	95	%.	73-122	1		05/24/24 00:24	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B							
	Pace Analytical Services - Indianapolis							
Alkalinity, Total as CaCO3	ND	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
Alkalinity,Carbonate (CaCO3)	ND	mg/L	20.0	1		05/23/24 21:05		
2540B Total Solids	Analytical Method: SM 2540B							
	Pace Analytical Services - Indianapolis							
Total Solids	ND	mg/L	10.0	1		05/22/24 06:50		PL
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
	Pace Analytical Services - Indianapolis							
Total Dissolved Solids	ND	mg/L	10.0	1		05/21/24 11:53		PL
4500 Ammonia Water Low Level	Analytical Method: SM-4500-NH3 G							
	Pace Analytical Services - Indianapolis							
Nitrogen, Ammonia	ND	mg/L	0.040	2		05/24/24 14:56	7664-41-7	D3

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Sample: Trip Blank **Lab ID: 50373602019** Collected: 05/15/24 08:00 Received: 05/17/24 13:20 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Indianapolis							
Benzene	ND	ug/L	1.0	1		05/24/24 21:19	71-43-2	
Bromomethane	ND	ug/L	2.0	1		05/24/24 21:19	74-83-9	L1
Carbon tetrachloride	ND	ug/L	1.0	1		05/24/24 21:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	1		05/24/24 21:19	108-90-7	
Chloroethane	ND	ug/L	1.0	1		05/24/24 21:19	75-00-3	
Chloroform	ND	ug/L	1.0	1		05/24/24 21:19	67-66-3	
Chloromethane	ND	ug/L	1.0	1		05/24/24 21:19	74-87-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	1		05/24/24 21:19	95-50-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	1		05/24/24 21:19	106-46-7	
1,1-Dichloroethane	ND	ug/L	1.0	1		05/24/24 21:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	1		05/24/24 21:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	1		05/24/24 21:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/24 21:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	1		05/24/24 21:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	1		05/24/24 21:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/24 21:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	1		05/24/24 21:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	1		05/24/24 21:19	100-41-4	
Methylene Chloride	ND	ug/L	3.0	1		05/24/24 21:19	75-09-2	
Styrene	ND	ug/L	1.0	1		05/24/24 21:19	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/24 21:19	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	1		05/24/24 21:19	79-34-5	L1
Tetrachloroethene	ND	ug/L	1.0	1		05/24/24 21:19	127-18-4	
Toluene	ND	ug/L	1.0	1		05/24/24 21:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	1		05/24/24 21:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	1		05/24/24 21:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	1		05/24/24 21:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		05/24/24 21:19	75-69-4	
Vinyl chloride	ND	ug/L	2.0	1		05/24/24 21:19	75-01-4	
Xylene (Total)	ND	ug/L	2.0	1		05/24/24 21:19	1330-20-7	
Surrogates								
4-Bromofluorobenzene (S)	101	%.	79-124	1		05/24/24 21:19	460-00-4	
Dibromofluoromethane (S)	99	%.	82-128	1		05/24/24 21:19	1868-53-7	
Toluene-d8 (S)	102	%.	73-122	1		05/24/24 21:19	2037-26-5	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 792002
QC Batch Method: EPA 9056
Analysis Method: EPA 9056
Analysis Description: 9056 IC Anions
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

METHOD BLANK: 3624441 Matrix: Water
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	0.25	05/27/24 18:09	
Sulfate	mg/L	ND	0.25	05/27/24 18:09	

LABORATORY CONTROL SAMPLE: 3624442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	2.5	2.3	93	80-120	
Sulfate	mg/L	5	4.9	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3624443 3624444

Parameter	Units	50373602012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	23.6	25	25	46.1	46.0	90	90	80-120	0	15	
Sulfate	mg/L	495	500	500	970	971	95	95	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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 790798
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET Dissolved
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

METHOD BLANK: 3618900 Matrix: Water
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	ND	5.0	05/19/24 19:47	
Cadmium, Dissolved	ug/L	ND	3.0	05/19/24 19:47	
Calcium, Dissolved	ug/L	ND	500	05/19/24 19:47	
Chromium, Dissolved	ug/L	ND	5.0	05/19/24 19:47	
Copper, Dissolved	ug/L	ND	10.0	05/19/24 19:47	
Iron, Dissolved	ug/L	ND	100	05/19/24 19:47	
Magnesium, Dissolved	ug/L	ND	500	05/19/24 19:47	
Manganese, Dissolved	ug/L	ND	10.0	05/19/24 19:47	
Potassium, Dissolved	ug/L	ND	500	05/19/24 19:47	
Sodium, Dissolved	ug/L	ND	1000	05/19/24 19:47	

LABORATORY CONTROL SAMPLE: 3618901

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	1000	986	99	80-120	
Cadmium, Dissolved	ug/L	1000	967	97	80-120	
Calcium, Dissolved	ug/L	10000	9990	100	80-120	
Chromium, Dissolved	ug/L	1000	962	96	80-120	
Copper, Dissolved	ug/L	1000	929	93	80-120	
Iron, Dissolved	ug/L	10000	9630	96	80-120	
Magnesium, Dissolved	ug/L	10000	9700	97	80-120	
Manganese, Dissolved	ug/L	1000	979	98	80-120	
Potassium, Dissolved	ug/L	10000	9570	96	80-120	
Sodium, Dissolved	ug/L	10000	9500	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3618902 3618903

Parameter	Units	50373602012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic, Dissolved	ug/L	14.5	1000	1000	1040	1060	103	105	75-125	2	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	977	993	98	99	75-125	2	20	
Calcium, Dissolved	ug/L	180000	10000	10000	187000	188000	66	72	75-125	0	20	P6
Chromium, Dissolved	ug/L	ND	1000	1000	944	961	94	96	75-125	2	20	
Copper, Dissolved	ug/L	ND	1000	1000	930	948	93	95	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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3618902 3618903

Parameter	Units	50373602012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron, Dissolved	ug/L	5330	10000	10000	14500	14700	92	94	75-125	1	20	
Magnesium, Dissolved	ug/L	77700	10000	10000	85000	85400	73	78	75-125	1	20	P6
Manganese, Dissolved	ug/L	1850	1000	1000	2740	2760	89	91	75-125	1	20	
Potassium, Dissolved	ug/L	3520	10000	10000	13600	13000	100	95	75-125	4	20	
Sodium, Dissolved	ug/L	77500	10000	10000	84800	85000	73	76	75-125	0	20	P6

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791751
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

METHOD BLANK: 3623004
Matrix: Water
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	05/23/24 15:54	
1,1,1-Trichloroethane	ug/L	ND	1.0	05/23/24 15:54	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	05/23/24 15:54	
1,1,2-Trichloroethane	ug/L	ND	1.0	05/23/24 15:54	
1,1-Dichloroethane	ug/L	ND	1.0	05/23/24 15:54	
1,1-Dichloroethene	ug/L	ND	1.0	05/23/24 15:54	
1,2-Dichlorobenzene	ug/L	ND	1.0	05/23/24 15:54	
1,2-Dichloroethane	ug/L	ND	1.0	05/23/24 15:54	
1,2-Dichloropropane	ug/L	ND	1.0	05/23/24 15:54	
1,4-Dichlorobenzene	ug/L	ND	1.0	05/23/24 15:54	
Benzene	ug/L	ND	1.0	05/23/24 15:54	
Bromomethane	ug/L	ND	2.0	05/23/24 15:54	
Carbon tetrachloride	ug/L	ND	1.0	05/23/24 15:54	
Chlorobenzene	ug/L	ND	1.0	05/23/24 15:54	
Chloroethane	ug/L	ND	1.0	05/23/24 15:54	
Chloroform	ug/L	ND	1.0	05/23/24 15:54	
Chloromethane	ug/L	ND	1.0	05/23/24 15:54	
cis-1,2-Dichloroethene	ug/L	ND	1.0	05/23/24 15:54	
cis-1,3-Dichloropropene	ug/L	ND	1.0	05/23/24 15:54	
Ethylbenzene	ug/L	ND	1.0	05/23/24 15:54	
Methylene Chloride	ug/L	ND	3.0	05/23/24 15:54	
Styrene	ug/L	ND	1.0	05/23/24 15:54	
Tetrachloroethene	ug/L	ND	1.0	05/23/24 15:54	
Toluene	ug/L	ND	1.0	05/23/24 15:54	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/23/24 15:54	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/23/24 15:54	
Trichloroethene	ug/L	ND	1.0	05/23/24 15:54	
Trichlorofluoromethane	ug/L	ND	5.0	05/23/24 15:54	
Vinyl chloride	ug/L	ND	2.0	05/23/24 15:54	
Xylene (Total)	ug/L	ND	2.0	05/23/24 15:54	
4-Bromofluorobenzene (S)	%.	104	79-124	05/23/24 15:54	
Dibromofluoromethane (S)	%.	108	82-128	05/23/24 15:54	
Toluene-d8 (S)	%.	96	73-122	05/23/24 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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

LABORATORY CONTROL SAMPLE: 3623005

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	50.4	101	81-130	
1,1,1-Trichloroethane	ug/L	50	42.1	84	71-126	
1,1,2,2-Tetrachloroethane	ug/L	50	48.6	97	70-126	
1,1,2-Trichloroethane	ug/L	50	49.1	98	79-125	
1,1-Dichloroethane	ug/L	50	42.1	84	79-120	
1,1-Dichloroethene	ug/L	50	41.9	84	71-130	
1,2-Dichlorobenzene	ug/L	50	43.9	88	79-123	
1,2-Dichloroethane	ug/L	50	41.0	82	72-123	
1,2-Dichloropropane	ug/L	50	46.4	93	76-125	
1,4-Dichlorobenzene	ug/L	50	43.9	88	79-116	
Benzene	ug/L	50	43.9	88	76-122	
Bromomethane	ug/L	50	45.8	92	10-175	
Carbon tetrachloride	ug/L	50	44.1	88	73-127	
Chlorobenzene	ug/L	50	43.0	86	76-118	
Chloroethane	ug/L	50	35.2	70	36-162	
Chloroform	ug/L	50	40.6	81	78-121	
Chloromethane	ug/L	50	40.9	82	37-143	
cis-1,2-Dichloroethene	ug/L	50	41.3	83	77-123	
cis-1,3-Dichloropropene	ug/L	50	51.2	102	76-132	
Ethylbenzene	ug/L	50	43.4	87	76-120	
Methylene Chloride	ug/L	50	50.1	100	71-121	
Styrene	ug/L	50	43.7	87	80-121	
Tetrachloroethene	ug/L	50	43.7	87	71-122	
Toluene	ug/L	50	42.8	86	74-118	
trans-1,2-Dichloroethene	ug/L	50	40.6	81	75-122	
trans-1,3-Dichloropropene	ug/L	50	54.1	108	77-126	
Trichloroethene	ug/L	50	45.4	91	74-125	
Trichlorofluoromethane	ug/L	50	41.0	82	64-138	
Vinyl chloride	ug/L	50	41.3	83	55-139	
Xylene (Total)	ug/L	100	86.0	86	73-119	
4-Bromofluorobenzene (S)	%.			100	79-124	
Dibromofluoromethane (S)	%.			93	82-128	
Toluene-d8 (S)	%.			99	73-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3623006 3623007

Parameter	Units	50373602012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	59.4	52.3	119	105	47-139	13	20	
1,1,1-Trichloroethane	ug/L	ND	50	50	48.2	43.8	96	88	47-145	10	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	57.4	49.1	115	98	49-133	15	20	
1,1,2-Trichloroethane	ug/L	ND	50	50	59.6	50.4	119	101	52-136	17	20	
1,1-Dichloroethane	ug/L	ND	50	50	48.7	42.5	97	85	52-137	13	20	
1,1-Dichloroethene	ug/L	ND	50	50	47.0	43.0	94	86	53-144	9	20	
1,2-Dichlorobenzene	ug/L	ND	50	50	48.1	43.8	96	88	43-133	9	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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3623006 3623007

Parameter	Units	50373602012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	50	50	46.7	42.0	93	84	50-138	11	20	
1,2-Dichloropropane	ug/L	ND	50	50	53.5	48.0	107	96	54-139	11	20	
1,4-Dichlorobenzene	ug/L	ND	50	50	47.6	43.2	95	86	41-131	10	20	
Benzene	ug/L	ND	50	50	51.8	45.4	104	91	53-138	13	20	
Bromomethane	ug/L	ND	50	50	54.8	53.6	110	107	10-173	2	20	
Carbon tetrachloride	ug/L	ND	50	50	49.2	46.1	98	92	43-148	7	20	
Chlorobenzene	ug/L	ND	50	50	50.4	44.0	101	88	52-131	14	20	
Chloroethane	ug/L	ND	50	50	39.3	34.7	79	69	25-169	13	20	
Chloroform	ug/L	ND	50	50	47.0	41.6	94	83	54-138	12	20	
Chloromethane	ug/L	ND	50	50	42.4	35.4	85	71	33-137	18	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	48.2	42.5	96	85	50-141	12	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	59.4	52.3	119	105	47-135	13	20	
Ethylbenzene	ug/L	ND	50	50	49.7	44.1	99	88	50-136	12	20	
Methylene Chloride	ug/L	ND	50	50	52.2	44.7	104	89	48-131	15	20	
Styrene	ug/L	ND	50	50	50.4	43.8	101	88	46-136	14	20	
Tetrachloroethene	ug/L	ND	50	50	49.0	43.5	98	87	44-138	12	20	
Toluene	ug/L	ND	50	50	50.8	42.9	102	86	52-132	17	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	45.2	40.1	90	80	50-137	12	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	60.7	53.5	121	107	46-130	13	20	
Trichloroethene	ug/L	ND	50	50	51.6	46.9	103	94	49-140	9	20	
Trichlorofluoromethane	ug/L	ND	50	50	41.8	36.4	84	73	44-153	14	20	
Vinyl chloride	ug/L	ND	50	50	43.2	36.2	86	72	41-147	17	20	
Xylene (Total)	ug/L	ND	150	150	146	130	98	87	44-138	12	20	
4-Bromofluorobenzene (S)	%.						98	97	79-124			
Dibromofluoromethane (S)	%.						90	92	82-128			
Toluene-d8 (S)	%.						99	97	73-122			

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791967
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602019

METHOD BLANK: 3624292 Matrix: Water
Associated Lab Samples: 50373602019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	05/24/24 13:46	
1,1,1-Trichloroethane	ug/L	ND	1.0	05/24/24 13:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	05/24/24 13:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	05/24/24 13:46	
1,1-Dichloroethane	ug/L	ND	1.0	05/24/24 13:46	
1,1-Dichloroethene	ug/L	ND	1.0	05/24/24 13:46	
1,2-Dichlorobenzene	ug/L	ND	1.0	05/24/24 13:46	
1,2-Dichloroethane	ug/L	ND	1.0	05/24/24 13:46	
1,2-Dichloropropane	ug/L	ND	1.0	05/24/24 13:46	
1,4-Dichlorobenzene	ug/L	ND	1.0	05/24/24 13:46	
Benzene	ug/L	ND	1.0	05/24/24 13:46	
Bromomethane	ug/L	ND	2.0	05/24/24 13:46	
Carbon tetrachloride	ug/L	ND	1.0	05/24/24 13:46	
Chlorobenzene	ug/L	ND	1.0	05/24/24 13:46	
Chloroethane	ug/L	ND	1.0	05/24/24 13:46	
Chloroform	ug/L	ND	1.0	05/24/24 13:46	
Chloromethane	ug/L	ND	1.0	05/24/24 13:46	
cis-1,2-Dichloroethene	ug/L	ND	1.0	05/24/24 13:46	
cis-1,3-Dichloropropene	ug/L	ND	1.0	05/24/24 13:46	
Ethylbenzene	ug/L	ND	1.0	05/24/24 13:46	
Methylene Chloride	ug/L	ND	3.0	05/24/24 13:46	
Styrene	ug/L	ND	1.0	05/24/24 13:46	
Tetrachloroethene	ug/L	ND	1.0	05/24/24 13:46	
Toluene	ug/L	ND	1.0	05/24/24 13:46	
trans-1,2-Dichloroethene	ug/L	ND	1.0	05/24/24 13:46	
trans-1,3-Dichloropropene	ug/L	ND	1.0	05/24/24 13:46	
Trichloroethene	ug/L	ND	1.0	05/24/24 13:46	
Trichlorofluoromethane	ug/L	ND	5.0	05/24/24 13:46	
Vinyl chloride	ug/L	ND	2.0	05/24/24 13:46	
Xylene (Total)	ug/L	ND	2.0	05/24/24 13:46	
4-Bromofluorobenzene (S)	%.	102	79-124	05/24/24 13:46	
Dibromofluoromethane (S)	%.	98	82-128	05/24/24 13:46	
Toluene-d8 (S)	%.	100	73-122	05/24/24 13:46	

LABORATORY CONTROL SAMPLE: 3624293

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	56.9	114	81-130	
1,1,1-Trichloroethane	ug/L	50	55.6	111	71-126	

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

LABORATORY CONTROL SAMPLE: 3624293

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	50	276	551	70-126	L1
1,1,2-Trichloroethane	ug/L	50	53.0	106	79-125	
1,1-Dichloroethane	ug/L	50	52.1	104	79-120	
1,1-Dichloroethene	ug/L	50	53.2	106	71-130	
1,2-Dichlorobenzene	ug/L	50	52.6	105	79-123	
1,2-Dichloroethane	ug/L	50	52.7	105	72-123	
1,2-Dichloropropane	ug/L	50	52.9	106	76-125	
1,4-Dichlorobenzene	ug/L	50	52.7	105	79-116	
Benzene	ug/L	50	52.3	105	76-122	
Bromomethane	ug/L	50	92.7	185	10-175	L1
Carbon tetrachloride	ug/L	50	57.3	115	73-127	
Chlorobenzene	ug/L	50	51.9	104	76-118	
Chloroethane	ug/L	50	50.7	101	36-162	
Chloroform	ug/L	50	53.0	106	78-121	
Chloromethane	ug/L	50	45.9	92	37-143	
cis-1,2-Dichloroethene	ug/L	50	52.2	104	77-123	
cis-1,3-Dichloropropene	ug/L	50	57.2	114	76-132	
Ethylbenzene	ug/L	50	53.2	106	76-120	
Methylene Chloride	ug/L	50	51.4	103	71-121	
Styrene	ug/L	50	53.3	107	80-121	
Tetrachloroethene	ug/L	50	51.6	103	71-122	
Toluene	ug/L	50	50.9	102	74-118	
trans-1,2-Dichloroethene	ug/L	50	53.1	106	75-122	
trans-1,3-Dichloropropene	ug/L	50	59.2	118	77-126	
Trichloroethene	ug/L	50	40.5	81	74-125	
Trichlorofluoromethane	ug/L	50	44.8	90	64-138	
Vinyl chloride	ug/L	50	45.7	91	55-139	
Xylene (Total)	ug/L	150	158	105	73-119	
4-Bromofluorobenzene (S)	%.			99	79-124	
Dibromofluoromethane (S)	%.			100	82-128	
Toluene-d8 (S)	%.			99	73-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3624294 3624295

Parameter	Units	50373251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	62.2	54.5	124	109	47-139	13	20	
1,1,1-Trichloroethane	ug/L	ND	50	50	60.4	55.5	121	111	47-145	8	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	335	295	670	590	49-133	13	20	E,M0
1,1,2-Trichloroethane	ug/L	ND	50	50	58.5	54.2	117	108	52-136	8	20	
1,1-Dichloroethane	ug/L	ND	50	50	57.5	53.1	115	106	52-137	8	20	
1,1-Dichloroethene	ug/L	ND	50	50	59.9	52.6	120	105	53-144	13	20	
1,2-Dichlorobenzene	ug/L	ND	50	50	54.4	48.3	109	97	43-133	12	20	
1,2-Dichloroethane	ug/L	ND	50	50	56.8	51.8	114	104	50-138	9	20	
1,2-Dichloropropane	ug/L	ND	50	50	58.5	52.0	117	104	54-139	12	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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3624294 3624295

Parameter	Units	50373251001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	50	50	53.0	46.8	106	94	41-131	12	20	
Benzene	ug/L	ND	50	50	56.9	51.2	114	102	53-138	11	20	
Bromomethane	ug/L	ND	50	50	64.4	80.4	129	161	10-173	22	20	R1
Carbon tetrachloride	ug/L	ND	50	50	59.9	53.9	120	108	43-148	11	20	
Chlorobenzene	ug/L	ND	50	50	55.6	49.0	111	98	52-131	13	20	
Chloroethane	ug/L	ND	50	50	57.4	51.3	115	103	25-169	11	20	
Chloroform	ug/L	ND	50	50	57.4	52.5	115	105	54-138	9	20	
Chloromethane	ug/L	ND	50	50	49.7	45.9	99	92	33-137	8	20	
cis-1,2-Dichloroethene	ug/L	ND	50	50	56.6	51.3	113	103	50-141	10	20	
cis-1,3-Dichloropropene	ug/L	ND	50	50	60.3	53.3	121	107	47-135	12	20	
Ethylbenzene	ug/L	ND	50	50	56.9	48.9	114	98	50-136	15	20	
Methylene Chloride	ug/L	ND	50	50	54.3	50.0	109	100	48-131	8	20	
Styrene	ug/L	ND	50	50	57.4	49.8	115	100	46-136	14	20	
Tetrachloroethene	ug/L	ND	50	50	52.6	45.7	105	91	44-138	14	20	
Toluene	ug/L	ND	50	50	56.0	48.5	112	97	52-132	14	20	
trans-1,2-Dichloroethene	ug/L	ND	50	50	56.2	50.4	112	101	50-137	11	20	
trans-1,3-Dichloropropene	ug/L	ND	50	50	59.4	54.1	119	108	46-130	9	20	
Trichloroethene	ug/L	ND	50	50	42.7	36.7	85	73	49-140	15	20	
Trichlorofluoromethane	ug/L	ND	50	50	49.0	42.9	98	86	44-153	13	20	
Vinyl chloride	ug/L	ND	50	50	49.7	44.0	99	88	41-147	12	20	
Xylene (Total)	ug/L	ND	150	150	167	145	112	97	44-138	14	20	
4-Bromofluorobenzene (S)	%.						101	100	79-124			
Dibromofluoromethane (S)	%.						99	101	82-128			
Toluene-d8 (S)	%.						99	98	73-122			

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791790
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

METHOD BLANK: 3623156 Matrix: Water
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	20.0	05/23/24 21:05	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	05/23/24 21:05	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	20.0	05/23/24 21:05	

LABORATORY CONTROL SAMPLE: 3623157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	52.7	105	90-110	

SAMPLE DUPLICATE: 3623158

Parameter	Units	50373602003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	528	535	1	20	
Alkalinity,Bicarbonate (CaCO3)	mg/L	528	535	1	20	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 3623159

Parameter	Units	50373602012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	519	531	2	20	
Alkalinity,Bicarbonate (CaCO3)	mg/L	519	531	2	20	
Alkalinity,Carbonate (CaCO3)	mg/L	ND	ND		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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791044 | Analysis Method: SM 2540B
QC Batch Method: SM 2540B | Analysis Description: 2540B Total Solids
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602013, 50373602014

METHOD BLANK: 3619739 Matrix: Water
Associated Lab Samples: 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602013, 50373602014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Solids	mg/L	ND	10.0	05/21/24 16:25	

LABORATORY CONTROL SAMPLE: 3619740

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	mg/L	300	310	103	80-120	

SAMPLE DUPLICATE: 3619741

Parameter	Units	50373284002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	mg/L	2030	2010	1	10	

SAMPLE DUPLICATE: 3619742

Parameter	Units	50373284008 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	mg/L	564	565	0	10	

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791309 | Analysis Method: SM 2540B
QC Batch Method: SM 2540B | Analysis Description: 2540B Total Solids
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602001, 50373602002, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602015, 50373602016, 50373602017, 50373602018

METHOD BLANK: 3620906 Matrix: Water
Associated Lab Samples: 50373602001, 50373602002, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602015, 50373602016, 50373602017, 50373602018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Solids	mg/L	ND	10.0	05/22/24 06:45	

LABORATORY CONTROL SAMPLE: 3620907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Solids	mg/L	300	281	94	80-120	

SAMPLE DUPLICATE: 3620908

Parameter	Units	50373251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	mg/L	1850	1870	1	10	

SAMPLE DUPLICATE: 3620909

Parameter	Units	50373602012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	mg/L	2410	2320	4	10	

SAMPLE DUPLICATE: 3620910

Parameter	Units	50373382002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Solids	mg/L	148	152	3	10	

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 790837
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602013, 50373602014

METHOD BLANK: 3619030 Matrix: Water
Associated Lab Samples: 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602013, 50373602014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	05/20/24 11:36	

LABORATORY CONTROL SAMPLE: 3619031

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	282	94	80-120	

SAMPLE DUPLICATE: 3619032

Parameter	Units	50373350016 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1420	1410	1	10	

SAMPLE DUPLICATE: 3619033

Parameter	Units	50373251001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1780	1730	3	10	

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791037
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602001, 50373602002, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012

METHOD BLANK: 3619731 Matrix: Water
Associated Lab Samples: 50373602001, 50373602002, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	05/21/24 12:14	

LABORATORY CONTROL SAMPLE: 3619732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	298	99	80-120	

SAMPLE DUPLICATE: 3619733

Parameter	Units	50373532003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	480	481	0	10	

SAMPLE DUPLICATE: 3619734

Parameter	Units	50373602012 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1240	1260	2	10	

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791039
QC Batch Method: SM 2540C
Analysis Method: SM 2540C
Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602015, 50373602016, 50373602017, 50373602018

METHOD BLANK: 3619735 Matrix: Water
Associated Lab Samples: 50373602015, 50373602016, 50373602017, 50373602018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	10.0	05/21/24 11:51	

LABORATORY CONTROL SAMPLE: 3619736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	300	294	98	80-120	

SAMPLE DUPLICATE: 3619737

Parameter	Units	50373602015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1410	1420	1	10	

SAMPLE DUPLICATE: 3619738

Parameter	Units	50373382002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	274	245	11	10	R1

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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

QC Batch: 791862
QC Batch Method: SM-4500-NH3 G
Analysis Method: SM-4500-NH3 G
Analysis Description: 4500 Ammonia Low Level
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

METHOD BLANK: 3623710 Matrix: Water
Associated Lab Samples: 50373602001, 50373602002, 50373602003, 50373602004, 50373602005, 50373602006, 50373602007, 50373602008, 50373602009, 50373602010, 50373602011, 50373602012, 50373602013, 50373602014, 50373602015, 50373602016, 50373602017, 50373602018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.020	05/24/24 12:52	

LABORATORY CONTROL SAMPLE: 3623711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.1	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3623712 3623713

Parameter	Units	50373602012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.0	1	1	1.9	1.9	90	89	90-110	1	20	M0

MATRIX SPIKE SAMPLE: 3623714

Parameter	Units	50373602016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.92	1	1.8	89	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.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

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.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
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.
PL	The minimum mass of dried residue of 2.5 mg could not be obtained using the routine sample volume of 100 mL.
R1	RPD value was outside control limits.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50373602001	**MW-1R**	EPA 9056	792002		
50373602002	**MW-2R**	EPA 9056	792002		
50373602003	**MW-3R**	EPA 9056	792002		
50373602004	**MW-4R**	EPA 9056	792002		
50373602005	**MW-5**	EPA 9056	792002		
50373602006	**MW-6**	EPA 9056	792002		
50373602007	**MW-7**	EPA 9056	792002		
50373602008	**MW-8**	EPA 9056	792002		
50373602009	**MW-9R**	EPA 9056	792002		
50373602010	**MW-10**	EPA 9056	792002		
50373602011	**MW-11**	EPA 9056	792002		
50373602012	**MW-12**	EPA 9056	792002		
50373602013	**MW-13**	EPA 9056	792002		
50373602014	**MW-14**	EPA 9056	792002		
50373602015	**MW-29**	EPA 9056	792002		
50373602016	**MW-33**	EPA 9056	792002		
50373602017	**Field Blank**	EPA 9056	792002		
50373602018	**Equipment Blank**	EPA 9056	792002		
50373602001	**MW-1R**	EPA 3010	790798	EPA 6010	790801
50373602002	**MW-2R**	EPA 3010	790798	EPA 6010	790801
50373602003	**MW-3R**	EPA 3010	790798	EPA 6010	790801
50373602004	**MW-4R**	EPA 3010	790798	EPA 6010	790801
50373602005	**MW-5**	EPA 3010	790798	EPA 6010	790801
50373602006	**MW-6**	EPA 3010	790798	EPA 6010	790801
50373602007	**MW-7**	EPA 3010	790798	EPA 6010	790801
50373602008	**MW-8**	EPA 3010	790798	EPA 6010	790801
50373602009	**MW-9R**	EPA 3010	790798	EPA 6010	790801
50373602010	**MW-10**	EPA 3010	790798	EPA 6010	790801
50373602011	**MW-11**	EPA 3010	790798	EPA 6010	790801
50373602012	**MW-12**	EPA 3010	790798	EPA 6010	790801
50373602013	**MW-13**	EPA 3010	790798	EPA 6010	790801
50373602014	**MW-14**	EPA 3010	790798	EPA 6010	790801
50373602015	**MW-29**	EPA 3010	790798	EPA 6010	790801
50373602016	**MW-33**	EPA 3010	790798	EPA 6010	790801
50373602017	**Field Blank**	EPA 3010	790798	EPA 6010	790801
50373602018	**Equipment Blank**	EPA 3010	790798	EPA 6010	790801
50373602001	**MW-1R**	EPA 5030B/8260	791751		
50373602002	**MW-2R**	EPA 5030B/8260	791751		
50373602003	**MW-3R**	EPA 5030B/8260	791751		
50373602004	**MW-4R**	EPA 5030B/8260	791751		
50373602005	**MW-5**	EPA 5030B/8260	791751		
50373602006	**MW-6**	EPA 5030B/8260	791751		
50373602007	**MW-7**	EPA 5030B/8260	791751		
50373602008	**MW-8**	EPA 5030B/8260	791751		
50373602009	**MW-9R**	EPA 5030B/8260	791751		
50373602010	**MW-10**	EPA 5030B/8260	791751		
50373602011	**MW-11**	EPA 5030B/8260	791751		
50373602012	**MW-12**	EPA 5030B/8260	791751		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50373602013	**MW-13**	EPA 5030B/8260	791751		
50373602014	**MW-14**	EPA 5030B/8260	791751		
50373602015	**MW-29**	EPA 5030B/8260	791751		
50373602016	**MW-33**	EPA 5030B/8260	791751		
50373602017	**Field Blank**	EPA 5030B/8260	791751		
50373602018	**Equipment Blank**	EPA 5030B/8260	791751		
50373602019	**Trip Blank**	EPA 5030B/8260	791967		
50373602001	**MW-1R**	SM 2320B	791790		
50373602002	**MW-2R**	SM 2320B	791790		
50373602003	**MW-3R**	SM 2320B	791790		
50373602004	**MW-4R**	SM 2320B	791790		
50373602005	**MW-5**	SM 2320B	791790		
50373602006	**MW-6**	SM 2320B	791790		
50373602007	**MW-7**	SM 2320B	791790		
50373602008	**MW-8**	SM 2320B	791790		
50373602009	**MW-9R**	SM 2320B	791790		
50373602010	**MW-10**	SM 2320B	791790		
50373602011	**MW-11**	SM 2320B	791790		
50373602012	**MW-12**	SM 2320B	791790		
50373602013	**MW-13**	SM 2320B	791790		
50373602014	**MW-14**	SM 2320B	791790		
50373602015	**MW-29**	SM 2320B	791790		
50373602016	**MW-33**	SM 2320B	791790		
50373602017	**Field Blank**	SM 2320B	791790		
50373602018	**Equipment Blank**	SM 2320B	791790		
50373602001	**MW-1R**	SM 2540B	791309		
50373602002	**MW-2R**	SM 2540B	791309		
50373602003	**MW-3R**	SM 2540B	791044		
50373602004	**MW-4R**	SM 2540B	791044		
50373602005	**MW-5**	SM 2540B	791044		
50373602006	**MW-6**	SM 2540B	791044		
50373602007	**MW-7**	SM 2540B	791044		
50373602008	**MW-8**	SM 2540B	791309		
50373602009	**MW-9R**	SM 2540B	791309		
50373602010	**MW-10**	SM 2540B	791309		
50373602011	**MW-11**	SM 2540B	791309		
50373602012	**MW-12**	SM 2540B	791309		
50373602013	**MW-13**	SM 2540B	791044		
50373602014	**MW-14**	SM 2540B	791044		
50373602015	**MW-29**	SM 2540B	791309		
50373602016	**MW-33**	SM 2540B	791309		
50373602017	**Field Blank**	SM 2540B	791309		
50373602018	**Equipment Blank**	SM 2540B	791309		
50373602001	**MW-1R**	SM 2540C	791037		
50373602002	**MW-2R**	SM 2540C	791037		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Sycamore Ridge SA GW
Pace Project No.: 50373602

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50373602003	**MW-3R**	SM 2540C	790837		
50373602004	**MW-4R**	SM 2540C	790837		
50373602005	**MW-5**	SM 2540C	790837		
50373602006	**MW-6**	SM 2540C	790837		
50373602007	**MW-7**	SM 2540C	790837		
50373602008	**MW-8**	SM 2540C	791037		
50373602009	**MW-9R**	SM 2540C	791037		
50373602010	**MW-10**	SM 2540C	791037		
50373602011	**MW-11**	SM 2540C	791037		
50373602012	**MW-12**	SM 2540C	791037		
50373602013	**MW-13**	SM 2540C	790837		
50373602014	**MW-14**	SM 2540C	790837		
50373602015	**MW-29**	SM 2540C	791039		
50373602016	**MW-33**	SM 2540C	791039		
50373602017	**Field Blank**	SM 2540C	791039		
50373602018	**Equipment Blank**	SM 2540C	791039		
50373602001	**MW-1R**	SM-4500-NH3 G	791862		
50373602002	**MW-2R**	SM-4500-NH3 G	791862		
50373602003	**MW-3R**	SM-4500-NH3 G	791862		
50373602004	**MW-4R**	SM-4500-NH3 G	791862		
50373602005	**MW-5**	SM-4500-NH3 G	791862		
50373602006	**MW-6**	SM-4500-NH3 G	791862		
50373602007	**MW-7**	SM-4500-NH3 G	791862		
50373602008	**MW-8**	SM-4500-NH3 G	791862		
50373602009	**MW-9R**	SM-4500-NH3 G	791862		
50373602010	**MW-10**	SM-4500-NH3 G	791862		
50373602011	**MW-11**	SM-4500-NH3 G	791862		
50373602012	**MW-12**	SM-4500-NH3 G	791862		
50373602013	**MW-13**	SM-4500-NH3 G	791862		
50373602014	**MW-14**	SM-4500-NH3 G	791862		
50373602015	**MW-29**	SM-4500-NH3 G	791862		
50373602016	**MW-33**	SM-4500-NH3 G	791862		
50373602017	**Field Blank**	SM-4500-NH3 G	791862		
50373602018	**Equipment Blank**	SM-4500-NH3 G	791862		

Pace

CHAIN-OF-CUSTODY / Analytical Request Dc

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must b

WO# : 50373602

50373602

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	SESCO / Republic	Report To:	Tim Bannister	Attention:	AP
Address:	5154 East 65th Street	Copy To:	Steve Reuter	Company Name:	Republic Services
	Indianapolis, IN 46220			Address:	
Email:	tbannister@sescogroup.com	Purchase Order #:		Pace Quote:	
Phone:	317-347-9590 Fax:	Project Name:	Sycamore Ridge SA GW	Pace Project Manager:	kenneth.hunt@pacelabs.com
Requested Due Date:	10BD	Project #:		Pace Profile #:	5030 / 1

Regulatory Agency
State / Location
IN

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	Total Metals 6010*	Alkalinity 2320B (Total, Bicarb, Carb), 9056-(Chloride, Sulfate)	Total Solids 2540B, Total Dissolved Solids 2540C	Ammonia 4500	Residual Chlorine (Y/N)	
1	MW-1R	WT	G			5/1 5:24	945		7	2	1	1	3						X	X	X	X	X		001
2	MW-2R	WT	G			↓	850		7	2	1	1	3						X	X	X	X	X		002
3	MW-3R	WT	G			5/14/24	530		7	2	1	1	3						X	X	X	X	X		003
4	MW-4R	WT	G				440		7	2	1	1	3						X	X	X	X	X		004
5	MW-5	WT	G				350		7	2	1	1	3						X	X	X	X	X		005
6	MW-6	WT	G				205		7	2	1	1	3						X	X	X	X	X		006
7	MW-7	WT	G				115		7	2	1	1	3						X	X	X	X	X		007
8	MW-8	WT	G			5/15/24	1040		7	2	1	1	3						X	X	X	X	X		008
9	MW-9R	WT	G				1135		7	2	1	1	3						X	X	X	X	X		009
10	MW-10	WT	G				1230		7	2	1	1	3						X	X	X	X	X		010
11	MW-11	WT	G				130		7	2	1	1	3						X	X	X	X	X		011
12	MW-12	WT	G				215		7	2	1	1	3						X	X	X	X	X		012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Metals: (As, Cd, Ca, Cr, Cu, Fe, Mg, Mn, K, Na)		5/17/24	120		5/17/24	120	3.1	Y	N	Y

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:						
SIGNATURE of SAMPLER:	DATE Signed: 5-17-24					

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	SESCO / Republic	Report To:	Tim Bannister	Attention:	AP
Address:	5154 East 65th Street	Copy To:	Steve Reuter	Company Name:	Republic Services
	Indianapolis, IN 46220			Address:	
Email:	tbannister@sescogroup.com	Purchase Order #:		Pace Quote:	
Phone:	317-347-9590 Fax:	Project Name:	Sycamore Ridge SA GW	Pace Project Manager:	kenneth.hunt@pacelabs.com
Requested Due Date:	10BD	Project #:		Pace Profile #:	5030 / 1

Regulatory Agency	
State / Location	IN

SAMPLE ID
One Character per box.
(A-Z, 0-9 / , -)
Sample Ids must be unique

MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Other	OT
Tissue	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	VOC by 8260	Total Metals 6010*	Alkalinity 2320B (Total, Bicarb, Carb), 9056-(Chloride, Sulfate)	Total Solids 2540B, Total Dissolved Solids 2540C	Ammonia 4500	Residual Chlorine (Y/N)	
13	MW-13	WT	G			5/14/24	1115		7	2	1	1	3						X	X	X	X	X		013
14	MW-14	WT	G			"	1220		7	2	1	1	3						X	X	X	X	X		014
15	MW-29	WT	G			5/15/24	—		7	2	1	1	3						X	X	X	X	X		015
16	MW-33	WT	G			"	—		7	2	1	1	3						X	X	X	X	X		016
17	Field Blank	WT	G			5/15/24	230		7	2	1	1	3						X	X	X	X	X		017
18	Equipment Blank	WT	G			"	235		7	2	1	1	3						X	X	X	X	X		018
19	Trip Blank	WT	G			"	—		3				3						X						019
20	MS/MSD (Parent Sample: MW-12)	WT	G			"	245		7	2	1	1	3						Do not log this line as a sample. Log Parent sample as RQS.						
21																									
22																									
23																									
24																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Metals: (As, Cd, Ca, Cr, Cu, Fe, Mg, Mn, K, Na)		5/7/24	120		5/17/24	120	3.1	Y	N	Y
Log MS/MSD with the parent sample										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ryan Gallagher

SIGNATURE of SAMPLER: [signature] DATE Signed: 5-17-24

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: 5/17/24 1542 MW

1. **Courier:** ☐ FED EX ☐ UPS ☑ CLIENT ☐ PACE ☐ NOW/JETT ☐ OTHER _____
2. **Custody Seal on Cooler/Box Present:** ☐ Yes ☑ No
   (If yes)Seals Intact: ☐ Yes ☐ No **(leave blank if no seals were present)**
3. **Thermometer:** 1 2 3 4 5 6 7 8 A B C D E F (G) H
4. **Cooler Temperature(s):** 3.3/3.1 | 1.1/0.9 | 1.4/1.2 | (Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)
5. **Packing Material:** ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____
6. **Ice Type:** ☑ Wet ☐ Blue ☐ None
7. **Was the PM notified of out of temp cooler?:** ☐ Yes ☐ No
   Cooler temp should be above freezing to 6°C
8. **EZ Bottle Order?** ☐ Yes ☑ No
   If yes but not on COC what is the EZ Bottle Order Number?:

All discrepancies 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 CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.**	✓		
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:			Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
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 Sent
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:

COC PAGE 1 **of** 2

Sample Container Count

** Place a RED dot on containers that are out of conformance **

									AMBER GLASS							PLASTIC								OTHER							
COC Line Item	WGFU	WGKU BG1U	MeOH (only) SBS DI R	DG9H VG9H	VOA VIAL HS >6mm	VG9U DG9U	VG9T	AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	CG3F	Syringe Kit		Matrix	Nitric Red	Sulfuric Yellow	Sodium Hydroxide Green	Sodium Hydroxide/ ZnAc Black
																												HNO3 <2	H2SO4 <2	NaOH >10	NaOH/Zn Ac >9
1				3													2			1	1							WT	✓	✓		
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11				1													1			1	1											
12				6													4			2	2											

Container Codes

Glass

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
WGKU	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 HCl	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		
BP1Z	1L NaOH, Zn, Ac		
BP2N	500mL HNO3 plastic		
BP2C	500mL NaOH plastic		
BP2S	500mL H2SO4 plastic		
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3F	250mL HNO3 plastic-field filtered		
BP3U	250mL unpreserved plastic		
BP3S	250mL H2SO4 plastic		
BP3Z	250mL NaOH, ZnAc plastic		
BP3R	250mL Unpres. FF SO4/OH buffer		

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL:	Oil
NAL	Non-aqueous liquid
WP	Wipe

COC PAGE 2 **of** 2

Sample Container Count

** Place a RED dot on containers that are out of conformance **

COC Line Item	WGFU	WGKU BG1U	MeOH (only) SBS DI R	DG9H VG9H	VOA VIAL HS >6mm	VG9U DG9U	VG9T	AMBER GLASS: AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	PLASTIC: BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	OTHER: CG3H	CG3F	Syringe Kit	Matrix	Nitric Red	Sulfuric Yellow	Sodium Hydroxide Green	Sodium Hydroxide/ ZnAc Black
																													HNO3 <2	H2SO4 <2	NaOH >10	NaOH/Zn Ac >9
1				3													2			1	1						WT	✓	✓		
2																															
3																															
4																															
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

Container Codes

Glass

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
WGKU	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 HCl	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		
BP1Z	1L NaOH, Zn, Ac		
BP2N	500mL HNO3 plastic		
BP2C	500mL NaOH plastic		
BP2S	500mL H2SO4 plastic		
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3F	250mL HNO3 plastic-field filtered		
BP3U	250mL unpreserved plastic		
BP3S	250mL H2SO4 plastic		
BP3Z	250mL NaOH, ZnAc plastic		
BP3R	250mL Unpres. FF SO4/OH buffer		

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL:	Oil
NAL	Non-aqueous liquid
WP	Wipe

Appendix 2

Field Data Sheets

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-10

GENERAL DATA

SAMPLE DATE 5/15/2024 SAMPLE TIME: 12:30 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 72 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 647.75

BOTTOM DEPTH (HISTORICAL) 70.57

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 42.17

DATE: 5/14/2024 TIME 5:53 PM

WATER ELEVATION: 605.58

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 70.31

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 4.59 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1325 ELAPSED TIME (MIN): 40 VOL PURGED (GAL): 14

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.1

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR ORANGE RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 4

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	18.1	7.31	1984	-24	2.58	74
2:	17.8	7.24	1999	-22	2.71	63
3:	17.7	7.2	1995	-21	2.64	65

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-11

GENERAL DATA

SAMPLE DATE 5/15/2024 SAMPLE TIME: 1:30 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 72 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT:

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 639.3

BOTTOM DEPTH (HISTORICAL) 57.03

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 33.98

DATE: 5/14/2024 TIME 5:58 PM

WATER ELEVATION: 605.32

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 62.75

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 4.69 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1136 ELAPSED TIME (MIN): 50 VOL PURGED (GAL): 15

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.2

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR ORANGE RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 5

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	16.1	7.12	969	-10	2.1	89
2:	15.7	7.16	954	-14	2.04	74
3:	15.7	7.12	960	-12	1.99	79

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-12

GENERAL DATA

SAMPLE DATE 5/15/2024 SAMPLE TIME: 2:15 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 72 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 629.95

BOTTOM DEPTH (HISTORICAL) 42.84

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 24.31

DATE: 5/14/2024 TIME 6:05 PM

WATER ELEVATION: 605.64

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 46.9

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 3.68 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1190 ELAPSED TIME (MIN): 35 VOL PURGED (GAL): 11

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.0

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR BROWN RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 5

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	15.9	7.1	1734	-8	2.24	56
2:	15.4	7.04	1745	-4	2.1	54
3:	15.5	7.02	1743	-3	2.19	50

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

-COMPLETED THE FIELD DUPLICATE, MW-33
-COMPLETED THE MS/MSD

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-13

GENERAL DATA

SAMPLE DATE 5/14/2024 SAMPLE TIME: 11:15 AM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 70 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Up

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 672.55

BOTTOM DEPTH (HISTORICAL) 46.08

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 34.05

DATE: 5/14/2024 TIME 10:30 AM

WATER ELEVATION: 638.5

BOTTOM HARDNESS: 45.93

BOTTOM DEPTH(MEASURED):

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 1.96 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 505 ELAPSED TIME (MIN): 45 VOL PURGED (GAL): 6

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.1

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR ORANGE RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 3

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	16.9	7.2	1202	-14	3.67	40
2:	16.7	7.15	1214	-10	3.61	31
3:	16.7	7.14	1204	-10	3.51	38

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-14

GENERAL DATA

SAMPLE DATE 5/14/2024 SAMPLE TIME: 12:20 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 70 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Up

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 672.45

BOTTOM DEPTH (HISTORICAL) 48.85

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 32.88

DATE: 5/14/2024 TIME 11:35 AM

WATER ELEVATION: 639.57

BOTTOM HARDNESS: HARD

BOTTOM DEPTH(MEASURED): 46.05

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 2.15 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 673 ELAPSED TIME (MIN): 45 VOL PURGED (GAL): 8

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.7

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR GREENISH RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 1

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	15.1	6.99	559	4	1.5	17
2:	14.4	6.95	556	1	1.56	14
3:	15	6.95	556	2	1.49	13

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-1R

GENERAL DATA

SAMPLE DATE 5/15/2024 SAMPLE TIME: 9:45 AM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 72 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 645.07

BOTTOM DEPTH (HISTORICAL) 67.33

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 40.55

DATE: 5/14/2024 TIME 6:12 PM

WATER ELEVATION: 604.52

BOTTOM HARDNESS: HARD

BOTTOM DEPTH(MEASURED): 66.92

CASING MATERIAL:

SCREEN MATERIAL:

WATER VOLUME IN WELL (GAL): 4.30 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1093 ELAPSED TIME (MIN): 45 VOL PURGED (GAL): 13

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.0

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR GREENISH RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 2

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	16.4	7.3	1981	-21	2.61	31
2:	16.1	7.28	1970	-12	2.78	34
3:	16.1	7.21	1979	-11	2.74	28

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-2R

GENERAL DATA

SAMPLE DATE 5/15/2024 SAMPLE TIME: 8:50 AM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 72 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 651.72

BOTTOM DEPTH (HISTORICAL) 71.3

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 49.63

DATE: 5/14/2024 TIME 6:08 PM

WATER ELEVATION: 602.09

BOTTOM HARDNESS: HARD

BOTTOM DEPTH(MEASURED): 72.42

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 3.72 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 908 ELAPSED TIME (MIN): 50 VOL PURGED (GAL): 12

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.2

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR BROWN RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 1

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	17.9	7.1	2031	8	3.1	18
2:	16.8	7.04	2021	6	3	17
3:	17.3	7.05	2025	4	2.98	18

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-3R

GENERAL DATA

SAMPLE DATE 5/14/2024 SAMPLE TIME: 5:30 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 70 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 654.62

BOTTOM DEPTH (HISTORICAL) 75.14

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 49.69

DATE: 5/14/2024 TIME 4:55 PM

WATER ELEVATION: 604.93

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 75

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 4.13 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1406 ELAPSED TIME (MIN): 35 VOL PURGED (GAL): 13

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.1

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR BROWN RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 3

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	19.8	7.19	1140	-15	3.51	19
2:	19.1	7.11	1156	-12	3.59	24
3:	19.5	7.1	1145	-10	3.64	21

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-4R

GENERAL DATA

SAMPLE DATE 5/14/2024 SAMPLE TIME: 4:40 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 70 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 656.6

BOTTOM DEPTH (HISTORICAL) 73.07

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 51.88

DATE: 5/14/2024 TIME 4:00 PM

WATER ELEVATION: 604.72

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 72.9

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 3.43 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 2082 ELAPSED TIME (MIN): 20 VOL PURGED (GAL): 11

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.2

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR GREENISH RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 4

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	16.4	7.1	2221	-8	2.94	24
2:	15.9	7.04	2217	-7	2.87	17
3:	15.9	7.05	2218	-7	2.88	19

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-5

GENERAL DATA

SAMPLE DATE 5/14/2024 SAMPLE TIME: 3:50 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 70 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 659.63

BOTTOM DEPTH (HISTORICAL) 85.38

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 54.1

DATE: 5/14/2024 TIME 2:15 PM

WATER ELEVATION: 605.53

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 83.8

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 4.84 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1622 ELAPSED TIME (MIN): 35 VOL PURGED (GAL): 15

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.1

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR GREENISH RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 4

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	15.8	7.15	1521	-8	3.94	55
2:	15.3	7.12	1508	-5	3.99	42
3:	15.4	7.1	1502	-5	3.97	41

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-6

GENERAL DATA

SAMPLE DATE 5/14/2024 SAMPLE TIME: 2:05 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 70 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 659.06

BOTTOM DEPTH (HISTORICAL) 76.26

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 54.23

DATE: 5/14/2024 TIME 1:30 PM

WATER ELEVATION: 604.83

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 76.21

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 3.59 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1190 ELAPSED TIME (MIN): 35 VOL PURGED (GAL): 11

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.1

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR BROWN RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 4

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	15.8	7.15	1661	-4	3.12	45
2:	15.2	7.1	1652	-2	3.04	37
3:	15.1	7.1	1654	-2	2.99	42

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-7

GENERAL DATA

SAMPLE DATE 5/14/2024 SAMPLE TIME: 1:15 PM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 70 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 659.48

BOTTOM DEPTH (HISTORICAL) 61.38

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 54.57

DATE: 5/14/2024 TIME 12:40 PM

WATER ELEVATION: 604.91

BOTTOM HARDNESS: HARD

BOTTOM DEPTH(MEASURED): 61.83

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 1.18 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 541 ELAPSED TIME (MIN): 35 VOL PURGED (GAL): 5

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 4.2

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR BROWN RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 10

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	15.5	7.1	1661	28	3.16	210
2:	15.3	7.16	1651	21	3.04	214
3:	15.5	7.15	1654	25	3.11	221

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-8

GENERAL DATA

SAMPLE DATE 5/15/2024 SAMPLE TIME: 10:40 AM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 72 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 651.38

BOTTOM DEPTH (HISTORICAL) 80.82

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 46.03

DATE: 5/14/2024 TIME 5:45 PM

WATER ELEVATION: 605.35

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 79.7

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 5.49 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 1609 ELAPSED TIME (MIN): 40 VOL PURGED (GAL): 17

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.1

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR GREENISH RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 4

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	15.9	7.38	1630	-24	2.8	64
2:	15.1	7.3	1638	-18	2.85	72
3:	15.5	7.3	1630	-19	2.82	65

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

-COMPLETED THE FIELD DUPLICATE, MW-29

WATER QUALITY SAMPLING FIELD DATA

SITE: Sycamore Ridge LF LOCATION ID: MW-9R

GENERAL DATA

SAMPLE DATE 5/15/2024 SAMPLE TIME: 11:35 AM SAMPLE TYPE: SEMI-ANNUAL GWS

WEATHER: P. Cloudy AIR TEMPERATURE: 72 SAMPLERS: Ryan Frauhiger

SAMPLE MEDIUM GROUND WATER

LOCATION DATA

GRADIENT: Down

DATUM: WELL CASING

DATUM ELEVATION (Ft MSL) 650.49

BOTTOM DEPTH (HISTORICAL) 66.74

CASING DIAMETER (IN.): 2

SCREEN DIAMETER (IN): 2

CHECK IF WATER LEVEL NOT DETECTED ☐

STATIC WATER DEPTH: 47.55

DATE: 5/14/2024 TIME 5:50 PM

WATER ELEVATION: 602.94

BOTTOM HARDNESS: SOFT

BOTTOM DEPTH(MEASURED): 66.56

CASING MATERIAL:

SCREEN MATERIAL: PVC

WATER VOLUME IN WELL (GAL): 3.10 (2-in. well: 0.163 gal/ft of depth; 4-in. well: 0.653 gal/ft of depth)

CONDITION OF WELL AND SECURITY EXCELLENT

PURGING DATA

PURGING METHOD: BAILER

PURGE EQUIPMENT DEDICATED? N

RECHARGE RATE: FAST

PURGING RATE (ML/MIN): 841 ELAPSED TIME (MIN): 45 VOL PURGED (GAL): 10

WELL EVACUATED? N PURGE CONTAINED? N WELL VOL PURGED: 3.2

SAMPLING DATA

SAMPLING METHOD ☐ PUMP PUMP DEDICATED? PUMP TYPE:

☑ BAILER BAILER DEDICATED? N DIAMETER: 1/8" CORD MATERIAL: NYLON

OTHER METHOD:

POST PURGE WATER DEPTH:

CONTAINERS (NUMBER/TYPE): SEE CHAIN OF CUSTODY

REACTION TO PRESERVATIVE: N FIELD FILTERED SAMPLES: DISSOLVED METALS

PHYSICAL/CHEMICAL DATA

APPEARANCE COLOR BROWN RELATIVE TURBIDITY (CLEAR=0, OPAQUE=10): 1

CONTAINS IMMISCIBLE LIQUID? N

REMARKS:

ODOR:? N ODOR DESCRIPTION:

FIELD TESTS

	Temp (º C)	pH (SU)	SC (Umhos/cm)	Eh (Mvolts)	DO (mg/l)	Turbidity (NTU)
1:	15.8	7.24	1921	-18	2.59	40
2:	15.8	7.14	1911	-14	2.53	44
3:	15.8	7.19	1913	-15	2.53	39

FIELD CALIBRATIONS STANDARDS: (SOURCE/TYPE YSI PRO PLUS

REMARKS

Appendix 3

Statistical Output

Shewhart-Cusum Control Chart / Rank Sum

Sycamore Ridge LF Client: Republic Data: Sycamore Data Printed 6/18/2024, 3:12 PM

Constituent	Well	Sig.	h	SCL	N	Mean	Std. Dev.	%NDs	ND Adj.	Deseas.	Transform	Method
Ammonia-N (mg/L)	MW-10	No	5	4.5	54	0.3952	0.1003	0	None	No	No	Param Intra
Ammonia-N (mg/L)	MW-11	No	5	4.5	42	0.6686	0.1498	0	None	No	No	Param Intra
Ammonia-N (mg/L)	MW-12	No	5	4.5	43	0.8488	0.3292	0	None	No	No	Param Intra
Ammonia-N (mg/L)	MW-13 (bg)	No	5	4.5	54	-2.023	1.054	18.52	None	No	ln(x)	Param Intra
Ammonia-N (mg/L)	MW-14 (bg)	No	PL=0.3	n/a	46	n/a	n/a	80.43	None	No	No	NP Intra PL (NDs)
Ammonia-N (mg/L)	MW-1R	No	5	4.5	53	0.4215	0.122	0	None	No	No	Param Intra
Ammonia-N (mg/L)	MW-2R	No	5	4.5	53	0.4649	0.1991	0	None	No	No	Param Intra
Ammonia-N (mg/L)	MW-3R	No	5	4.5	54	0.4272	0.1734	3.704	None	No	No	Param Intra
Ammonia-N (mg/L)	MW-4R	No	5	4.5	48	-2.086	0.7938	18.75	None	No	ln(x)	Param Intra
Ammonia-N (mg/L)	MW-5	No	5	4.5	14	-1.582	0.2835	0	None	No	ln(x)	Param Intra
Ammonia-N (mg/L)	MW-8	No	5	4.5	53	0.4237	0.1373	3.774	None	No	No	Param Intra
Ammonia-N (mg/L)	MW-9R	No	5	4.5	53	0.329	0.1255	3.774	None	No	No	Param Intra
Chloride (mg/L)	MW-10	No	5	4.5	54	17.44	6.81	0	None	No	No	Param Intra
Chloride (mg/L)	MW-11	No	5	4.5	43	3.136	0.257	0	None	No	ln(x)	Param Intra
Chloride (mg/L)	MW-12	No	5	4.5	43	3.34	0.1698	0	None	No	ln(x)	Param Intra
Chloride (mg/L)	MW-13 (bg)	No	5	4.5	54	9.324	6.731	0	None	No	No	Param Intra
Chloride (mg/L)	MW-14 (bg)	No	5	4.5	46	4.287	0.09521	0	None	No	ln(x)	Param Intra
Chloride (mg/L)	MW-1R	No	5	4.5	53	15.55	2.722	0	None	No	No	Param Intra
Chloride (mg/L)	MW-2R	No	5	4.5	51	14.44	2.431	0	None	No	No	Param Intra
Chloride (mg/L)	MW-3R	No	5	4.5	54	14.04	3.072	0	None	No	No	Param Intra
Chloride (mg/L)	MW-4R	No	5	4.5	46	12.04	1.61	0	None	No	No	Param Intra
Chloride (mg/L)	MW-5	No	5	4.5	14	2.527	0.134	0	None	No	ln(x)	Param Intra
Chloride (mg/L)	MW-8	No	5	4.5	53	2.796	0.2418	0	None	No	ln(x)	Param Intra
Chloride (mg/L)	MW-9R	No	5	4.5	52	2.796	0.2367	0	None	No	ln(x)	Param Intra
Dissolved Arsenic (ug/L)	MW-10	No	5	4.5	42	9.681	1.68	71.43	None	No	No	Param Intra
Dissolved Arsenic (ug/L)	MW-11	No	5	4.5	43	16.69	7.743	39.53	None	No	No	Param Intra
Dissolved Arsenic (ug/L)	MW-12	No	5	4.5	43	11.72	4.04	37.21	None	No	No	Param Intra
Dissolved Arsenic (ug/L)	MW-13 (bg)	No	PL=10	n/a	42	n/a	n/a	95.24	None	No	No	NP Intra PL (NDs)
Dissolved Arsenic (ug/L)	MW-14 (bg)	No	PL=10	n/a	42	n/a	n/a	97.62	None	No	No	NP Intra PL (NDs)
Dissolved Arsenic (ug/L)	MW-1R	No	PL=10	n/a	42	n/a	n/a	88.1	None	No	No	NP Intra PL (NDs)
Dissolved Arsenic (ug/L)	MW-2R	No	PL=11	n/a	41	n/a	n/a	78.05	None	No	No	NP Intra PL (NDs)
Dissolved Arsenic (ug/L)	MW-3R	No	5	4.5	42	10.75	2.175	50	None	No	No	Param Intra
Dissolved Arsenic (ug/L)	MW-4R	No	PL=12	n/a	42	n/a	n/a	76.19	None	No	No	NP Intra PL (NDs)
Dissolved Arsenic (ug/L)	MW-5	No	5	4.5	14	6.357	1.764	50	None	No	No	Param Intra
Dissolved Arsenic (ug/L)	MW-8	No	5	4.5	42	9.36	1.659	71.43	None	No	No	Param Intra
Dissolved Arsenic (ug/L)	MW-9R	No	5	4.5	41	10.11	1.729	56.1	None	No	No	Param Intra
Dissolved Cadmium (ug/L)	MW-10	No	PL=10	n/a	54	n/a	n/a	98.15	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-11	No	PL=10	n/a	43	n/a	n/a	97.67	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-12	No	PL=10	n/a	43	n/a	n/a	97.67	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-13 (bg)	No	PL=10	n/a	54	n/a	n/a	98.15	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-14 (bg)	No	PL=10	n/a	50	n/a	n/a	98	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-1R	No	PL=10	n/a	54	n/a	n/a	98.15	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-2R	No	PL=10	n/a	53	n/a	n/a	98.11	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-3R	No	PL=10	n/a	54	n/a	n/a	98.15	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-4R	No	PL=10	n/a	48	n/a	n/a	97.92	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-5	No	PL=3	n/a	14	n/a	n/a	100	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-8	No	PL=10	n/a	54	n/a	n/a	98.15	None	No	No	NP Intra PL (NDs)
Dissolved Cadmium (ug/L)	MW-9R	No	PL=10	n/a	53	n/a	n/a	98.11	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-10	No	PL=30	n/a	54	n/a	n/a	87.04	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-11	No	PL=10	n/a	43	n/a	n/a	95.35	None	No	No	NP Intra PL (NDs)

Shewhart-Cusum Control Chart / Rank Sum

Sycamore Ridge LF Client: Republic Data: Sycamore Data Printed 6/18/2024, 3:12 PM

Constituent	Well	Sig.	h	SCL	N	Mean	Std. Dev.	%NDs	ND Adj.	Deseas.	Transform	Method
Dissolved Chromium (ug/L)	MW-12	No	PL=59	n/a	43	n/a	n/a	93.02	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-13 (bg)	No	PL=13	n/a	54	n/a	n/a	96.3	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-14 (bg)	No	PL=10	n/a	50	n/a	n/a	98	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-1R	No	PL=21	n/a	54	n/a	n/a	87.04	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-2R	No	PL=22	n/a	53	n/a	n/a	83.02	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-3R	No	PL=40	n/a	54	n/a	n/a	83.33	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-4R	No	PL=30	n/a	48	n/a	n/a	89.58	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-5	No	PL=5	n/a	14	n/a	n/a	100	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-8	No	PL=20	n/a	54	n/a	n/a	87.04	None	No	No	NP Intra PL (NDs)
Dissolved Chromium (ug/L)	MW-9R	No	PL=30	n/a	53	n/a	n/a	92.45	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-10	No	PL=30	n/a	54	n/a	n/a	96.3	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-11	No	PL=30	n/a	43	n/a	n/a	97.67	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-12	No	PL=46	n/a	43	n/a	n/a	93.02	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-13 (bg)	No	PL=30	n/a	54	n/a	n/a	98.15	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-14 (bg)	No	PL=30	n/a	50	n/a	n/a	98	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-1R	No	PL=30	n/a	54	n/a	n/a	98.15	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-2R	No	PL=30	n/a	53	n/a	n/a	96.23	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-3R	No	PL=30	n/a	54	n/a	n/a	94.44	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-4R	No	PL=30	n/a	48	n/a	n/a	93.75	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-5	No	PL=10	n/a	14	n/a	n/a	100	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-8	No	PL=30	n/a	54	n/a	n/a	96.3	None	No	No	NP Intra PL (NDs)
Dissolved Copper (ug/L)	MW-9R	No	PL=30	n/a	53	n/a	n/a	96.23	None	No	No	NP Intra PL (NDs)
Dissolved Iron (ug/L)	MW-10	No	5	4.5	27	4163	999.9	0	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-11	No	5	4.5	27	8879	2724	0	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-12	No	5	4.5	27	15853	11973	0	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-13 (bg)	No	5	4.5	27	248.9	376.1	70.37	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-14 (bg)	No	5	4.5	27	6.133	1.21	14.81	None	No	ln(x)	Param Intra
Dissolved Iron (ug/L)	MW-1R	No	5	4.5	27	899.4	396.4	0	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-2R	No	5	4.5	27	2404	2538	3.704	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-3R	No	5	4.5	27	2020	722.6	3.704	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-4R	No	5	4.5	27	1245	931.1	14.81	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-5	No	5	4.5	14	3654	1118	0	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-8	No	5	4.5	27	1809	638.6	0	None	No	No	Param Intra
Dissolved Iron (ug/L)	MW-9R	No	5	4.5	27	8.05	0.3854	0	None	No	ln(x)	Param Intra
Dissolved Manganese (ug/L)	MW-10	No	5	4.5	50	2283	371.9	0	None	No	No	Param Intra
Dissolved Manganese (ug/L)	MW-11	No	5	4.5	37	7.713	0.327	0	None	No	ln(x)	Param Intra
Dissolved Manganese (ug/L)	MW-12	No	5	4.5	36	7.936	0.3243	0	None	No	ln(x)	Param Intra
Dissolved Manganese (ug/L)	MW-13 (bg)	No	5	4.5	50	188	141.3	2	None	No	No	Param Intra
Dissolved Manganese (ug/L)	MW-14 (bg)	No	5	4.5	46	6.677	0.6562	0	None	No	ln(x)	Param Intra
Dissolved Manganese (ug/L)	MW-1R	No	5	4.5	50	1284	151.3	0	None	No	No	Param Intra
Dissolved Manganese (ug/L)	MW-2R	No	5	4.5	48	7.313	0.1072	0	None	No	ln(x)	Param Intra
Dissolved Manganese (ug/L)	MW-3R	No	5	4.5	50	2077	1010	0	None	No	No	Param Intra
Dissolved Manganese (ug/L)	MW-4R	No	5	4.5	48	7.827	0.5088	0	None	No	ln(x)	Param Intra
Dissolved Manganese (ug/L)	MW-5	No	5	4.5	12	7.835	0.05437	0	None	No	ln(x)	Param Intra
Dissolved Manganese (ug/L)	MW-8	No	5	4.5	50	1591	418.3	0	None	No	No	Param Intra
Dissolved Manganese (ug/L)	MW-9R	No	5	4.5	49	1992	505.2	0	None	No	No	Param Intra
Sodium (ug/L)	MW-10	No	5	4.5	54	11.33	0.1286	0	None	No	ln(x)	Param Intra
Sodium (ug/L)	MW-11	No	5	4.5	43	104251	16365	0	None	No	No	Param Intra
Sodium (ug/L)	MW-12	No	5	4.5	43	11.57	0.1453	0	None	No	ln(x)	Param Intra
Sodium (ug/L)	MW-13 (bg)	No	5	4.5	54	83148	6953	0	None	No	No	Param Intra

Shewhart-Cusum Control Chart / Rank Sum

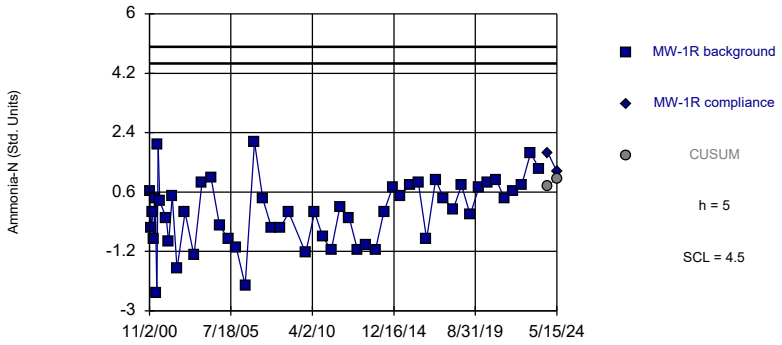
Sycamore Ridge LF Client: Republic Data: Sycamore Data Printed 6/18/2024, 3:12 PM

Constituent	Well	Sig.	h	SCL	N	Mean	Std. Dev.	%NDs	ND Adj.	Deseas.	Transform	Method
Sodium (ug/L)	MW-14 (bg)	No	5	4.5	48	50698	2710	0	None	No	No	Param Intra
Sodium (ug/L)	MW-1R	No	5	4.5	53	11	0.311	0	None	No	ln(x)	Param Intra
Sodium (ug/L)	MW-2R	No	5	4.5	53	68234	8863	0	None	No	No	Param Intra
Sodium (ug/L)	MW-3R	No	5	4.5	54	11.07	0.2132	0	None	No	ln(x)	Param Intra
Sodium (ug/L)	MW-4R	No	5	4.5	48	81956	22365	0	None	No	No	Param Intra
Sodium (ug/L)	MW-5	No	5	4.5	13	31169	1290	0	None	No	No	Param Intra
Sodium (ug/L)	MW-8	No	5	4.5	55	52156	12322	0	None	No	No	Param Intra
Sodium (ug/L)	MW-9R	No	5	4.5	54	52161	13432	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-10	No	5	4.5	52	6.579	0.19	0	None	No	ln(x)	Param Intra
Sulfate (mg/L)	MW-11	No	5	4.5	42	796.7	99.7	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-12	No	5	4.5	43	6.606	0.1708	0	None	No	ln(x)	Param Intra
Sulfate (mg/L)	MW-13 (bg)	No	5	4.5	54	122.9	162.3	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-14 (bg)	No	5	4.5	45	4.034	0.1069	0	None	No	ln(x)	Param Intra
Sulfate (mg/L)	MW-1R	No	5	4.5	54	537.2	261.4	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-2R	No	5	4.5	50	6.438	0.1855	0	None	No	ln(x)	Param Intra
Sulfate (mg/L)	MW-3R	No	5	4.5	54	947.5	672.4	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-4R	No	5	4.5	47	1347	623.7	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-5	No	5	4.5	14	552.1	81.98	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-8	No	5	4.5	54	473.5	150.3	0	None	No	No	Param Intra
Sulfate (mg/L)	MW-9R	No	5	4.5	51	6.153	0.2976	0	None	No	ln(x)	Param Intra

Within Control Limits

Control Chart

MW-1R



Background Data Summary: Mean=0.4215, Std. Dev.=0.122, n=53. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9799, critical = 0.938. Report alpha = 0.000062. Dates ending 5/9/2023 used for control stats.

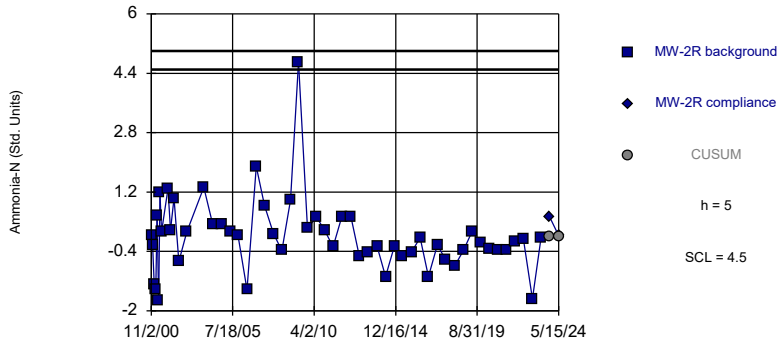
Constituent: Ammonia-N Analysis Run 6/18/2024 2:46 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-2R



Background Data Summary: Mean=0.4649, Std. Dev.=0.1991, n=53. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9058, critical = 0.938 (non-normal: user chose to continue). Report alpha = 0.000062. Dates ending 5/9/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart

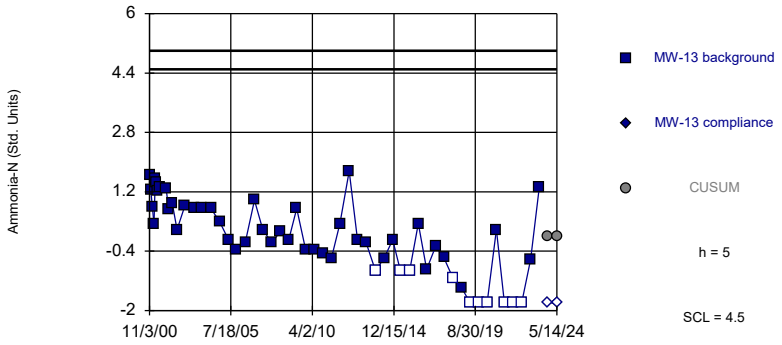
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.

Within Control Limits

Control Chart

MW-13



Background Data Summary (based on natural log transformation): Mean=-2.023, Std. Dev.=1.054, n=54, 18.52% NDs. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9753, critical = 0.939. Report alpha = 0.000042. Dates ending 5/9/2023 used for control stats.

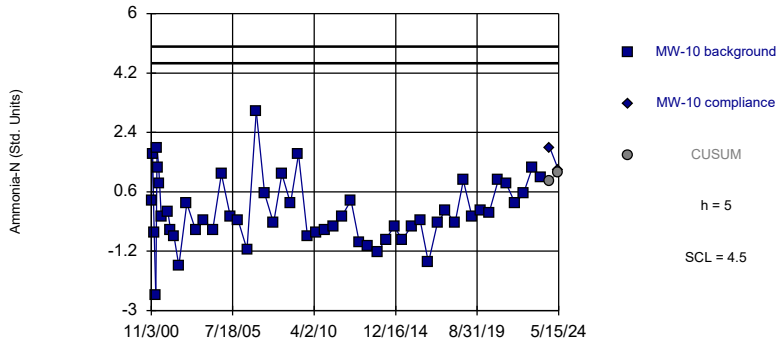
Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-10



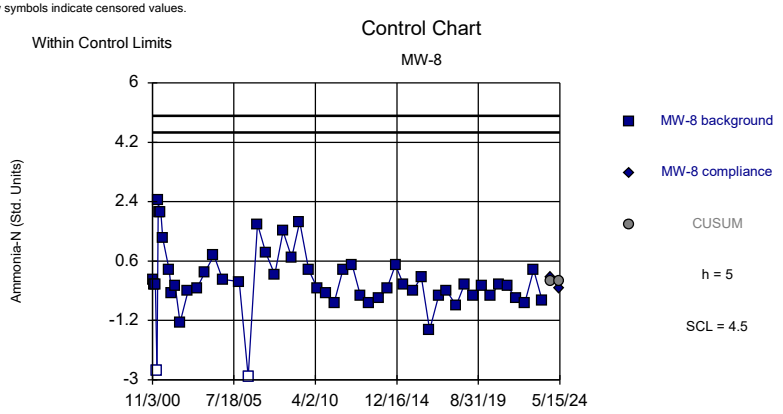
Background Data Summary: Mean=0.3952, Std. Dev.=0.1003, n=54. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9598, critical = 0.939. Report alpha = 0.000042. Dates ending 5/10/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

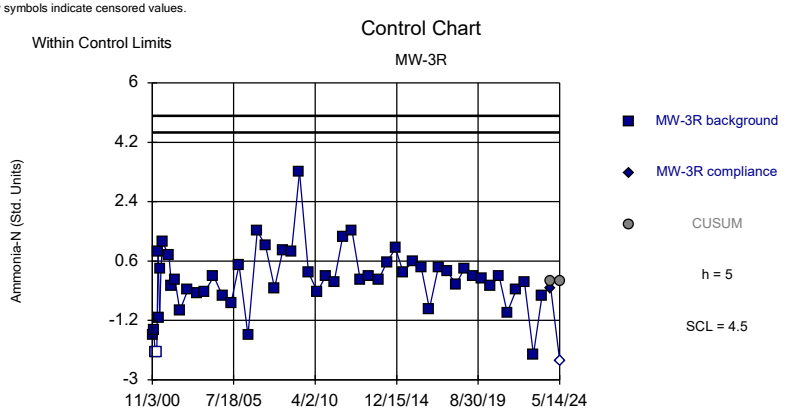


Background Data Summary: Mean=0.4237, Std. Dev.=0.1373, n=53, 3.774% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.5866, critical = 0.938 (non-normal: user chose to continue). Report alpha = 0.000044. Dates ending 5/9/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

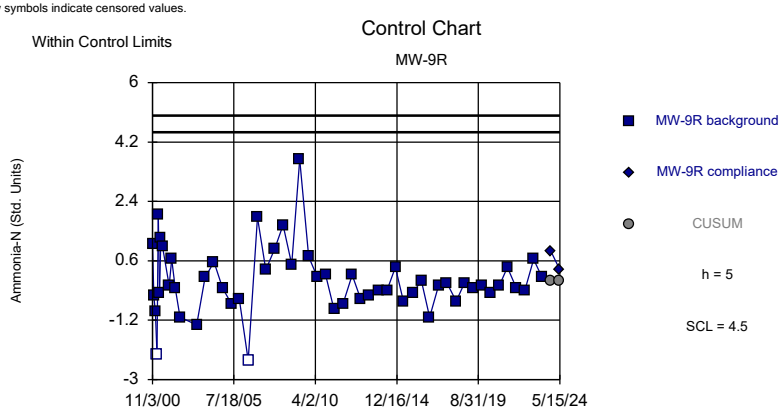


Background Data Summary: Mean=0.4272, Std. Dev.=0.1734, n=54, 3.704% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.7375, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.000046. Dates ending 5/9/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

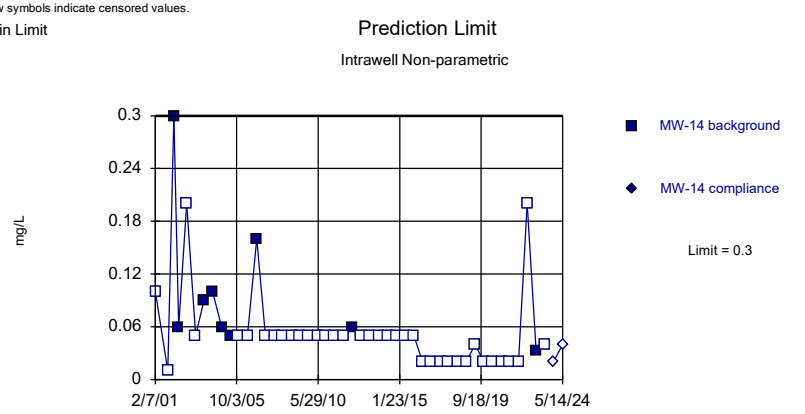


Background Data Summary: Mean=0.329, Std. Dev.=0.1255, n=53, 3.774% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.7181, critical = 0.938 (non-normal: user chose to continue). Report alpha = 0.000048. Dates ending 5/10/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

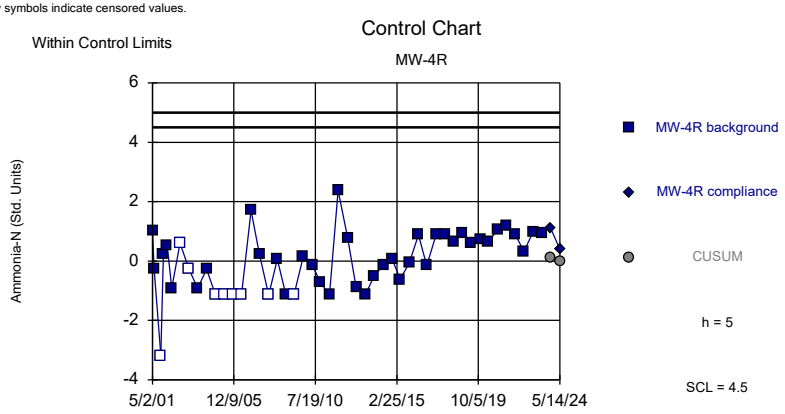
Within Limit



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 46 background values. 80.43% NDs. Report alpha = 0.02128. Most recent point compared to limit.

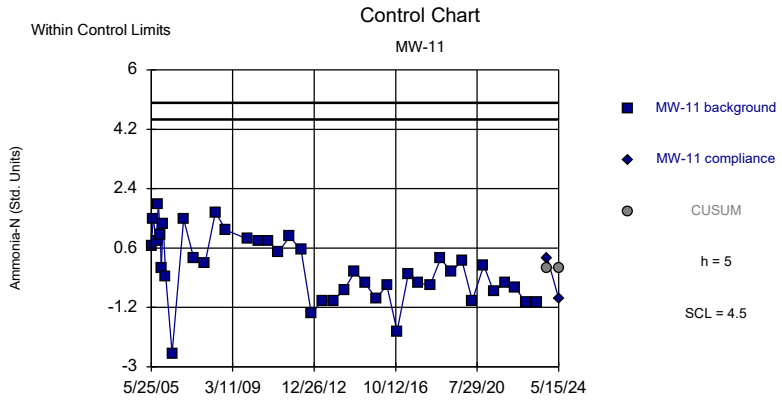
Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.



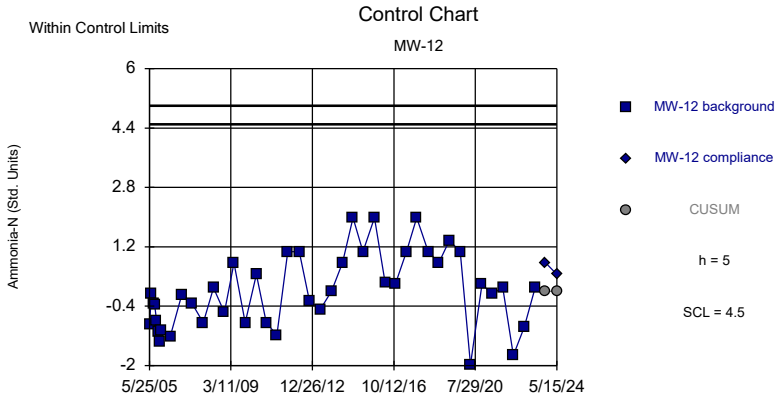
Background Data Summary (based on natural log transformation): Mean=-2.086, Std. Dev.=0.7938, n=48, 18.75% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9529, critical = 0.929. Report alpha = 0.000056. Dates ending 5/9/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



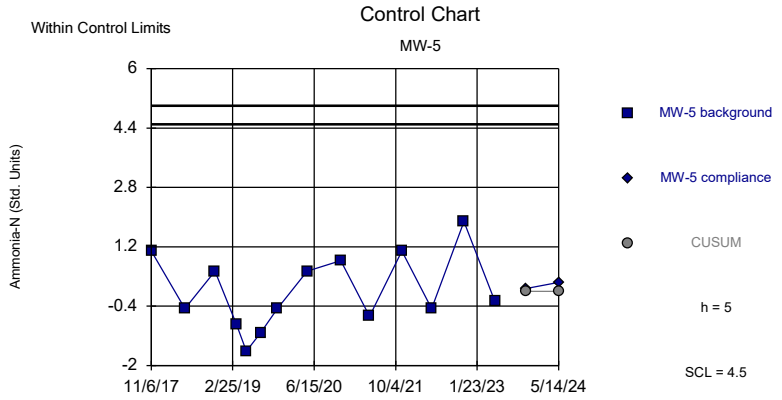
Background Data Summary: Mean=0.6686, Std. Dev.=0.1498, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9812, critical = 0.922. Report alpha = 0.000074. Dates ending 5/10/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary: Mean=0.8488, Std. Dev.=0.3292, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9638, critical = 0.923. Report alpha = 0.000062. Dates ending 5/10/2023 used for control stats.

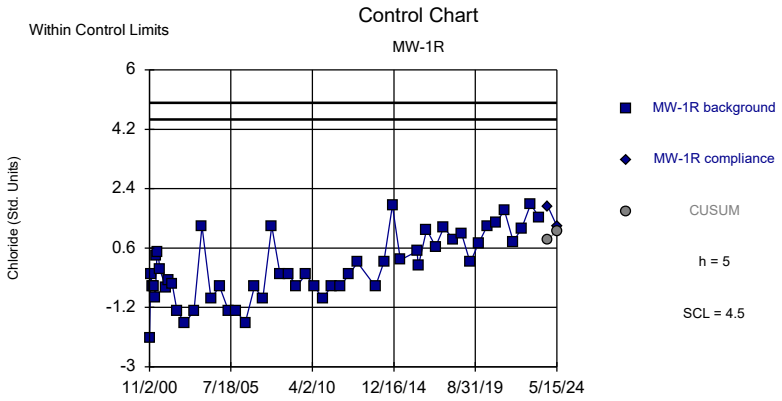
Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary (based on natural log transformation): Mean=-1.582, Std. Dev.=0.2835, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9559, critical = 0.825. Report alpha = 0.000822. Dates ending 5/9/2023 used for control stats.

Constituent: Ammonia-N Analysis Run 6/18/2024 2:47 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

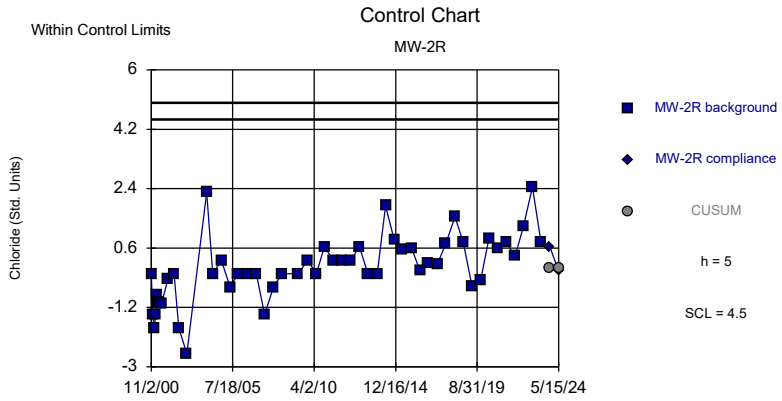


Background Data Summary: Mean=15.55, Std. Dev.=2.722, n=53. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9782, critical = 0.938. Report alpha = 0.000046. Dates ending 5/9/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

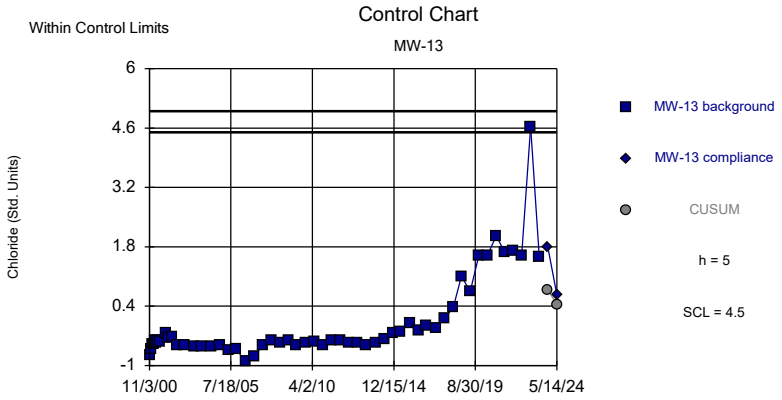


Background Data Summary: Mean=14.44, Std. Dev.=2.431, n=51. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9654, critical = 0.935. Report alpha = 0.00006. Dates ending 5/9/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

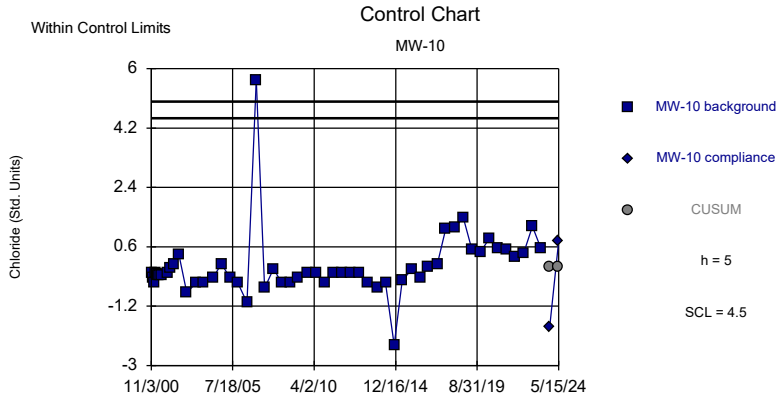


Background Data Summary: Mean=9.324, Std. Dev.=6.731, n=54. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.8225, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.00004. Dates ending 5/9/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

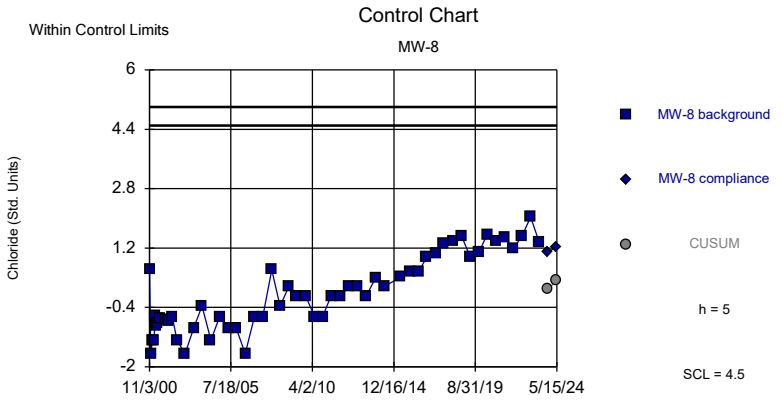
Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits



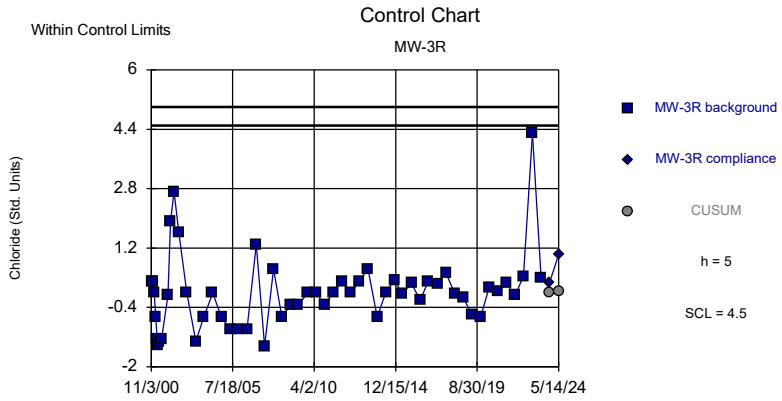
Background Data Summary: Mean=17.44, Std. Dev.=6.81, n=54. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.5709, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.00004. Dates ending 5/10/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



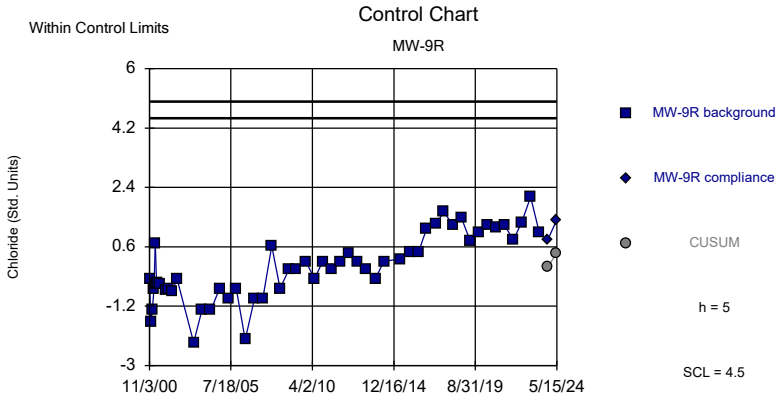
Background Data Summary (based on natural log transformation): Mean=2.796, Std. Dev.=0.2418, n=53. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9652, critical = 0.938. Report alpha = 0.000072. Dates ending 5/9/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



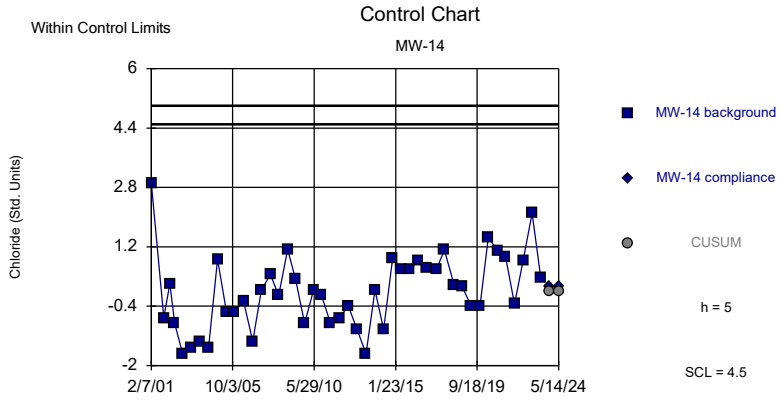
Background Data Summary: Mean=14.04, Std. Dev.=3.072, n=54. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9167, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.000044. Dates ending 5/9/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary (based on natural log transformation): Mean=2.796, Std. Dev.=0.2367, n=52. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9838, critical = 0.937. Report alpha = 0.000044. Dates ending 5/10/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



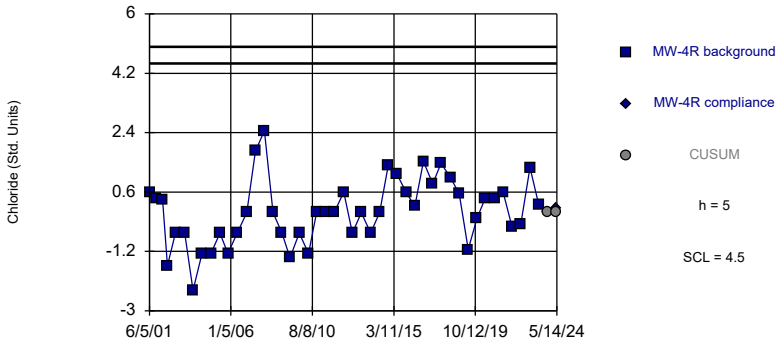
Background Data Summary (based on natural log transformation): Mean=4.287, Std. Dev.=0.09521, n=46. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9704, critical = 0.927. Report alpha = 0.000072. Dates ending 5/9/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-4R



Background Data Summary: Mean=12.04, Std. Dev.=1.61, n=46. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9855, critical = 0.927. Report alpha = 0.000072. Dates ending 5/9/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart

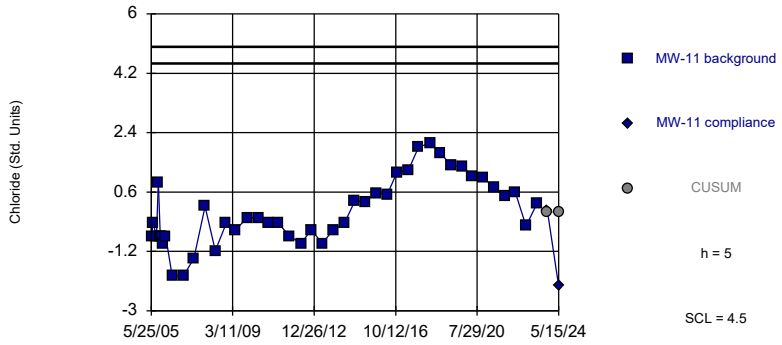
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-11



Background Data Summary (based on natural log transformation): Mean=3.136, Std. Dev.=0.257, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9605, critical = 0.923. Report alpha = 0.000076. Dates ending 5/10/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart

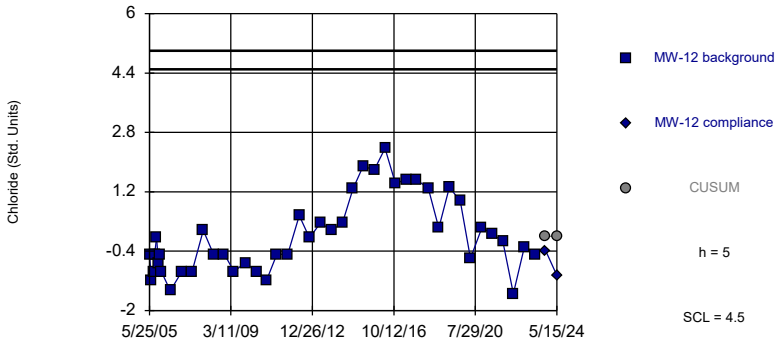
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-12



Background Data Summary (based on natural log transformation): Mean=3.34, Std. Dev.=0.1698, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9253, critical = 0.923. Report alpha = 0.000076. Dates ending 5/10/2023 used for control stats.

Constituent: Chloride Analysis Run 6/18/2024 2:48 PM View: Control chart

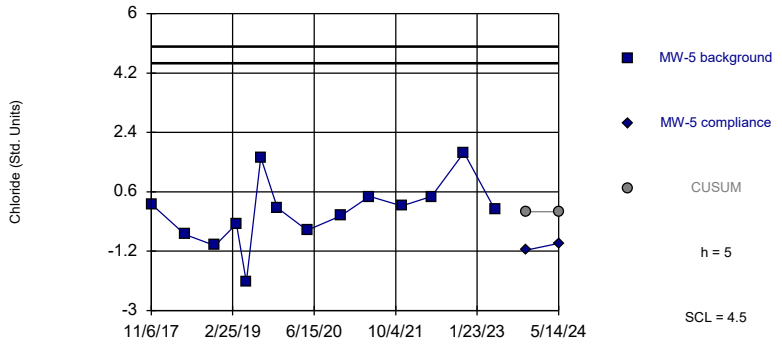
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-5



Background Data Summary (based on natural log transformation): Mean=2.527, Std. Dev.=0.134, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9494, critical = 0.825. Report alpha = 0.000896. Dates ending 5/9/2023 used for control stats.

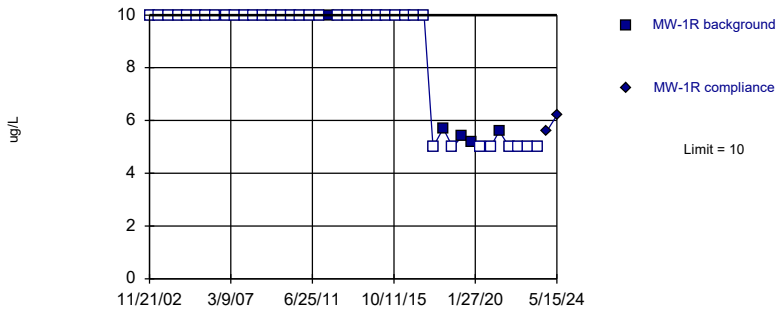
Constituent: Chloride Analysis Run 6/18/2024 2:49 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



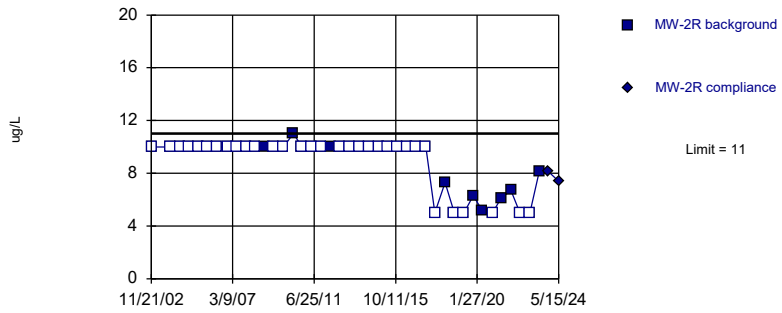
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 42 background values. 88.1% NDs. Report alpha = 0.02326. Most recent point compared to limit.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



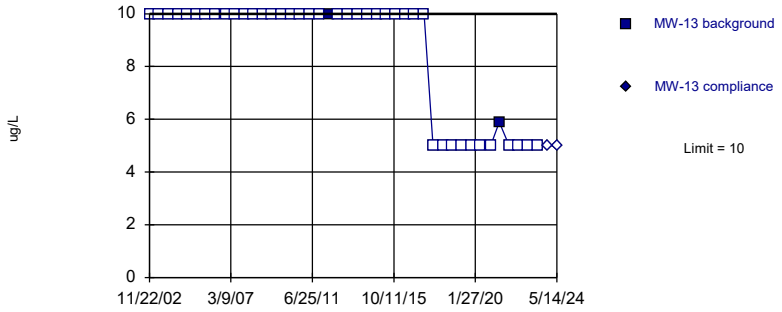
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 41 background values. 78.05% NDs. Report alpha = 0.02381. Most recent point compared to limit.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



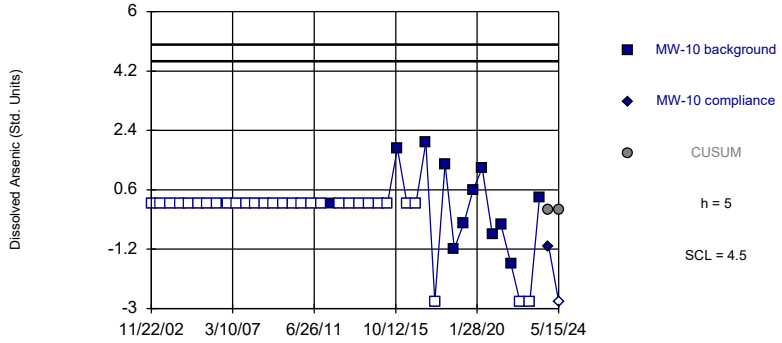
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 42 background values. 95.24% NDs. Report alpha = 0.02326. Most recent point compared to limit.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Control Limits

Control Chart

MW-10

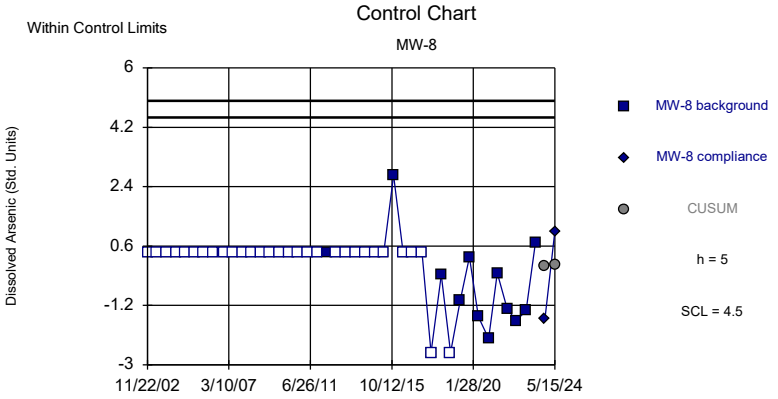


Background Data Summary: Mean=9.681, Std. Dev.=1.68, n=42, 71.43% NDs (maximum before substituting non-parametric 75%). Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.6471, critical = 0.922 (non-normal: user chose to continue). Report alpha = 0.000052. Dates ending 5/10/2023 used for control stats.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

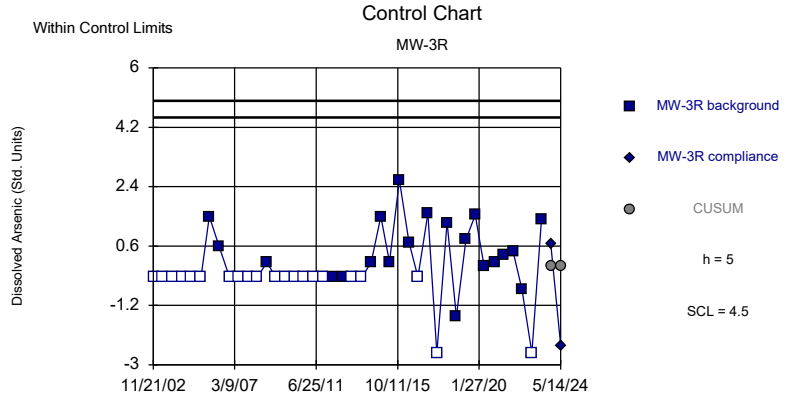


Background Data Summary: Mean=9.36, Std. Dev.=1.659, n=42, 71.43% NDs (maximum before substituting non-parametric 75%). Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.6569, critical = 0.922 (non-normal: user chose to continue). Report alpha = 0.000052. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

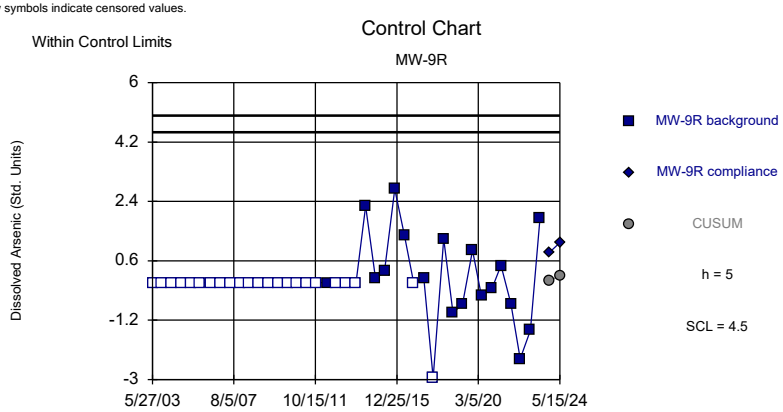


Background Data Summary: Mean=10.75, Std. Dev.=2.175, n=42, 50% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.795, critical = 0.922 (non-normal: user chose to continue). Report alpha = 0.000052. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

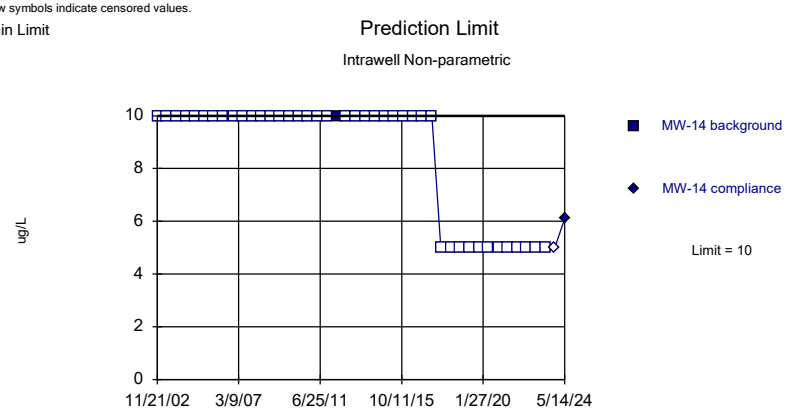


Background Data Summary: Mean=10.11, Std. Dev.=1.729, n=41, 56.1% NDs (maximum before substituting non-parametric 75%). Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7705, critical = 0.92 (non-normal: user chose to continue). Report alpha = 0.000094. Dates ending 5/10/2023 used for control stats.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Limit



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 42 background values. 97.62% NDs. Report alpha = 0.02326. Most recent point compared to limit.

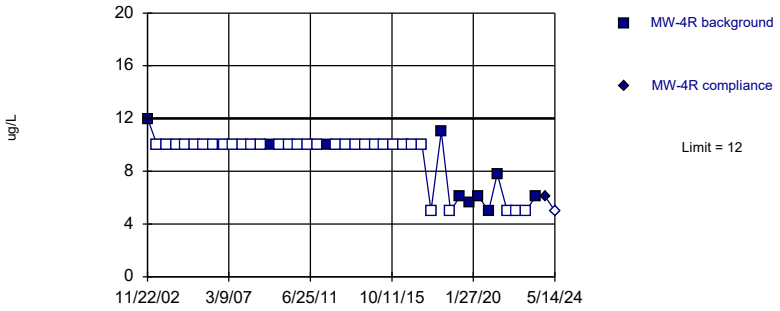
Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 42 background values. 76.19% NDs. Report alpha = 0.02326. Most recent point compared to limit.

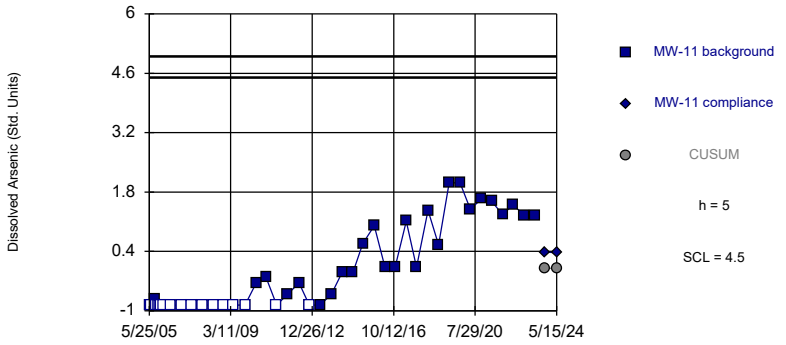
Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

Control Chart

MW-11



Background Data Summary: Mean=16.69, Std. Dev.=7.743, n=43, 39.53% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7994, critical = 0.923 (non-normal: user chose to continue). Report alpha = 0.000068. Dates ending 5/10/2023 used for control stats.

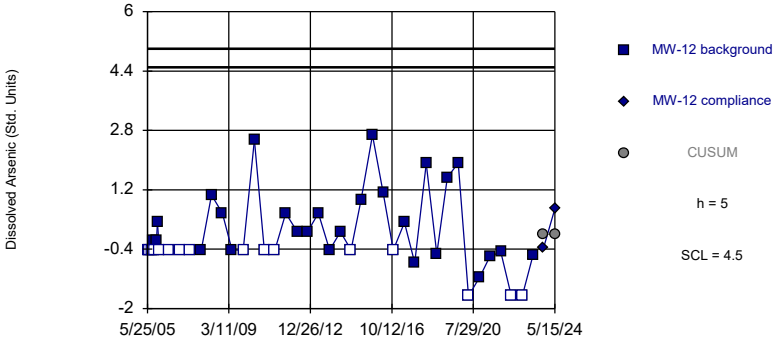
Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

Control Chart

MW-12



Background Data Summary: Mean=11.72, Std. Dev.=4.04, n=43, 37.21% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.899, critical = 0.923 (non-normal: user chose to continue). Report alpha = 0.000068. Dates ending 5/10/2023 used for control stats.

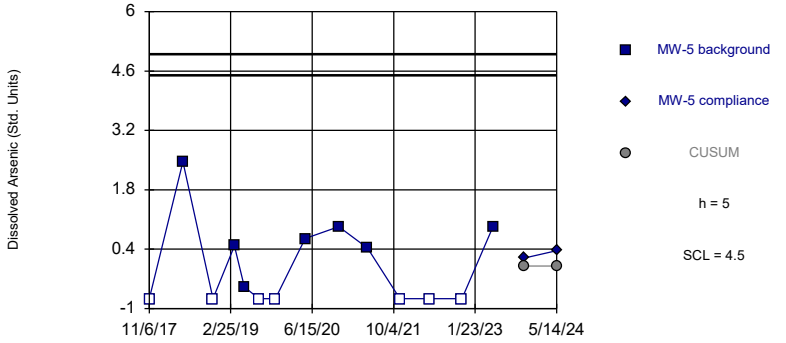
Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Control Limits

Control Chart

MW-5



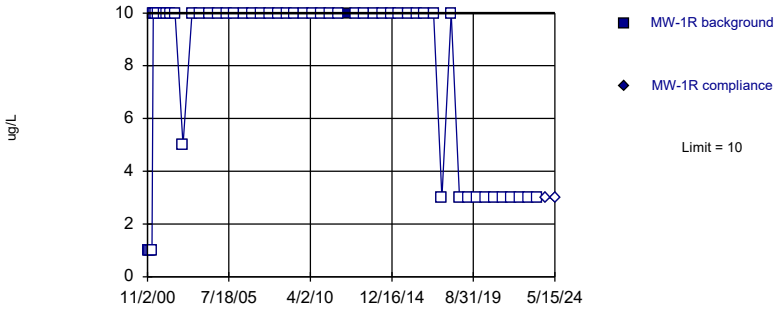
Background Data Summary: Mean=6.357, Std. Dev.=1.764, n=14, 50% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7927, critical = 0.825 (non-normal: user chose to continue). Report alpha = 0.00096. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Arsenic Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



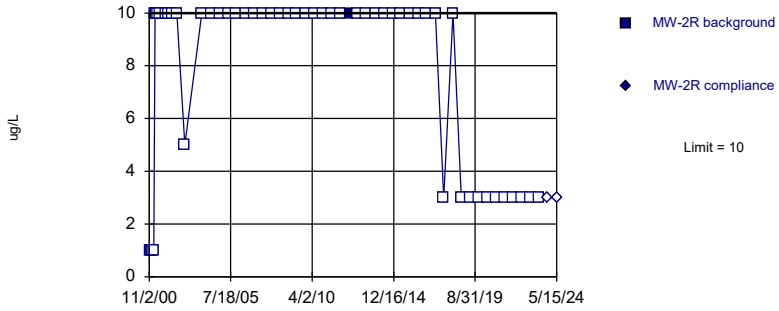
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 98.15% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



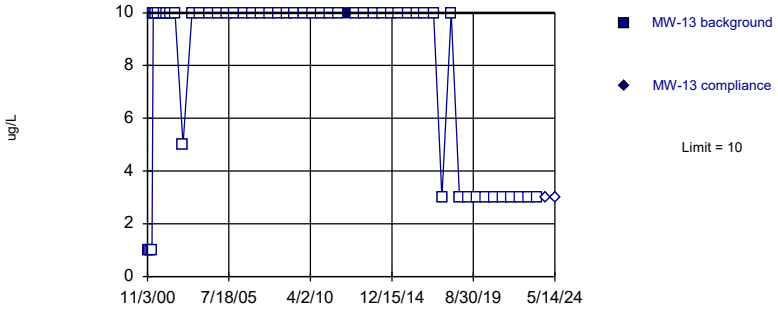
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 53 background values. 98.11% NDs. Report alpha = 0.01852. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



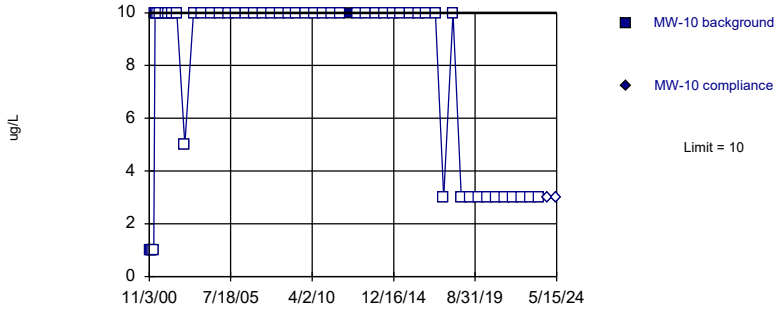
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 98.15% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



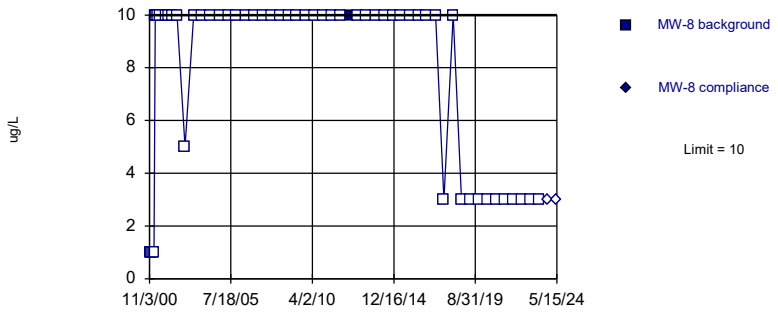
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 98.15% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



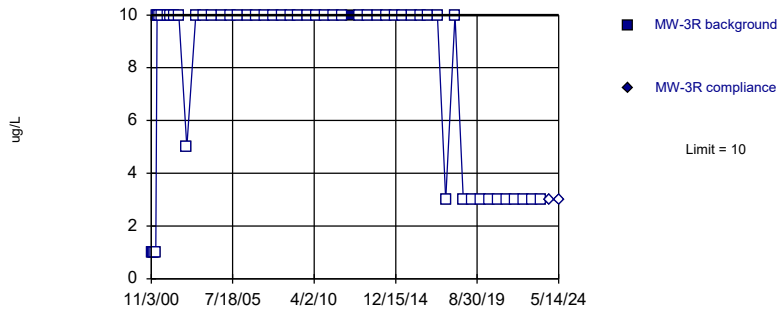
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 98.15% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



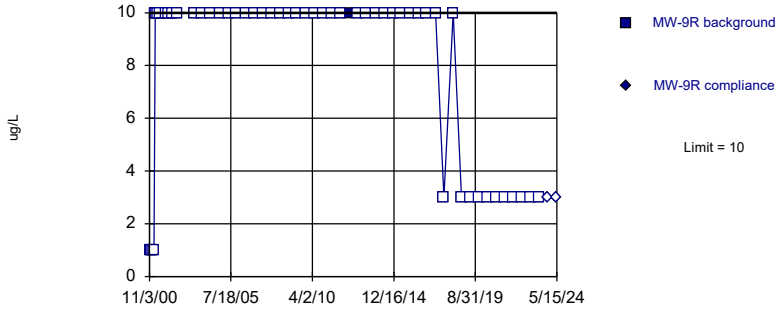
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 98.15% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



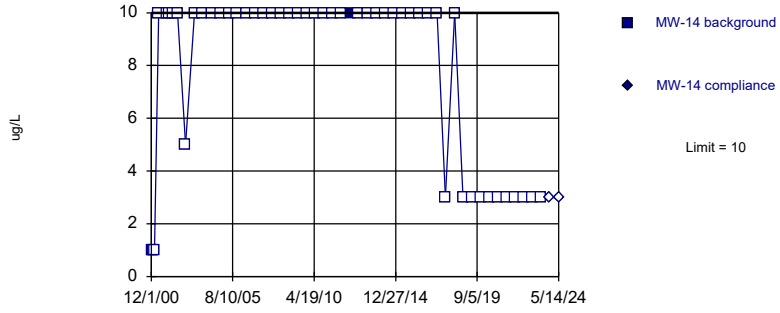
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 53 background values. 98.11% NDs. Report alpha = 0.01852. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 50 background values. 98% NDs. Report alpha = 0.01961. Most recent point compared to limit.

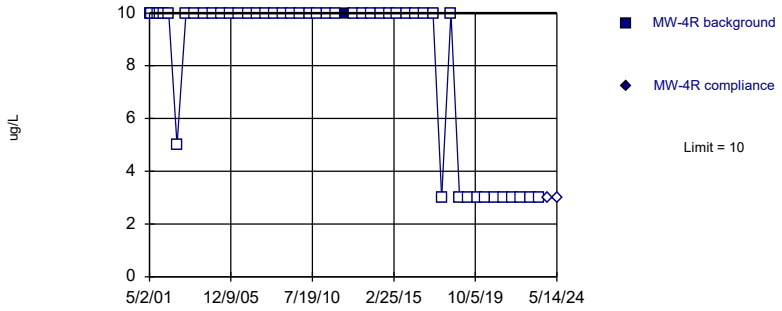
Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 48 background values. 97.92% NDs. Report alpha = 0.02041. Most recent point compared to limit.

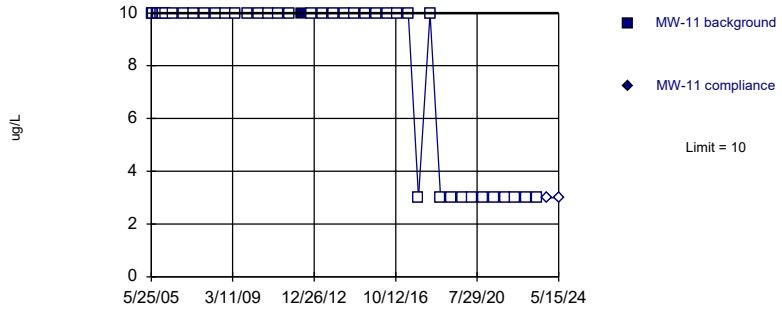
Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 43 background values. 97.67% NDs. Report alpha = 0.02273. Most recent point compared to limit.

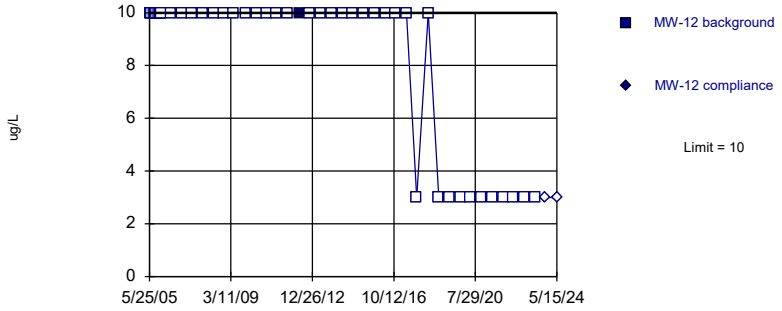
Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 43 background values. 97.67% NDs. Report alpha = 0.02273. Most recent point compared to limit.

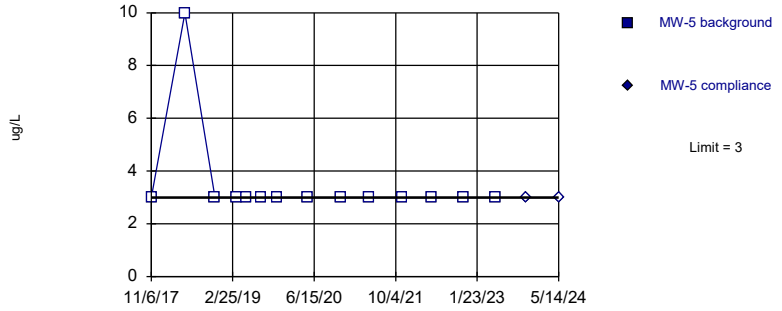
Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



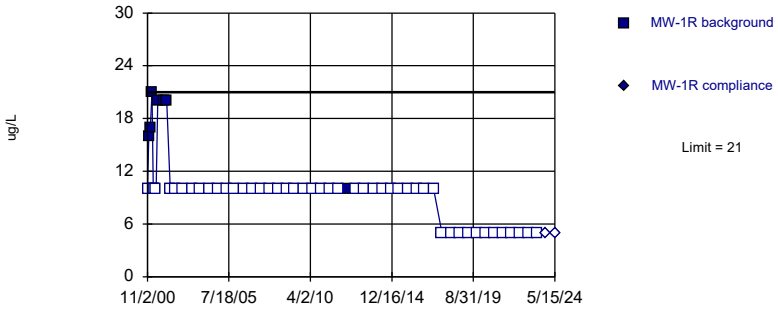
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. All background values (n = 14) were censored; limit is most recent reporting limit. Report alpha = 0.06667. Most recent point compared to limit.

Constituent: Dissolved Cadmium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



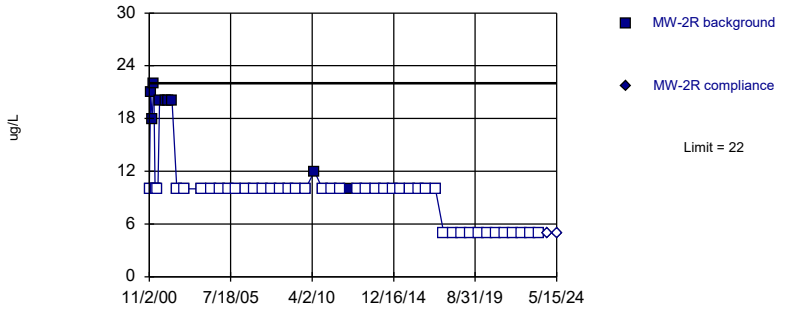
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 87.04% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



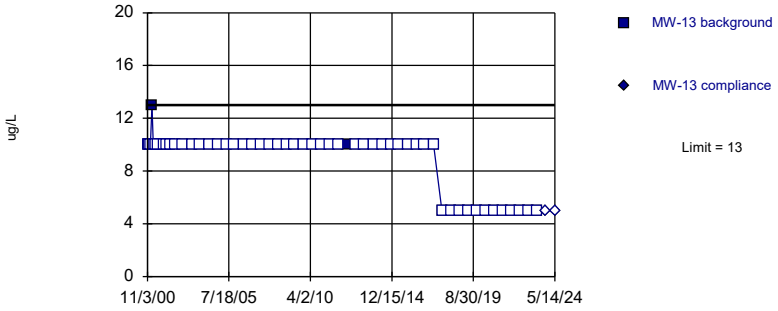
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 53 background values. 83.02% NDs. Report alpha = 0.01852. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



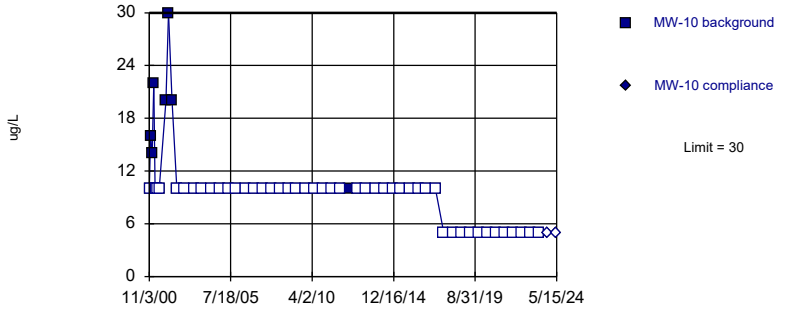
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 96.3% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



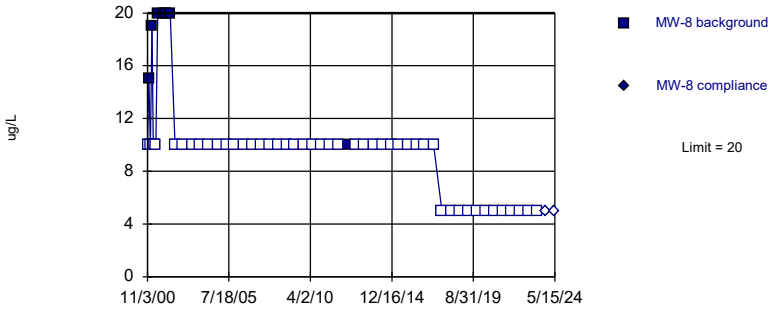
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 87.04% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:49 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



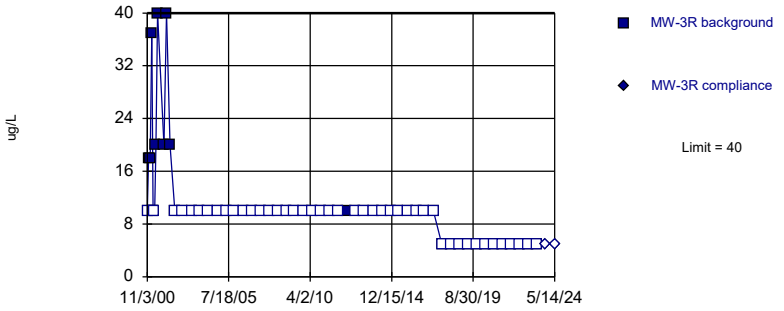
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 87.04% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



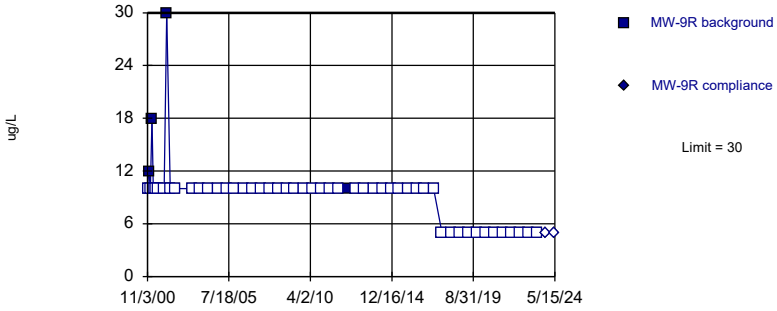
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 83.33% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



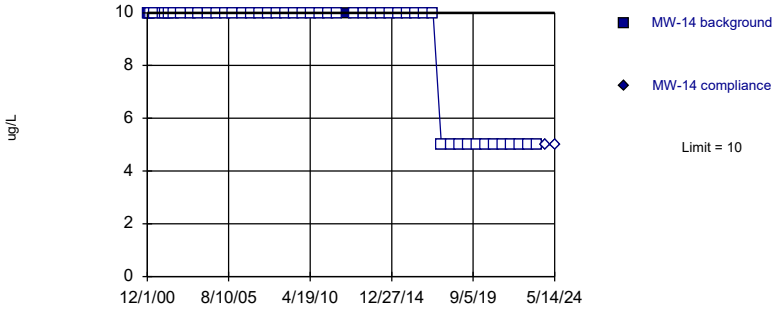
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 53 background values. 92.45% NDs. Report alpha = 0.01852. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



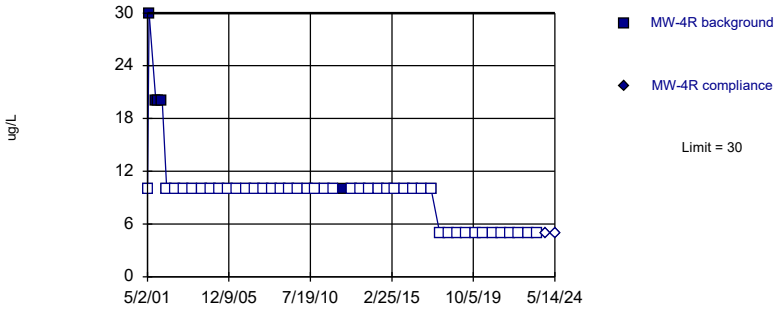
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 50 background values. 98% NDs. Report alpha = 0.01961. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



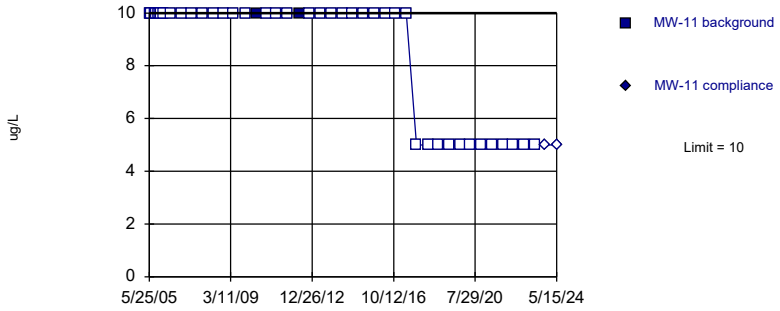
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 48 background values. 89.58% NDs. Report alpha = 0.02041. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



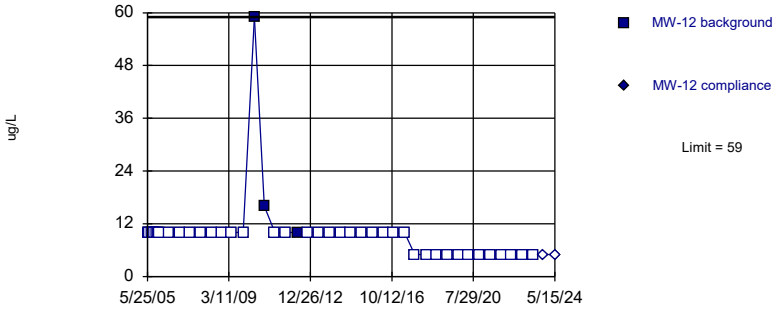
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 43 background values. 95.35% NDs. Report alpha = 0.02273. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



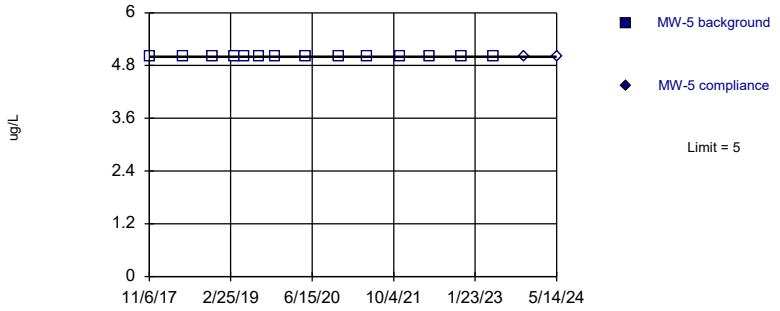
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 43 background values. 93.02% NDs. Report alpha = 0.02273. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



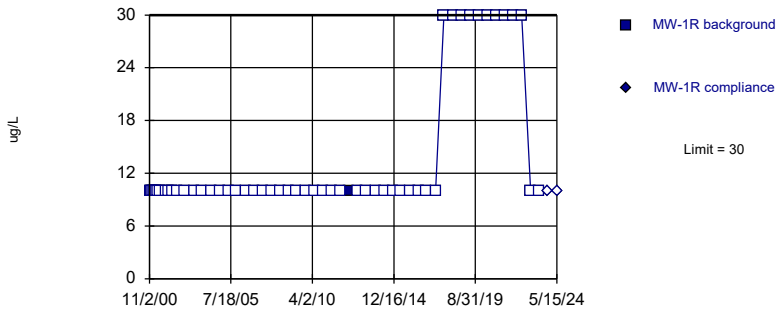
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. All background values (n = 14) were censored; limit is most recent reporting limit. Report alpha = 0.06667. Most recent point compared to limit.

Constituent: Dissolved Chromium Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



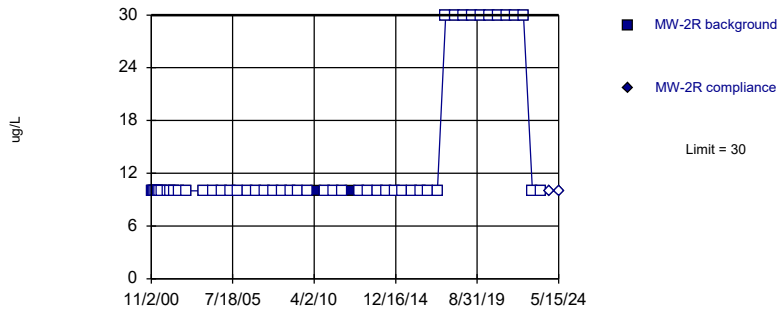
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 98.15% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



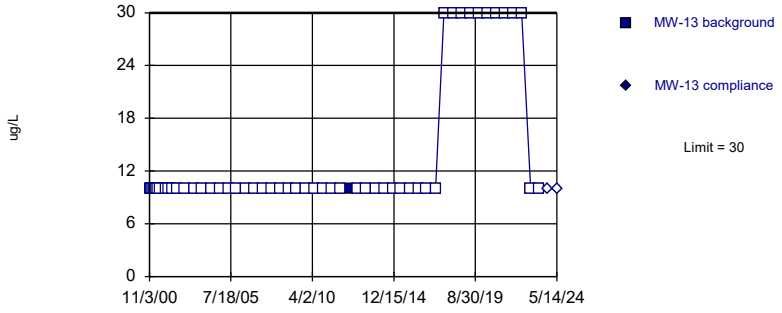
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 53 background values. 96.23% NDs. Report alpha = 0.01852. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



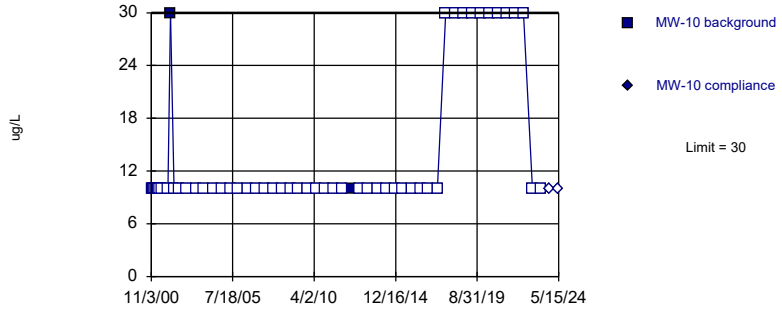
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 98.15% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



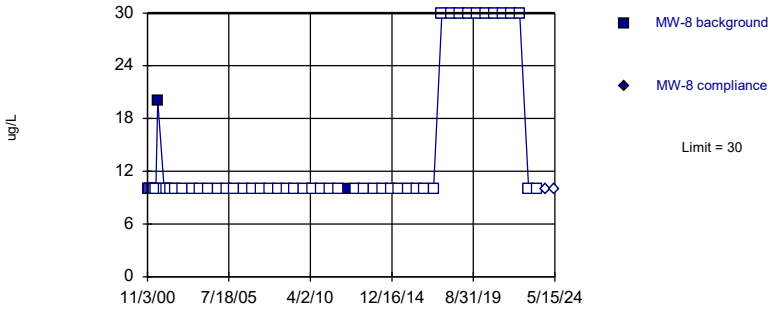
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 96.3% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



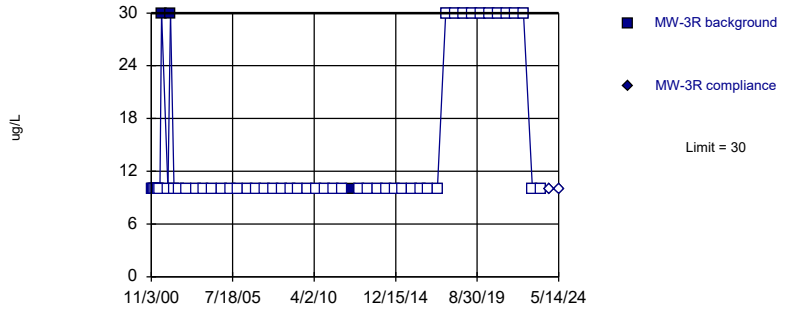
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 96.3% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



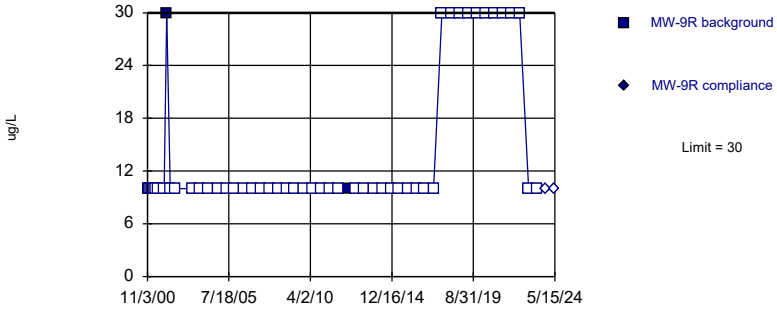
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 54 background values. 94.44% NDs. Report alpha = 0.01818. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



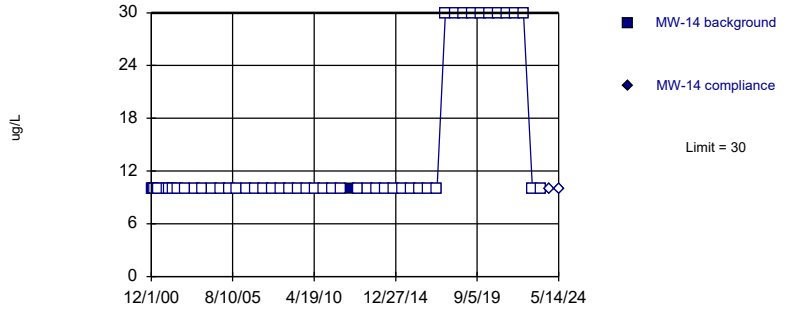
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 53 background values. 96.23% NDs. Report alpha = 0.01852. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



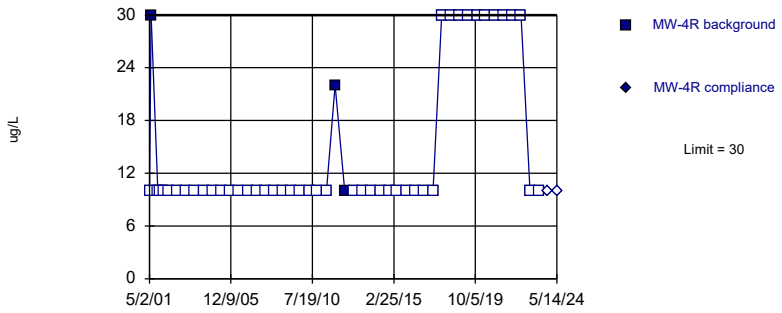
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 50 background values. 98% NDs. Report alpha = 0.01961. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



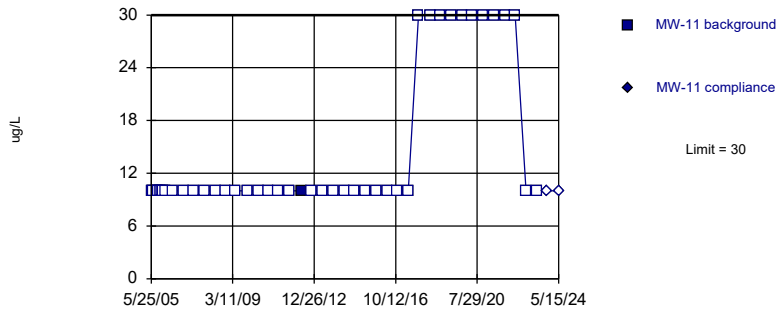
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 48 background values. 93.75% NDs. Report alpha = 0.02041. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



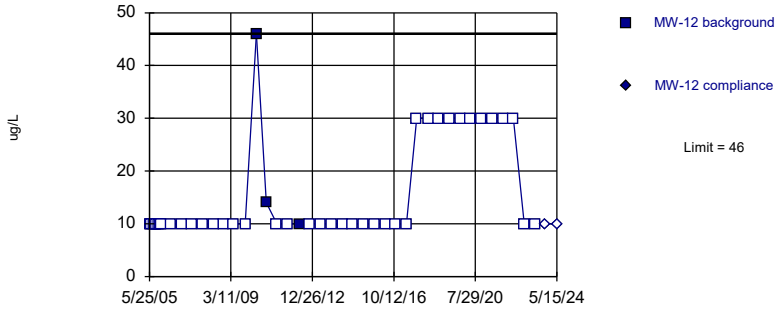
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 43 background values. 97.67% NDs. Report alpha = 0.02273. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



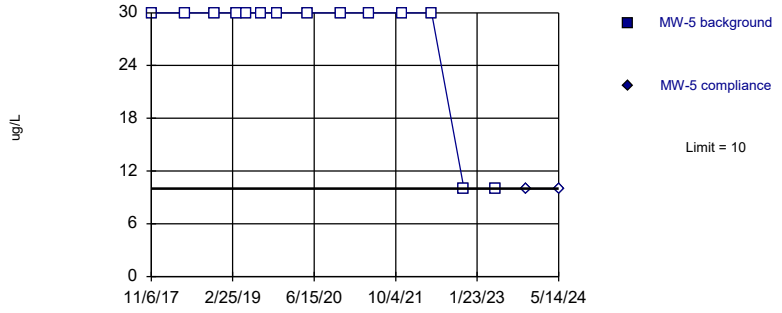
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. Limit is highest of 43 background values. 93.02% NDs. Report alpha = 0.02273. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



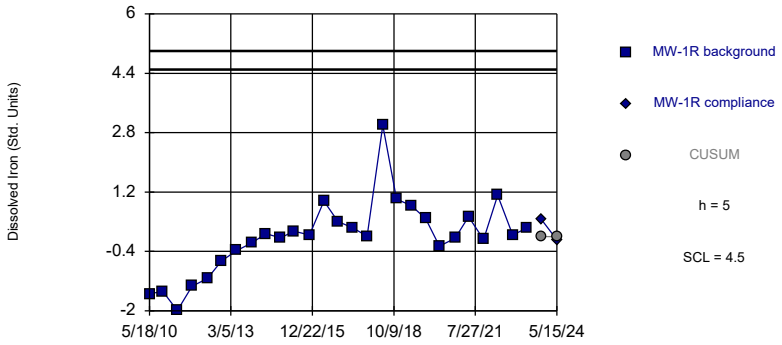
Non-parametric test used in lieu of control chart because non-detects exceed user-adjustable maximum of 75%. All background values (n = 14) were censored; limit is most recent reporting limit. Report alpha = 0.06667. Most recent point compared to limit.

Constituent: Dissolved Copper Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-1R



Background Data Summary: Mean=899.4, Std. Dev.=396.4, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9315, critical = 0.894. Report alpha = 0.000214. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

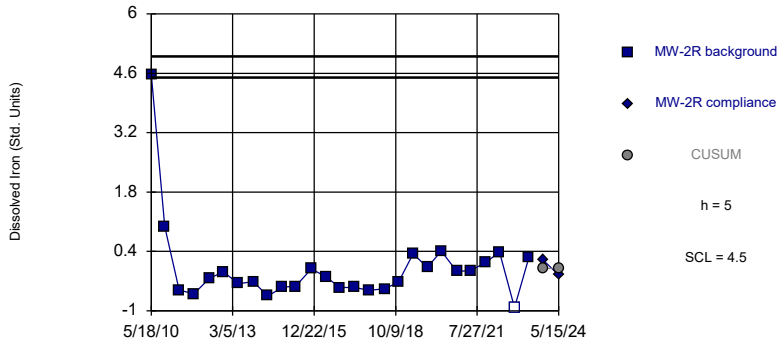
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.

Within Control Limits

Control Chart

MW-2R



Background Data Summary: Mean=2404, Std. Dev.=2538, n=27, 3.704% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8165, critical = 0.894 (non-normal: user chose to continue). Report alpha = 0.000214. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

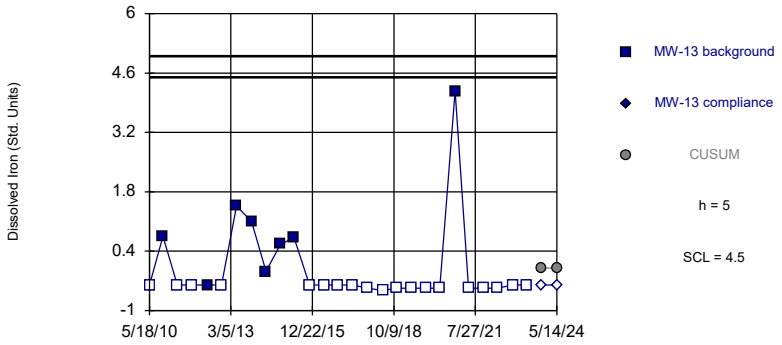
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.

Within Control Limits

Control Chart

MW-13



Background Data Summary: Mean=248.9, Std. Dev.=376.1, n=27, 70.37% NDs (maximum before substituting non-parametric 75%). Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7585, critical = 0.894 (non-normal: user chose to continue). Report alpha = 0.000214. Dates ending 5/9/2023 used for control stats.

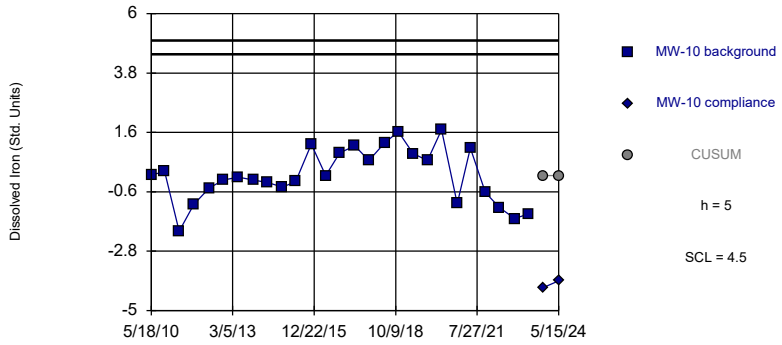
Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

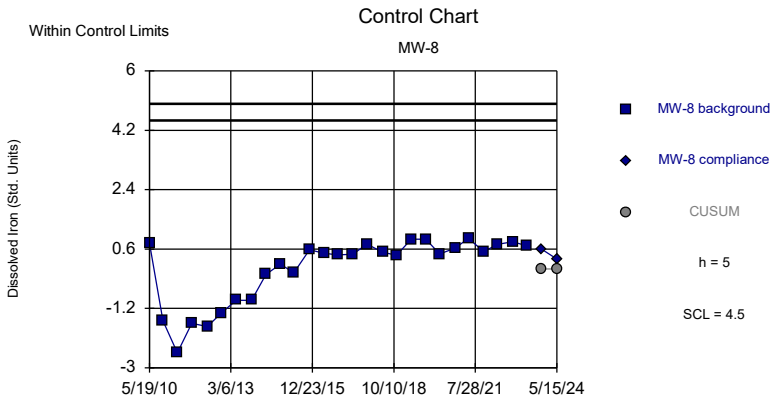
MW-10



Background Data Summary: Mean=4163, Std. Dev.=999.9, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.973, critical = 0.894. Report alpha = 0.000214. Dates ending 5/10/2023 used for control stats.

Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

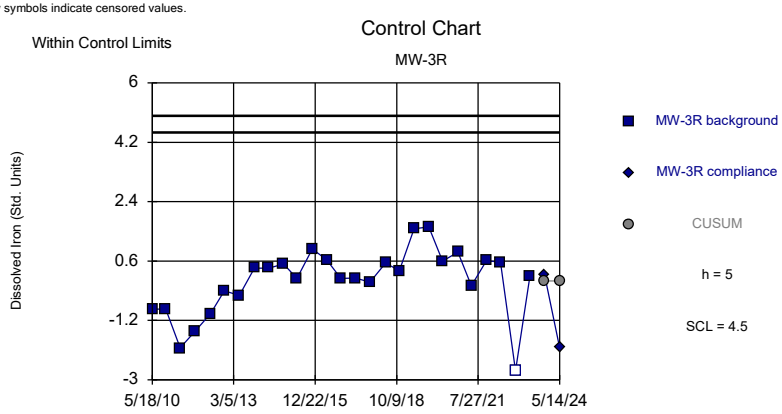
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary: Mean=1809, Std. Dev.=638.6, n=27. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.6749, critical = 0.894 (non-normal: user chose to continue). Report alpha = 0.000214. Dates ending 5/9/2023 used for control stats.

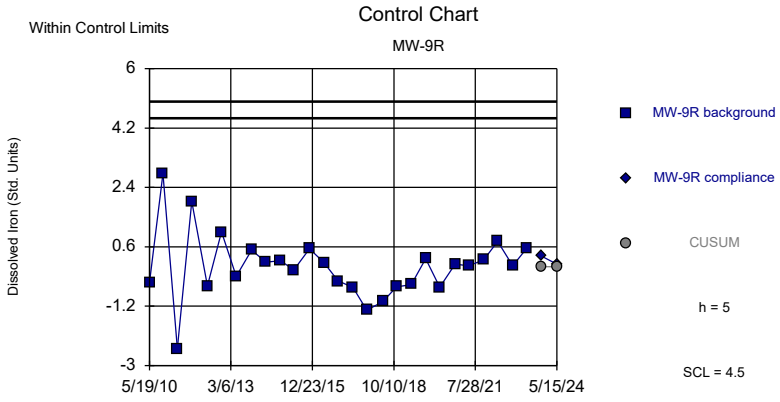
Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.



Background Data Summary: Mean=2020, Std. Dev.=722.6, n=27, 3.704% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9275, critical = 0.894. Report alpha = 0.000214. Dates ending 5/9/2023 used for control stats.

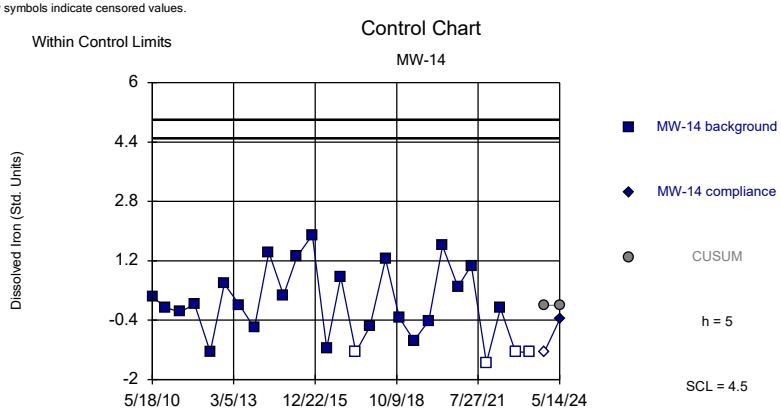
Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary (based on natural log transformation): Mean=8.05, Std. Dev.=0.3854, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9339, critical = 0.894. Report alpha = 0.000214. Dates ending 5/10/2023 used for control stats.

Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.



Background Data Summary (based on natural log transformation): Mean=6.133, Std. Dev.=1.21, n=27, 14.81% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9524, critical = 0.894. Report alpha = 0.000214. Dates ending 5/9/2023 used for control stats.

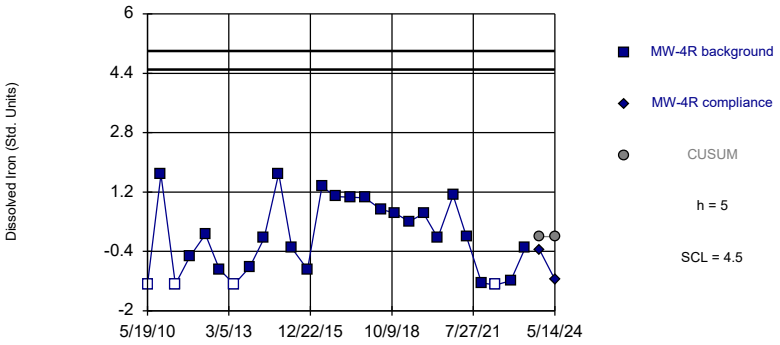
Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.

Control Chart

Within Control Limits

MW-4R



Background Data Summary: Mean=1245, Std. Dev.=931.1, n=27, 14.81% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9178, critical = 0.894. Report alpha = 0.000214. Dates ending 5/9/2023 used for control stats.

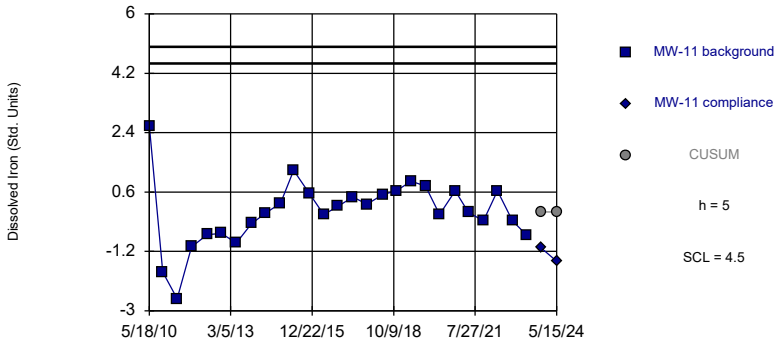
Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Control Chart

Within Control Limits

MW-11



Background Data Summary: Mean=8879, Std. Dev.=2724, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9564, critical = 0.894. Report alpha = 0.000214. Dates ending 5/10/2023 used for control stats.

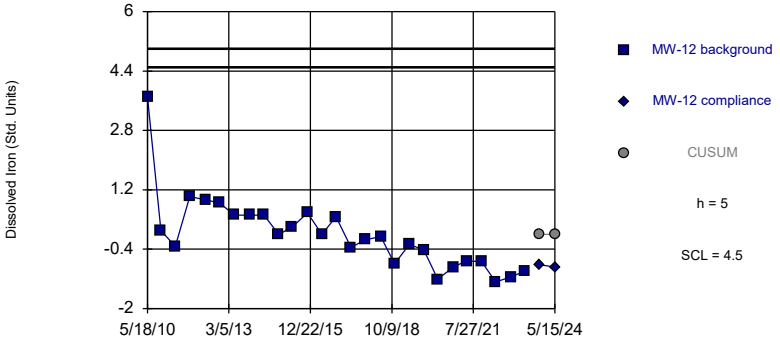
Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Control Chart

Within Control Limits

MW-12



Background Data Summary: Mean=15853, Std. Dev.=11973, n=27. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8741, critical = 0.894 (non-normal: user chose to continue). Report alpha = 0.000214. Dates ending 5/10/2023 used for control stats.

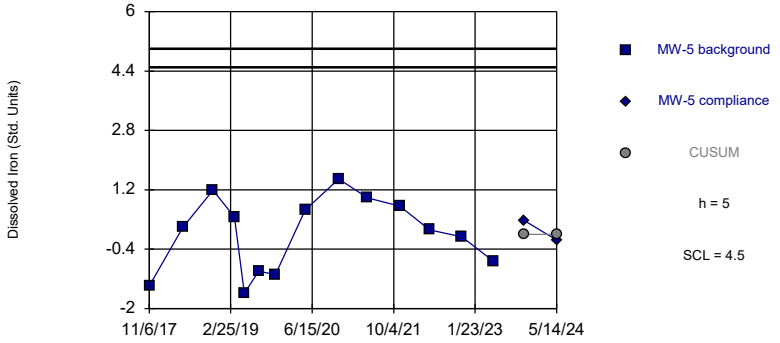
Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Control Chart

Within Control Limits

MW-5

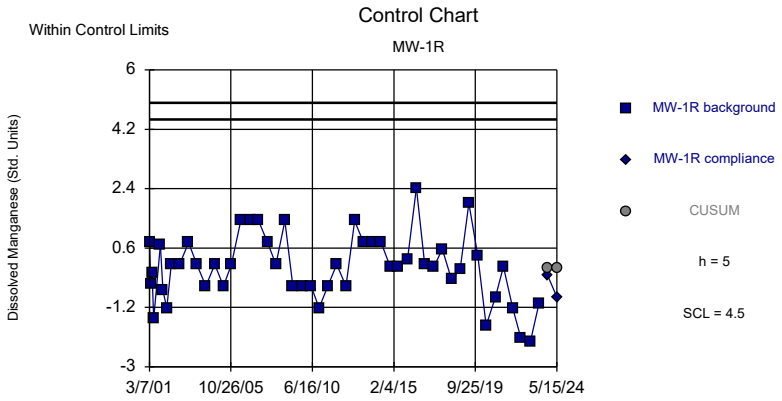


Background Data Summary: Mean=3654, Std. Dev.=1118, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9451, critical = 0.825. Report alpha = 0.000854. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Iron Analysis Run 6/18/2024 2:50 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

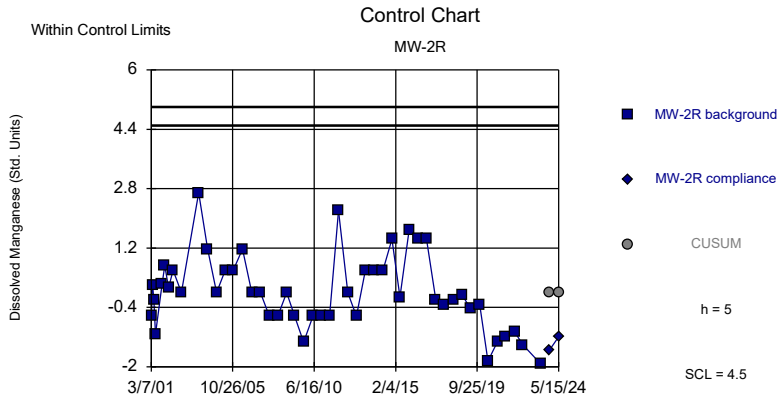
Within Control Limits



Background Data Summary: Mean=1284, Std. Dev.=151.3, n=50. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9761, critical = 0.935. Report alpha = 0.000042. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

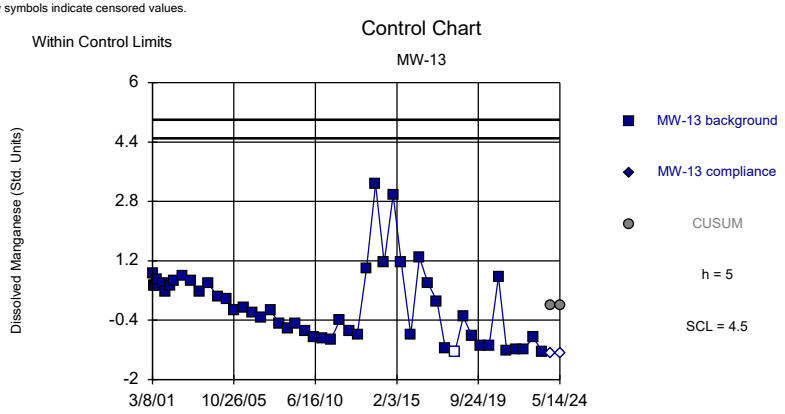


Background Data Summary (based on natural log transformation): Mean=7.313, Std. Dev.=0.1072, n=48. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9687, critical = 0.929. Report alpha = 0.000056. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.

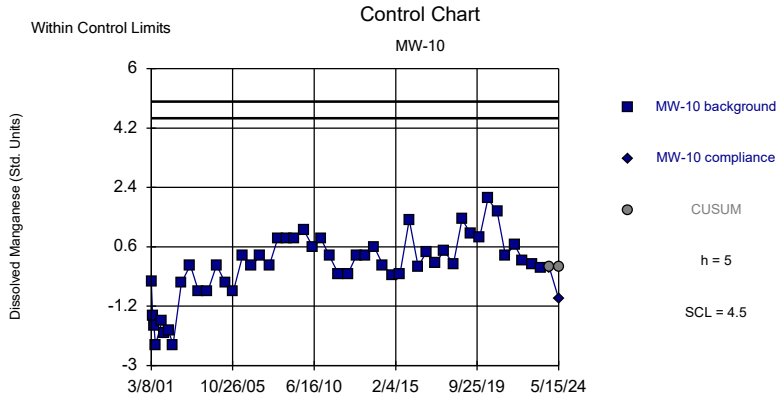
Within Control Limits



Background Data Summary: Mean=188, Std. Dev.=141.3, n=50, 2% NDs. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9183, critical = 0.935 (non-normal: user chose to continue). Report alpha = 0.000056. Dates ending 5/9/2023 used for control stats.

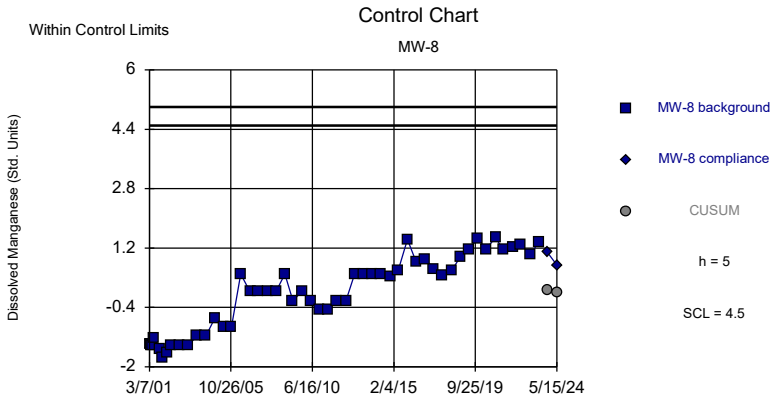
Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits



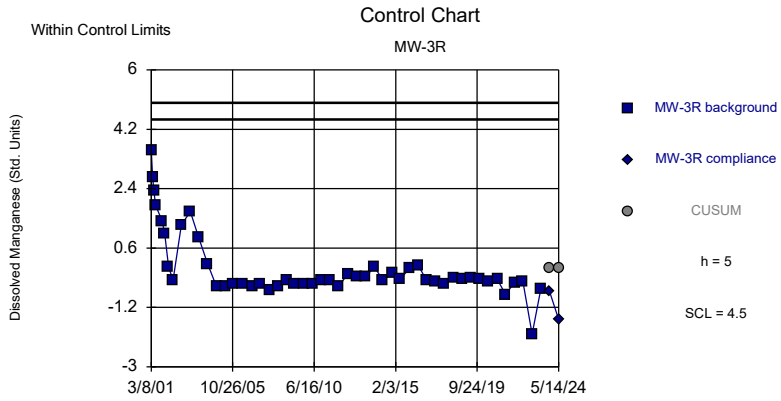
Background Data Summary: Mean=2283, Std. Dev.=371.9, n=50. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9419, critical = 0.935. Report alpha = 0.000056. Dates ending 5/10/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



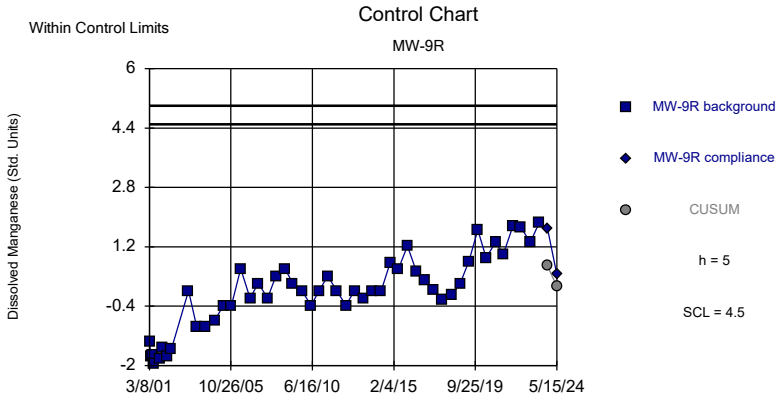
Background Data Summary: Mean=1591, Std. Dev.=418.3, n=50. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.946, critical = 0.935. Report alpha = 0.000056. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



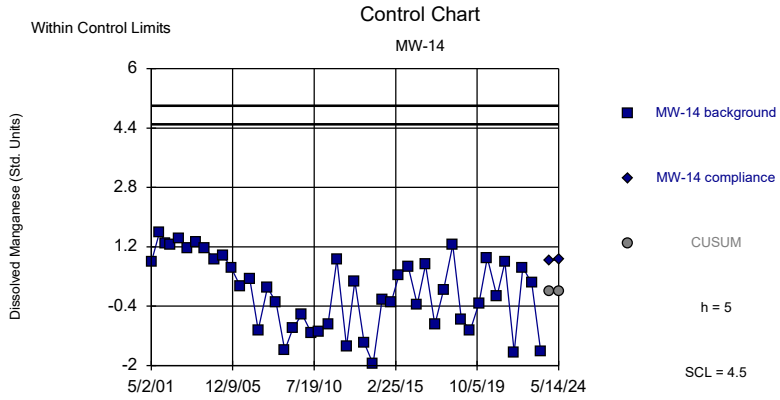
Background Data Summary: Mean=2077, Std. Dev.=1010, n=50. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.5199, critical = 0.935 (non-normal: user chose to continue). Report alpha = 0.000056. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary: Mean=1992, Std. Dev.=505.2, n=49. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9476, critical = 0.929. Report alpha = 0.000066. Dates ending 5/10/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



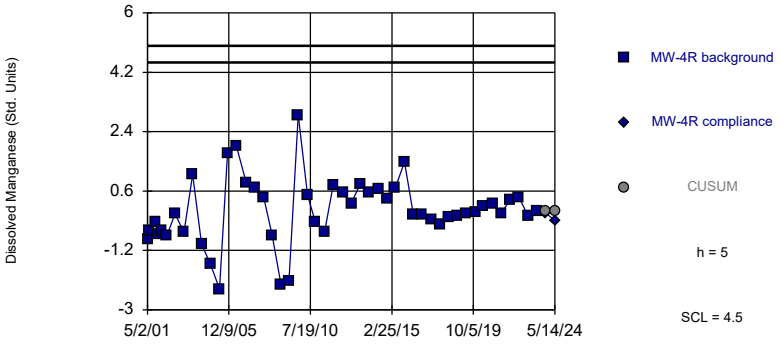
Background Data Summary (based on natural log transformation): Mean=6.677, Std. Dev.=0.6562, n=46. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9374, critical = 0.927. Report alpha = 0.000062. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-4R



Background Data Summary (based on natural log transformation): Mean=7.827, Std. Dev.=0.5088, n=48. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9657, critical = 0.929. Report alpha = 0.000048. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-11

Background Data Summary (based on natural log transformation): Mean=7.713, Std. Dev.=0.327, n=37. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9458, critical = 0.914. Report alpha = 0.000088. Dates ending 5/10/2023 used for control stats.

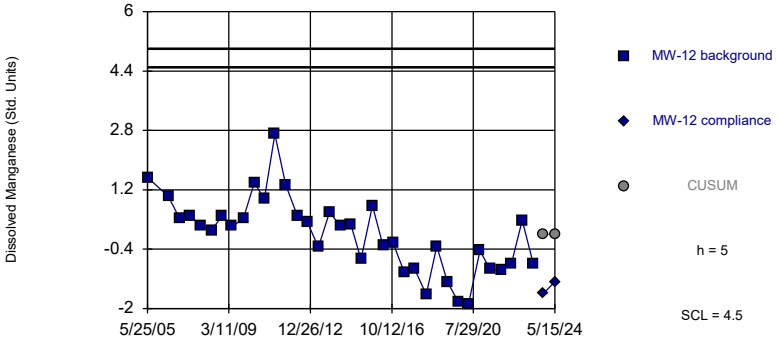
Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-12



Background Data Summary (based on natural log transformation): Mean=7.936, Std. Dev.=0.3243, n=36. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9764, critical = 0.912. Report alpha = 0.000108. Dates ending 5/10/2023 used for control stats.

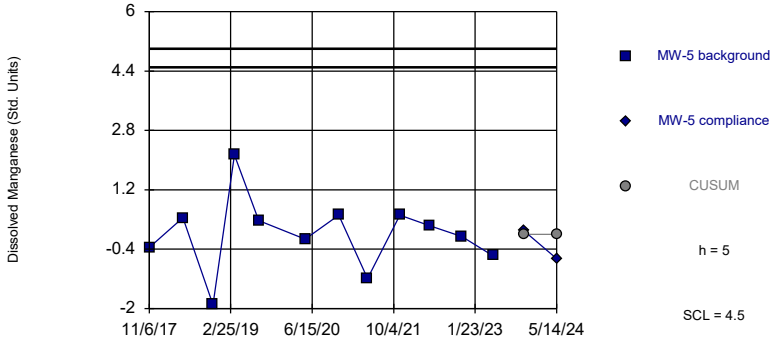
Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-5



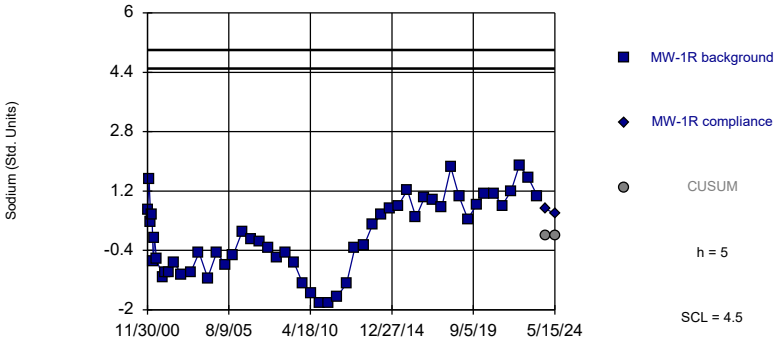
Background Data Summary (based on natural log transformation): Mean=7.835, Std. Dev.=0.05437, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9406, critical = 0.805. Report alpha = 0.001394. Dates ending 5/9/2023 used for control stats.

Constituent: Dissolved Manganese Analysis Run 6/18/2024 2:51 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-1R



Background Data Summary (based on natural log transformation): Mean=11, Std. Dev.=0.311, n=53. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9793, critical = 0.938. Report alpha = 0.000034. Dates ending 5/9/2023 used for control stats.

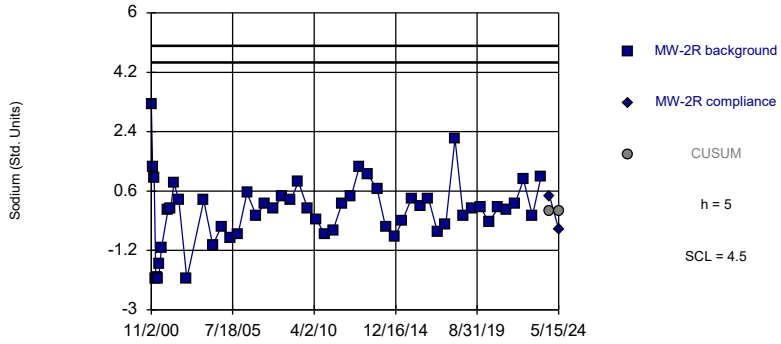
Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-2R



Background Data Summary: Mean=68234, Std. Dev.=8863, n=53. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9396, critical = 0.938. Report alpha = 0.000034. Dates ending 5/9/2023 used for control stats.

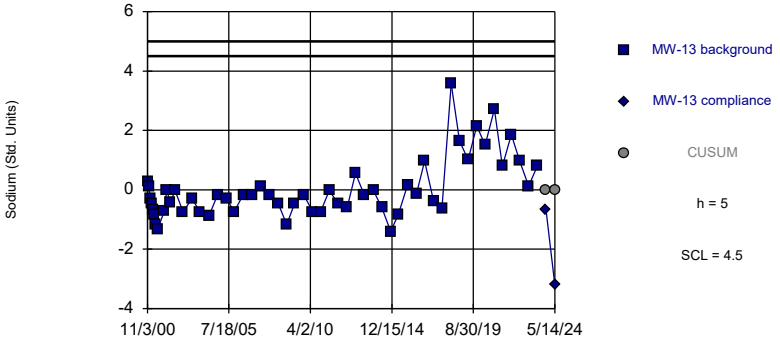
Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-13



Background Data Summary: Mean=83148, Std. Dev.=6953, n=54. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.8871, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.000044. Dates ending 5/9/2023 used for control stats.

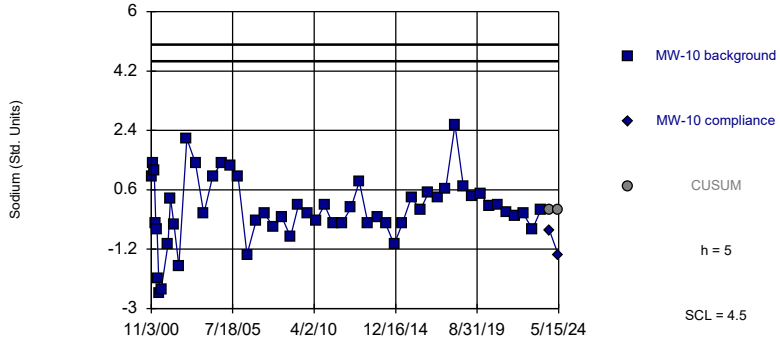
Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-10



Background Data Summary (based on natural log transformation): Mean=11.33, Std. Dev.=0.1286, n=54. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9591, critical = 0.939. Report alpha = 0.000044. Dates ending 5/10/2023 used for control stats.

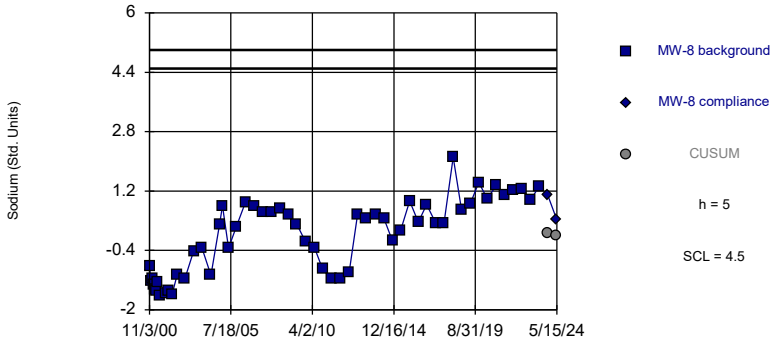
Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-8



Background Data Summary: Mean=52156, Std. Dev.=12322, n=55. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9431, critical = 0.94. Report alpha = 0.000054. Dates ending 5/9/2023 used for control stats.

Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

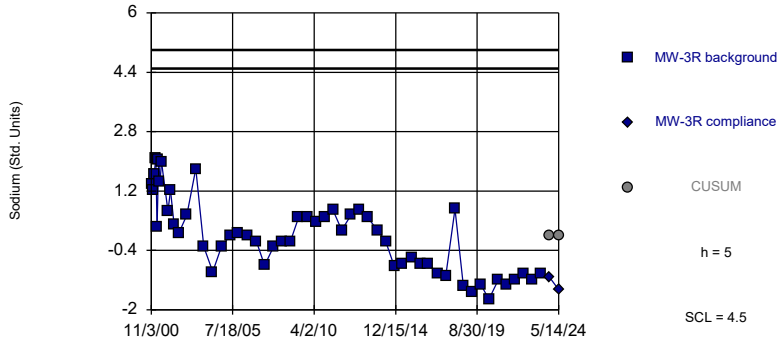
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-3R



Background Data Summary (based on natural log transformation): Mean=11.07, Std. Dev.=0.2132, n=54. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9719, critical = 0.939. Report alpha = 0.00004. Dates ending 5/9/2023 used for control stats.

Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

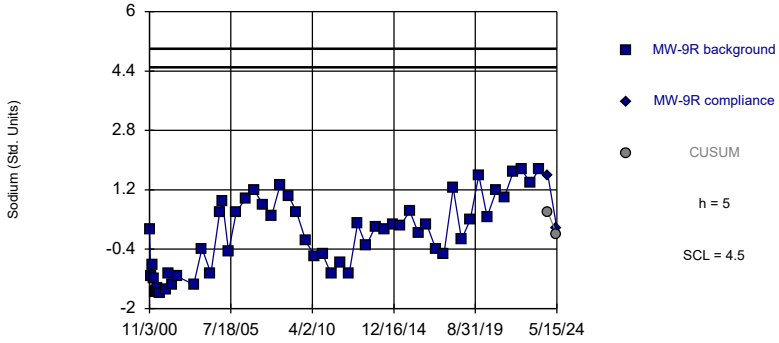
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-9R



Background Data Summary: Mean=52161, Std. Dev.=13432, n=54. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9719, critical = 0.939. Report alpha = 0.00004. Dates ending 5/10/2023 used for control stats.

Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

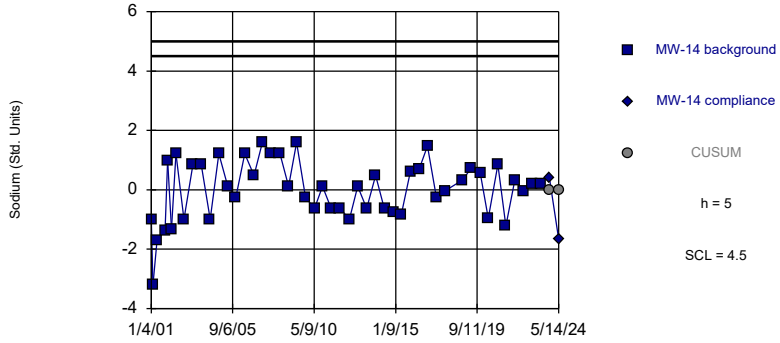
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

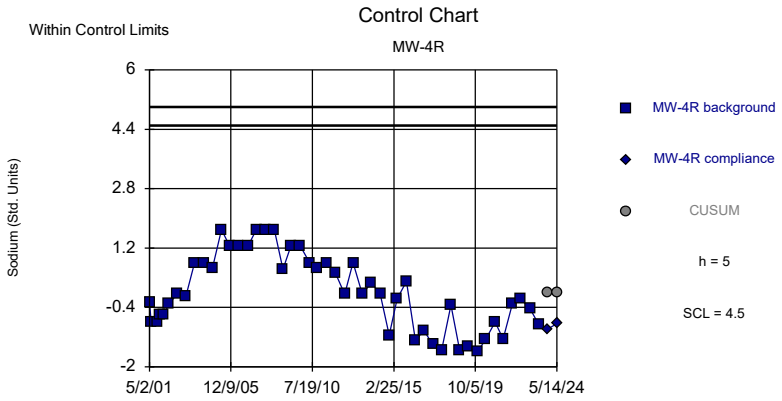
MW-14



Background Data Summary: Mean=50698, Std. Dev.=2710, n=48. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9565, critical = 0.929. Report alpha = 0.000046. Dates ending 5/9/2023 used for control stats.

Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart

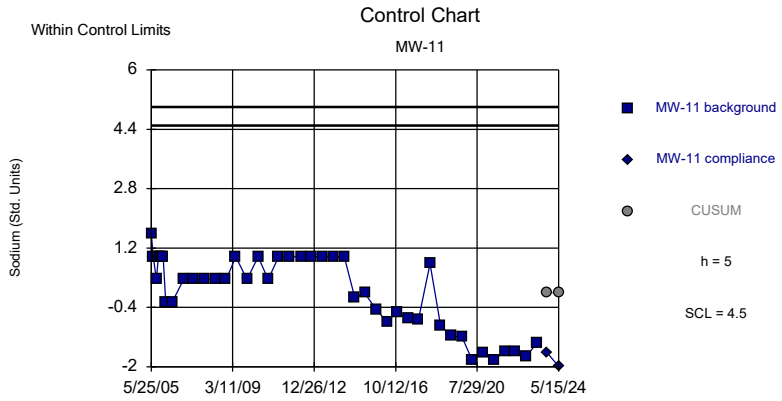
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary: Mean=81956, Std. Dev.=22365, n=48. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9364, critical = 0.929. Report alpha = 0.000046. Dates ending 5/9/2023 used for control stats.

Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

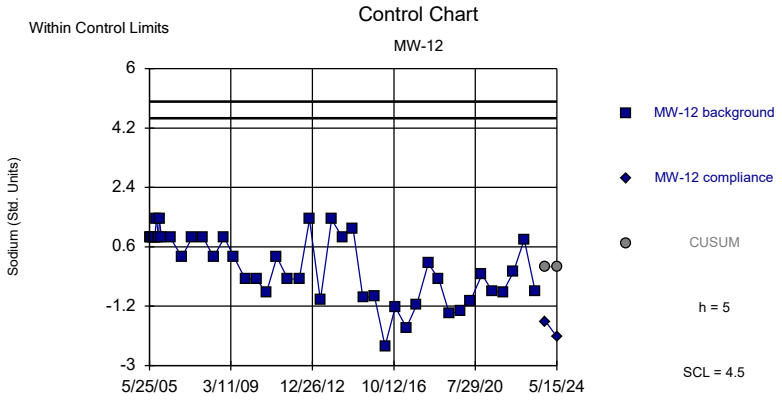
Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA



Background Data Summary: Mean=104251, Std. Dev.=16365, n=43. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8618, critical = 0.923 (non-normal: user chose to continue). Report alpha = 0.000046. Dates ending 5/10/2023 used for control stats.

Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

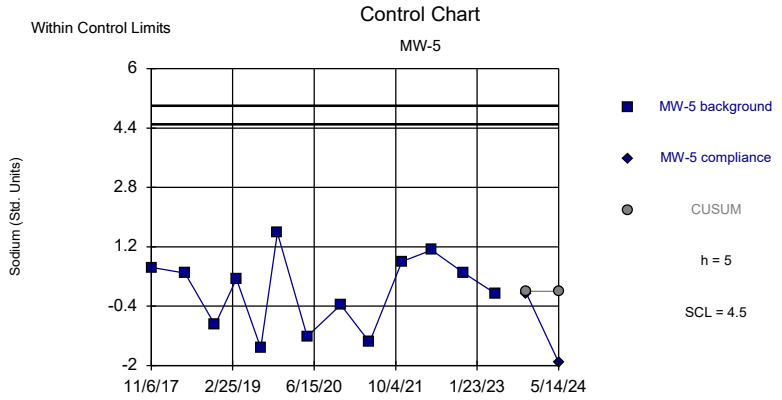
Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA



Background Data Summary (based on natural log transformation): Mean=11.57, Std. Dev.=0.1453, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9286, critical = 0.923. Report alpha = 0.000046. Dates ending 5/10/2023 used for control stats.

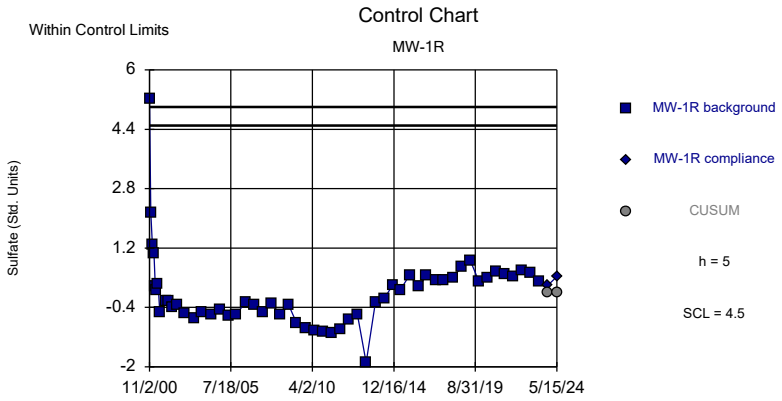
Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA



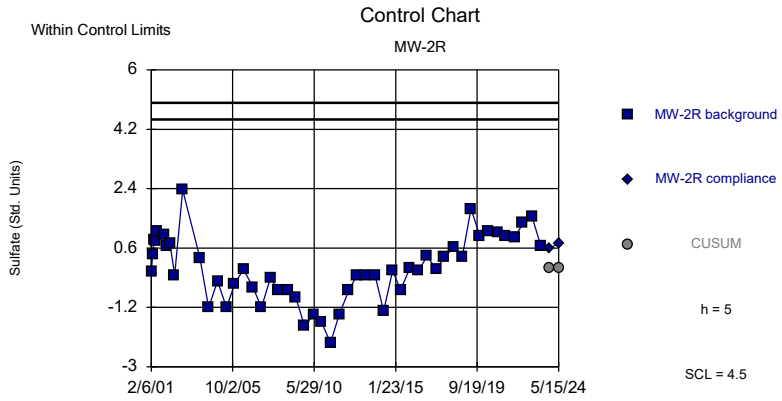
Background Data Summary: Mean=31169, Std. Dev.=1290, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.941, critical = 0.814. Report alpha = 0.001048. Dates ending 5/9/2023 used for control stats.

Constituent: Sodium Analysis Run 6/18/2024 2:52 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



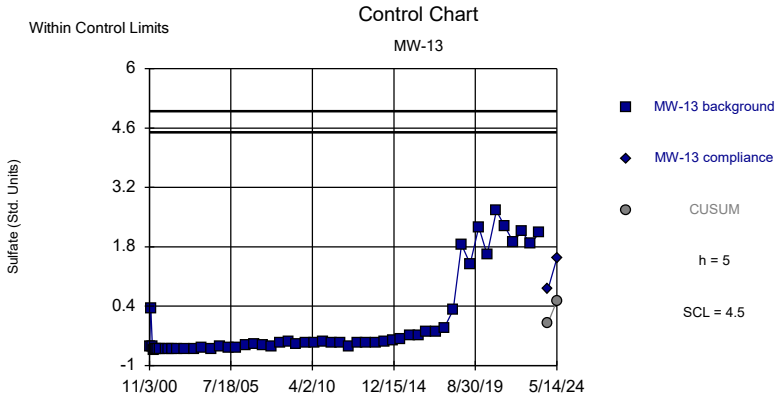
Background Data Summary: Mean=537.2, Std. Dev.=261.4, n=54. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.7981, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.000048. Dates ending 5/9/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:52 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



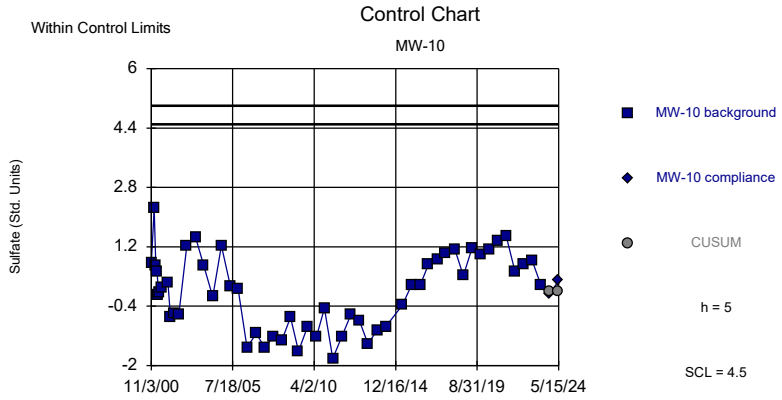
Background Data Summary (based on natural log transformation): Mean=6.438, Std. Dev.=0.1855, n=50. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9897, critical = 0.935. Report alpha = 0.000048. Dates ending 5/9/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



Background Data Summary: Mean=122.9, Std. Dev.=162.3, n=54. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.8347, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.000054. Dates ending 5/9/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data



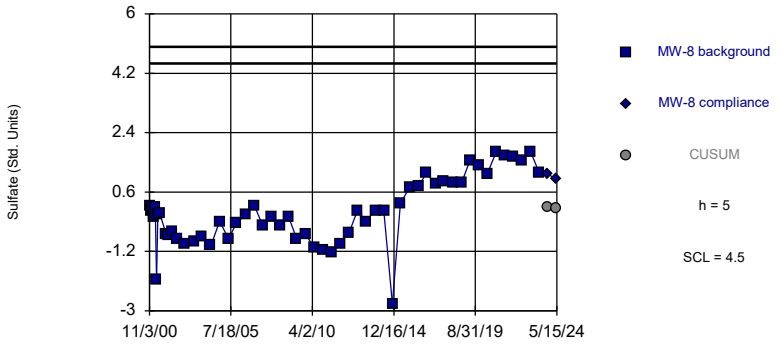
Background Data Summary (based on natural log transformation): Mean=6.579, Std. Dev.=0.19, n=52. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9753, critical = 0.937. Report alpha = 0.000048. Dates ending 5/10/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-8



Background Data Summary: Mean=473.5, Std. Dev.=150.3, n=54. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9625, critical = 0.939. Report alpha = 0.000044. Dates ending 5/9/2023 used for control stats.

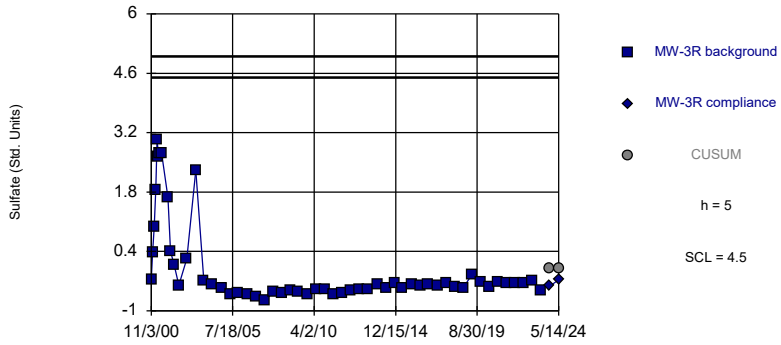
Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-3R



Background Data Summary: Mean=947.5, Std. Dev.=672.4, n=54. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.7556, critical = 0.939 (non-normal: user chose to continue). Report alpha = 0.000044. Dates ending 5/9/2023 used for control stats.

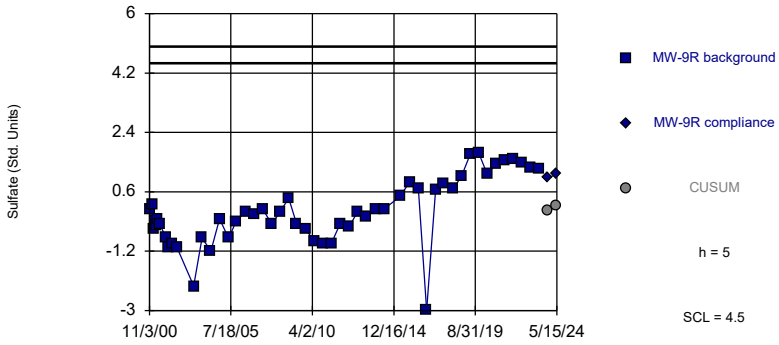
Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-9R



Background Data Summary (based on natural log transformation): Mean=6.153, Std. Dev.=0.2976, n=51. Normality test: Shapiro Francia @alpha = 0.01, calculated = 0.9559, critical = 0.935. Report alpha = 0.00003. Dates ending 5/10/2023 used for control stats.

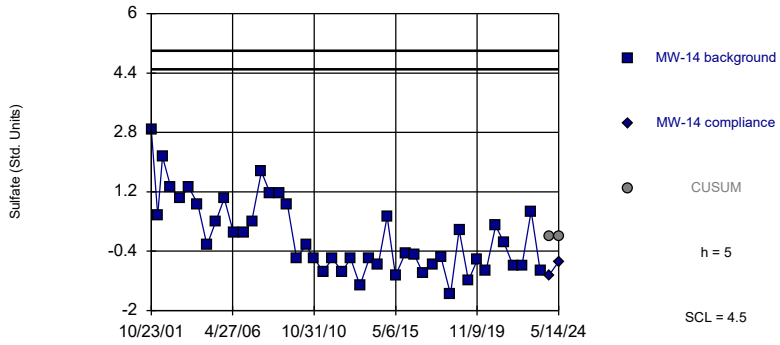
Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-14



Background Data Summary (based on natural log transformation): Mean=4.034, Std. Dev.=0.1069, n=45. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9314, critical = 0.926. Report alpha = 0.00006. Dates ending 5/9/2023 used for control stats.

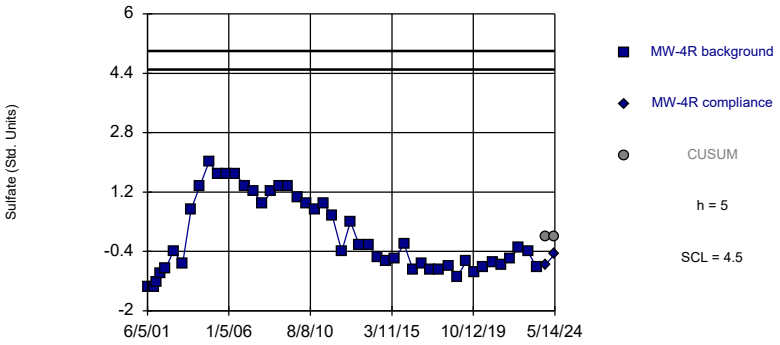
Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Within Control Limits

Control Chart

MW-4R



Background Data Summary: Mean=1347, Std. Dev.=623.7, n=47. Analysis run on non-transformed values; transformation unable to normalize distribution. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9167, critical = 0.928 (non-normal: user chose to continue). Report alpha = 0.000058. Dates ending 5/9/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart

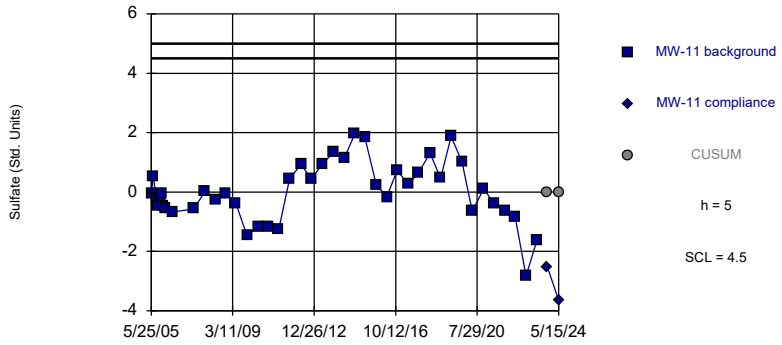
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-11



Background Data Summary: Mean=796.7, Std. Dev.=99.7, n=42. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9807, critical = 0.922. Report alpha = 0.000072. Dates ending 5/10/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart

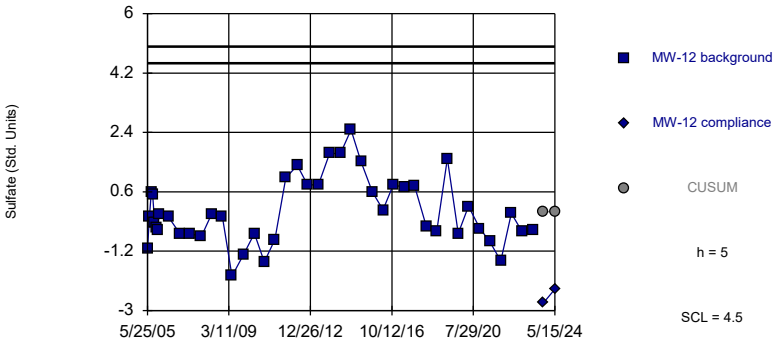
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-12



Background Data Summary (based on natural log transformation): Mean=6.606, Std. Dev.=0.1708, n=43. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9628, critical = 0.923. Report alpha = 0.000062. Dates ending 5/10/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:53 PM View: Control chart

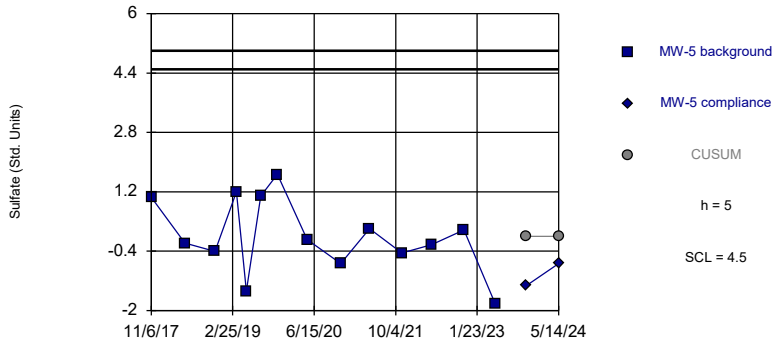
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Within Control Limits

Control Chart

MW-5



Background Data Summary: Mean=552.1, Std. Dev.=81.98, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9615, critical = 0.825. Report alpha = 0.000848. Dates ending 5/9/2023 used for control stats.

Constituent: Sulfate Analysis Run 6/18/2024 2:54 PM View: Control chart

Sycamore Ridge LF Client: Republic Data: Sycamore Data

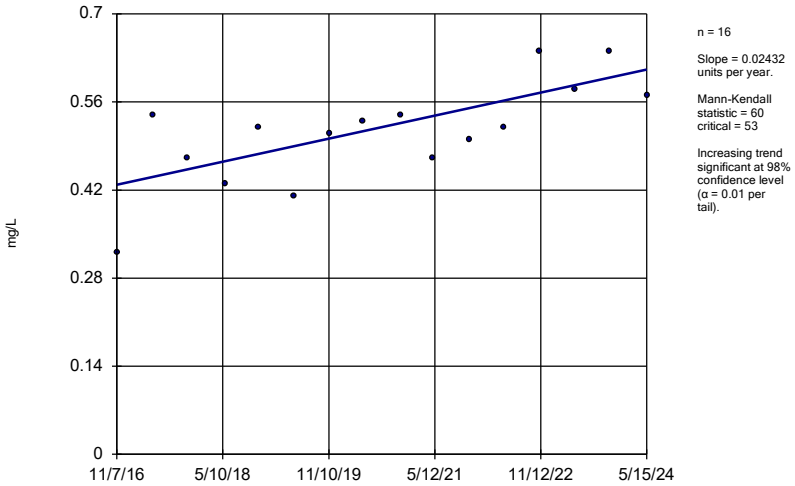
Trend Test

Sycamore Ridge LF Client: Republic Data: Sycamore Data Printed 6/19/2024, 10:22 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Ammonia-N (mg/L)	**MW-10**	**0.02916**	**81**	**53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Ammonia-N (mg/L)	**MW-1R**	**0.02432**	**60**	**53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Ammonia-N (mg/L)	**MW-3R**	**-0.02038**	**-59**	**-53**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-11**	**-2.549**	**-90**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-12**	**-1.768**	**-85**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Chloride (mg/L)	**MW-13 (bg)**	**1.921**	**65**	**53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Iron (ug/L)	**MW-10**	**-589.8**	**-71**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Iron (ug/L)	**MW-12**	**-1718**	**-64**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Iron (ug/L)	**MW-4R**	**-268.4**	**-78**	**-53**	**Yes**	**16**	**6.25**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Iron (ug/L)	**MW-9R**	**207.3**	**64**	**53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Manganese (ug/L)	**MW-11**	**-80.02**	**-93**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Manganese (ug/L)	**MW-13 (bg)**	**-8.584**	**-55**	**-53**	**Yes**	**16**	**18.75**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Manganese (ug/L)	**MW-2R**	**-37.76**	**-64**	**-48**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Dissolved Manganese (ug/L)	**MW-9R**	**128.5**	**65**	**53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium (ug/L)	**MW-10**	**-2401**	**-86**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium (ug/L)	**MW-11**	**-3068**	**-76**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sodium (ug/L)	**MW-9R**	**3149**	**56**	**53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	**MW-11**	**-55.97**	**-82**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**
Sulfate (mg/L)	**MW-12**	**-37.02**	**-68**	**-53**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.02**	**NP**

Sen's Slope Estimator

MW-1R



n = 16

Slope = 0.02432 units per year.

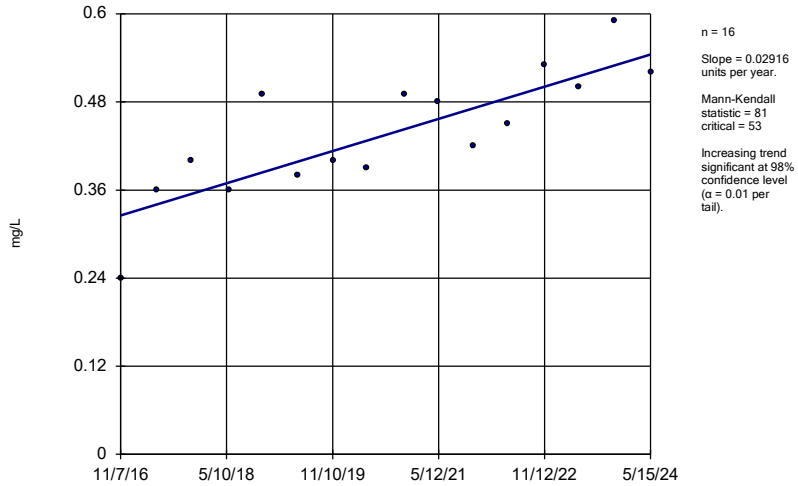
Mann-Kendall statistic = 60
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Ammonia-N Analysis Run 6/19/2024 10:18 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sen's Slope Estimator

MW-10



n = 16

Slope = 0.02916 units per year.

Mann-Kendall statistic = 81
critical = 53

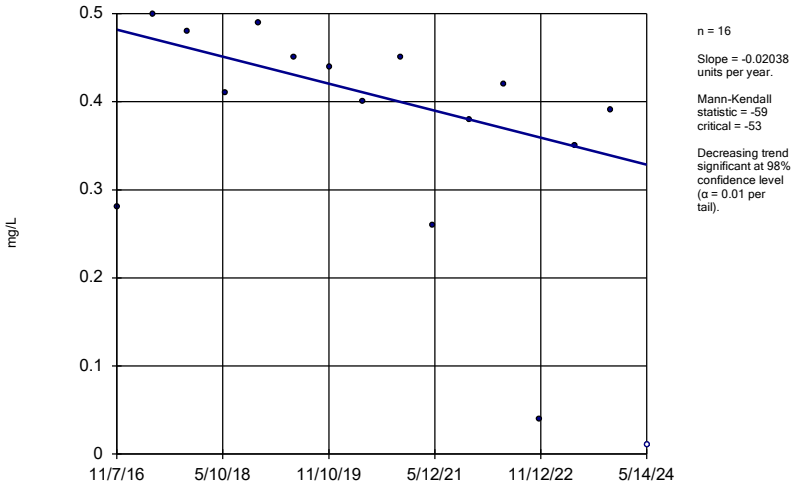
Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Ammonia-N Analysis Run 6/19/2024 10:18 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3R



n = 16

Slope = -0.02038 units per year.

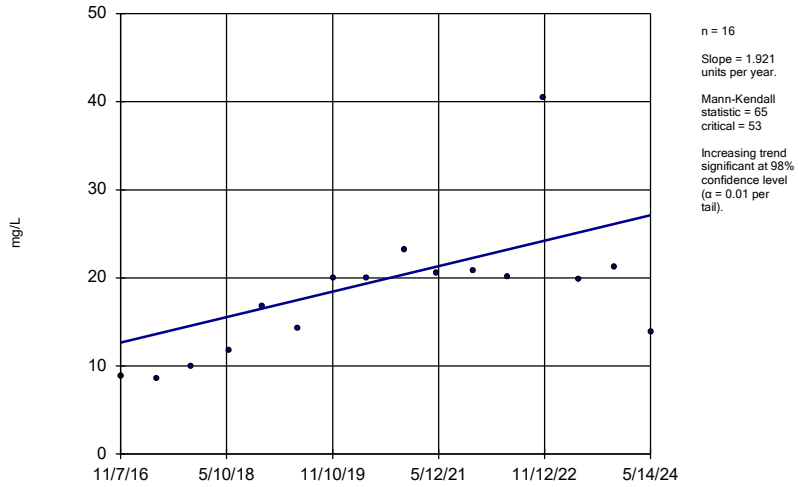
Mann-Kendall statistic = -59
critical = -53

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Ammonia-N Analysis Run 6/19/2024 10:18 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sen's Slope Estimator

MW-13 (bg)



n = 16

Slope = 1.921 units per year.

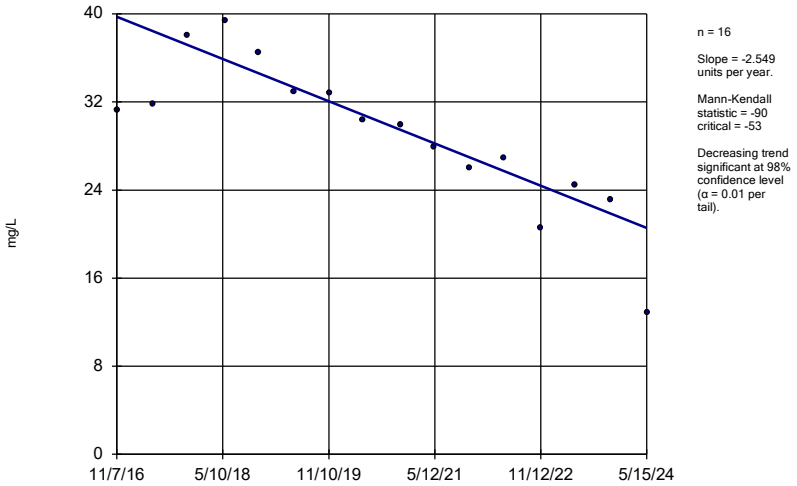
Mann-Kendall statistic = 65
critical = 53

Increasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Chloride Analysis Run 6/19/2024 10:19 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sen's Slope Estimator

MW-11



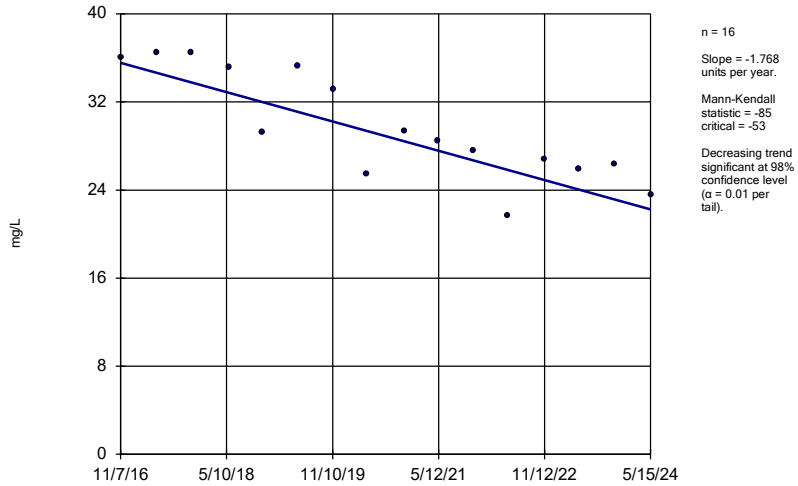
Constituent: Chloride Analysis Run 6/19/2024 10:19 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-12



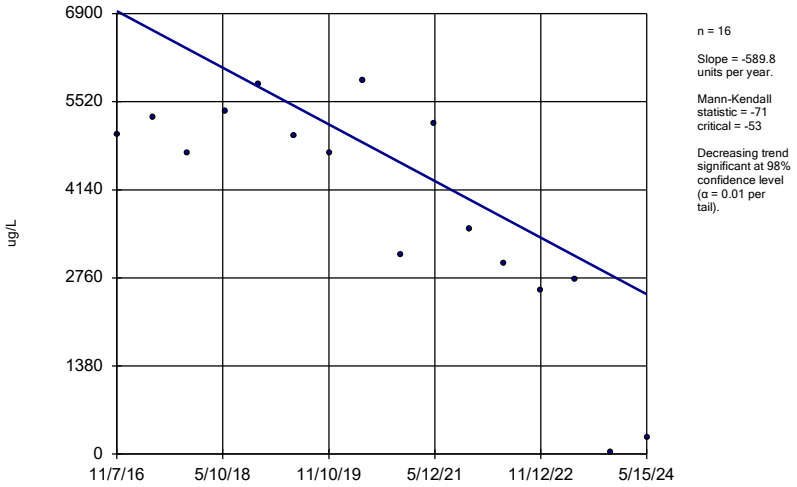
Constituent: Chloride Analysis Run 6/19/2024 10:19 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-10



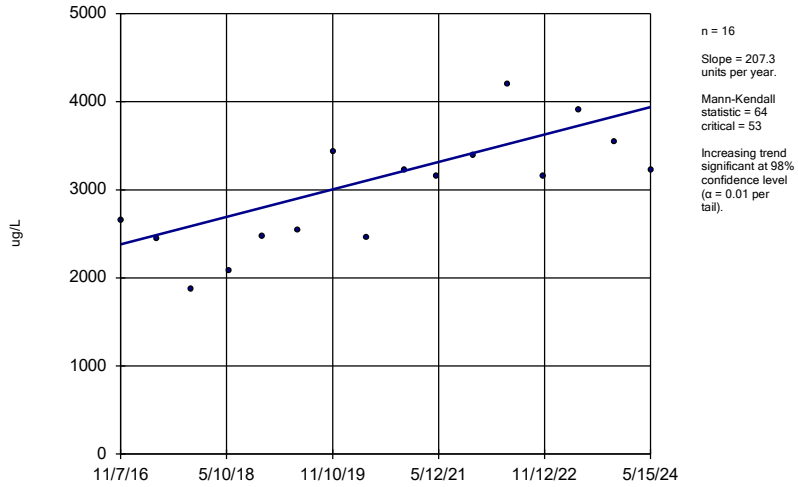
Constituent: Dissolved Iron Analysis Run 6/19/2024 10:20 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-9R



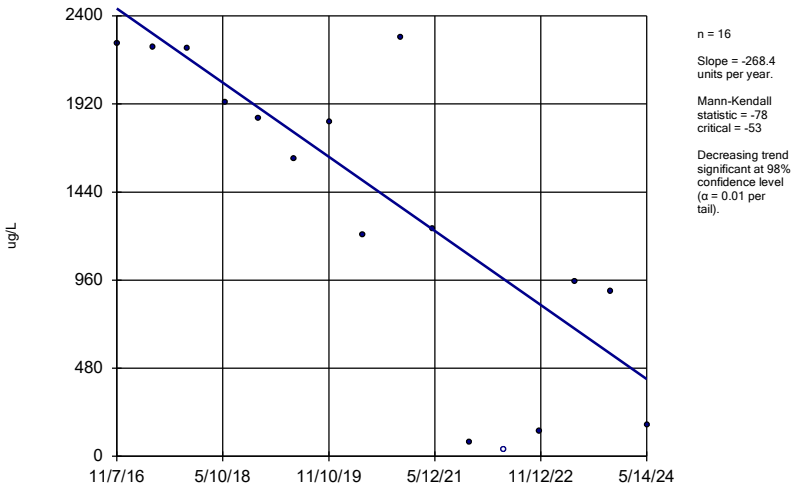
Constituent: Dissolved Iron Analysis Run 6/19/2024 10:20 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4R



n = 16

Slope = -268.4 units per year.

Mann-Kendall statistic = -78
critical = -53

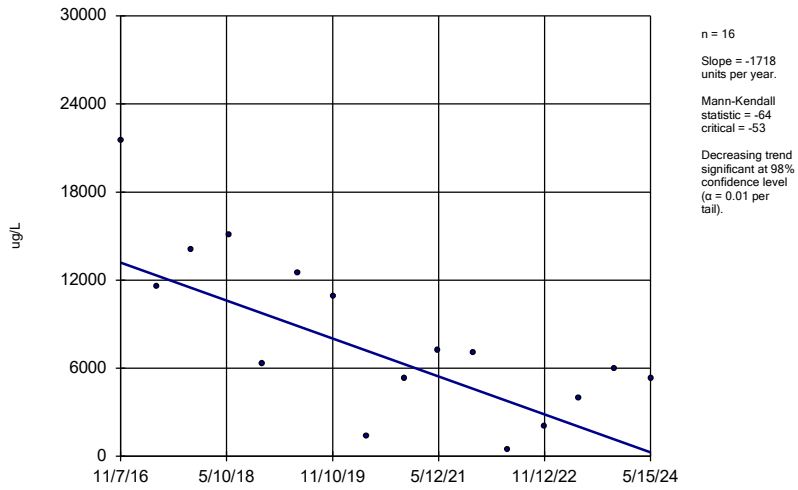
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Dissolved Iron Analysis Run 6/19/2024 10:20 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-12



n = 16

Slope = -1718 units per year.

Mann-Kendall statistic = -64
critical = -53

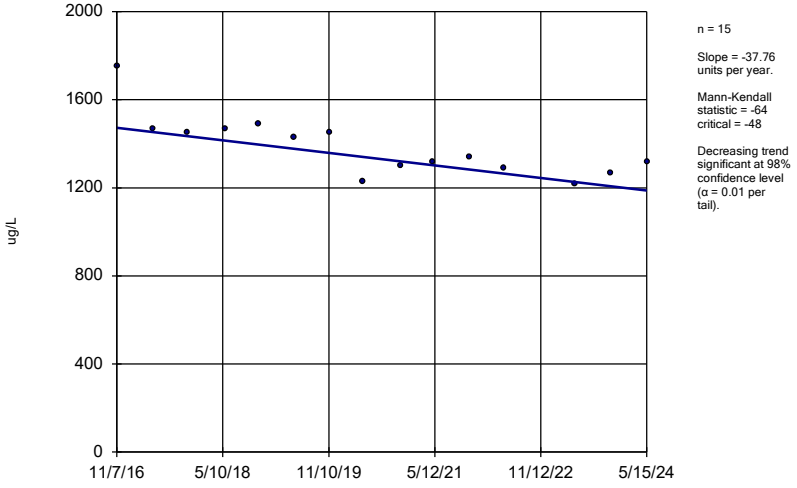
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Dissolved Iron Analysis Run 6/19/2024 10:20 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-2R



n = 15

Slope = -37.76 units per year.

Mann-Kendall statistic = -64
critical = -48

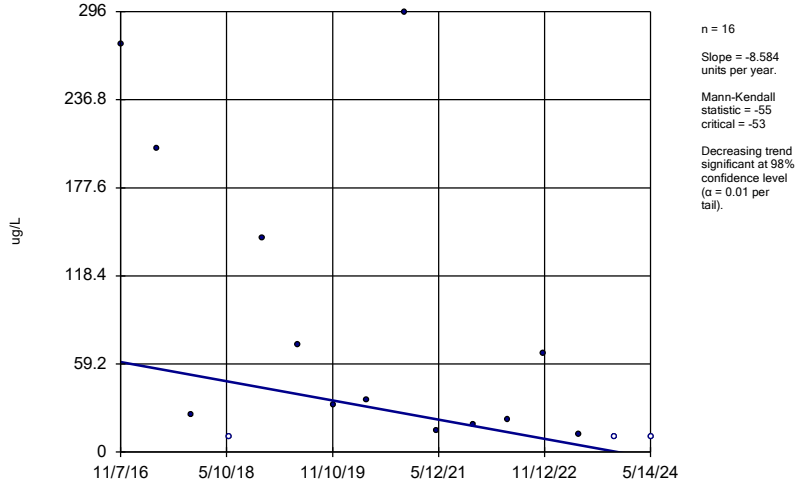
Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Dissolved Manganese Analysis Run 6/19/2024 10:20 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-13 (bg)



n = 16

Slope = -8.584 units per year.

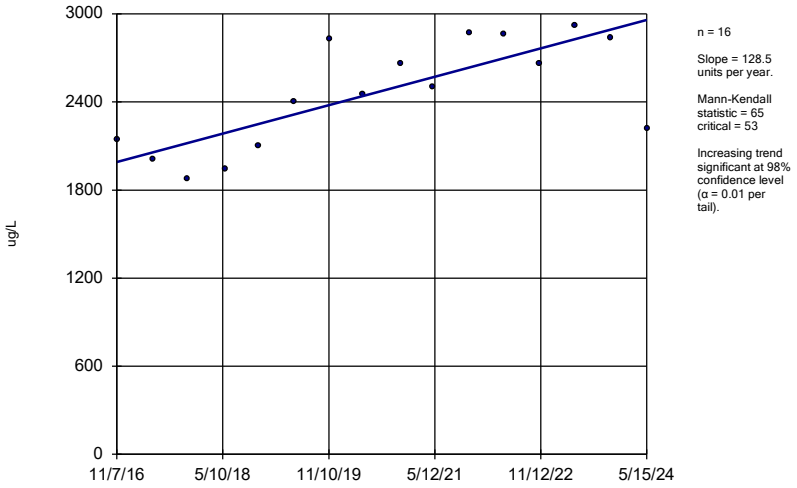
Mann-Kendall statistic = -55
critical = -53

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Dissolved Manganese Analysis Run 6/19/2024 10:20 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sen's Slope Estimator

MW-9R



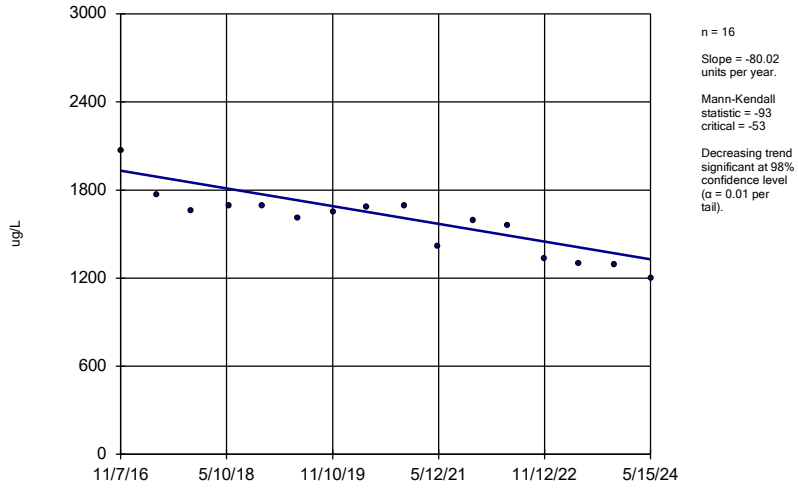
Constituent: Dissolved Manganese Analysis Run 6/19/2024 10:20 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-11



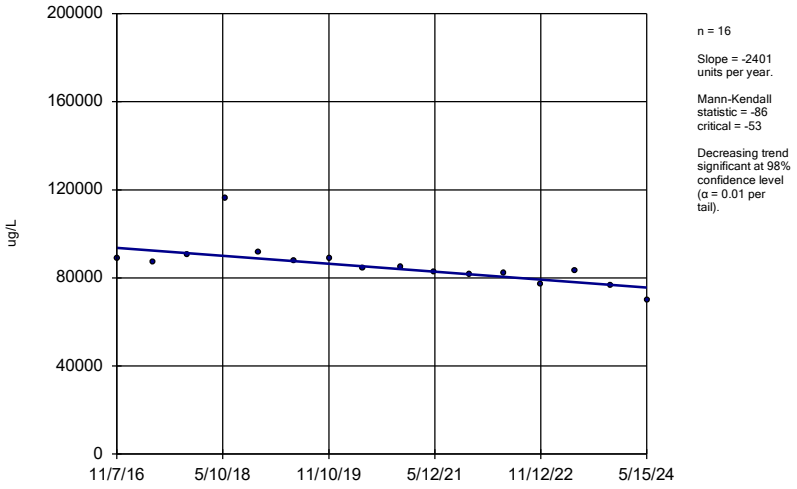
Constituent: Dissolved Manganese Analysis Run 6/19/2024 10:20 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-10



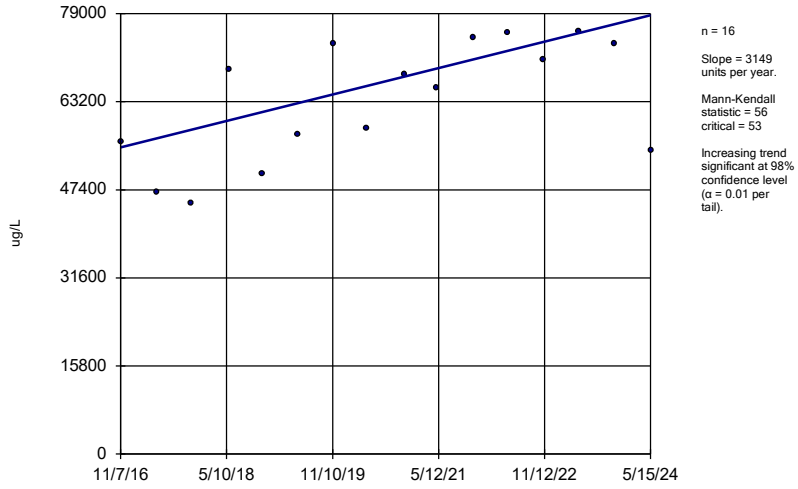
Constituent: Sodium Analysis Run 6/19/2024 10:20 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sanitas™ v.10.0.19 Software licensed to SESCO Group. EPA

Sen's Slope Estimator

MW-9R

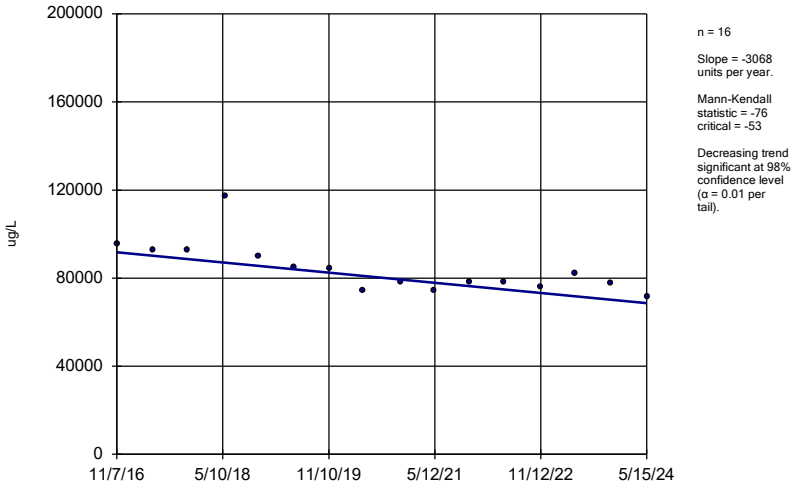


Constituent: Sodium Analysis Run 6/19/2024 10:20 AM View: Trends

Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sen's Slope Estimator

MW-11



n = 16

Slope = -3068 units per year.

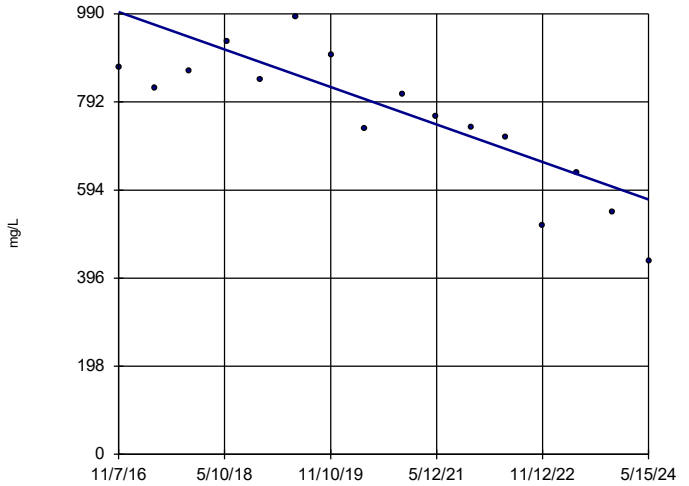
Mann-Kendall statistic = -76
critical = -53

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sodium Analysis Run 6/19/2024 10:20 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sen's Slope Estimator

MW-11



n = 16

Slope = -55.97 units per year.

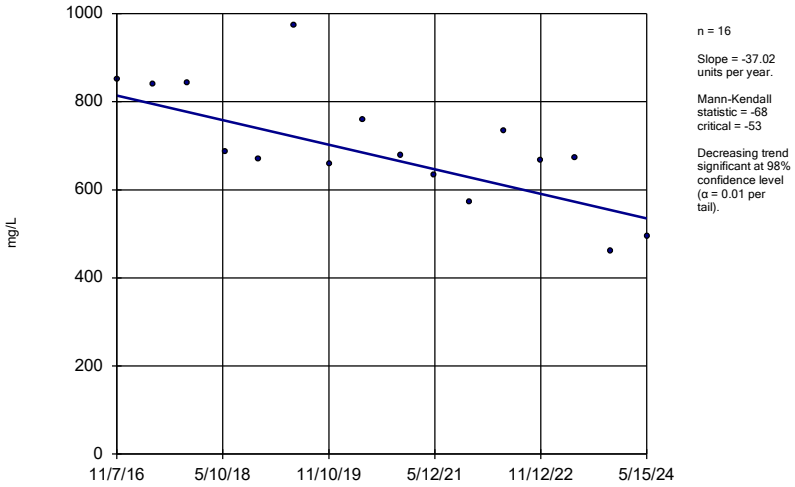
Mann-Kendall statistic = -82
critical = -53

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 6/19/2024 10:20 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data

Sen's Slope Estimator

MW-12



n = 16

Slope = -37.02 units per year.

Mann-Kendall statistic = -68
critical = -53

Decreasing trend significant at 98% confidence level (α = 0.01 per tail).

Constituent: Sulfate Analysis Run 6/19/2024 10:20 AM View: Trends
Sycamore Ridge LF Client: Republic Data: Sycamore Data