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May 27, 2025

Mr. Danny Anderson Division of Waste Management Kentucky Department for Environmental Protection 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601

Mr. Todd Hendricks Division of Waste Management Kentucky Department for Environmental Protection 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601

Dear Mr. Anderson and Mr. Hendricks:

C-746-S&T LANDFILLS FIRST QUARTER CALENDAR YEAR 2025 (JANUARY– MARCH) COMPLIANCE MONITORING REPORT, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, FRNP-RPT-0386/V1, PERMIT NUMBER SW07300014, SW07300015, SW07300045, AGENCY INTEREST ID NO. 3059

The subject report for the first quarter calendar year (CY) 2025 has been uploaded to the Kentucky eForms portal via the Kentucky Online Gateway. Other recipients outside the Solid Waste Branch are receiving this document via email distribution (see distribution list). This report is required in accordance with Solid Waste Landfill Permit Number SW07300014, SW07300015, SW07300045 (Permit). This report includes groundwater analytical data, a validation summary, groundwater flow rate and direction determination, figures depicting well locations, and methane monitoring results.

The statistical analyses of the first quarter CY 2025 monitoring well (MW) data collected from the C-746-S&T Landfills were performed in accordance with Monitoring Condition GSTR0003, Standard Requirement 3, using the U.S. Environmental Protection Agency guidance document, *Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Final Guidance* (1989).

A statistically significant exceedance was indicated for calcium, conductivity, dissolved solids, sodium, and sulfate in MW373. These statistical exceedances are Type 2 Exceedances—Source Unknown. Continued evaluation of calcium, conductivity, dissolved solids, sodium, and sulfate levels through future quarterly monitoring events is recommended. This report also serves as the statistical exceedance notification for the first quarter CY 2025, in accordance with Monitoring Condition GSTR0001, Standard Requirement 5, of the Permit.

PPPO-02-10032946-25

If you have any questions or require additional information, please contact Angus MacKelvey at (270) 349-7526.

Sincerely,

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Enclosure:

C-746-S&T Landfills First Quarter Calendar Year 2025 (January–March) Compliance Monitoring Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, FRNP-RPT-0386/V1

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FRNP-RPT-0386/V1

C-746-S&T Landfills First Quarter Calendar Year 2025 (January–March) Compliance Monitoring Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky



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C-746-S&T Landfills First Quarter Calendar Year 2025 (January–March) Compliance Monitoring Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky

Date Issued—May 2025

U.S. DEPARTMENT OF ENERGY Office of Environmental Management

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

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FIC	GURES	5		v
TA	BLES			v
AC	CRONY	/MS		. vii
1.	1.1 1.2	BACK MONI 1.2.1 1.2.2 1.2.3	CTION CGROUND ITORING PERIOD ACTIVITIES Groundwater Monitoring Methane Monitoring Surface Water Monitoring RESULTS	1 1 3 4
2.	DATA 2.1	A EVA STAT 2.1.1 2.1.2 2.1.3	LUATION/STATISTICAL SYNOPSIS ISTICAL ANALYSIS OF GROUNDWATER DATA Upper Continental Recharge System Upper Regional Gravel Aquifer Lower Regional Gravel Aquifer VERIFICATION AND VALIDATION	11 12 12 12 12 13
3.	PROF	FESSIC	ONAL GEOLOGIST AUTHORIZATION	15
4.	REFE	RENC	ES	. 17
AP	PEND	IX A:	GROUNDWATER, SURFACE WATER, LEACHATE, AND METHANE MONITORING SAMPLE DATA REPORTING FORM	A-1
AP	PEND	IX B:	FACILITY INFORMATION SHEET	B-1
AP	PEND	IX C:	GROUNDWATER SAMPLE ANALYSES AND LABORATORY REPORTS	C-1
AP	PEND	IX D:	STATISTICAL ANALYSES AND QUALIFICATION STATEMENT	D-1
AP	PEND	IX E:	GROUNDWATER FLOW RATE AND DIRECTION	E-1
AP	PEND	IX F:	NOTIFICATIONS	.F-1
AP	PEND	IX G:	CHART OF MCL AND UTL EXCEEDANCES	G-1
AP	PEND	IX H:	METHANE MONITORING DATA	H-1
AP	PEND	IX I:	SURFACE WATER ANALYSES AND LABORATORY REPORTS	I-1
AP	PEND	IX J:	ANALYTICAL LABORATORY CERTIFICATION	. J-1

CONTENTS

APPENDIX K:	LABORATORY ANALYTICAL METHODS	K-1
APPENDIX L:	MICRO-PURGING STABILITY PARAMETERS	L-1

FIGURES

1.	C-746-S&T Landfills Groundwater Monitoring Well Network	. 2
2.	C-746-S&T Landfills Surface Water Monitoring Locations	. 5

TABLES

1.	Summary of MCL Exceedances	6
2.	Exceedances of Statistically Derived Historical Background Concentrations	6
3.	Exceedances of Current Background UTL in Downgradient Wells	7
4.	C-746-S&T Landfills Downgradient Wells Trend Summary Utilizing the Previous Eight	
	Quarters	8
5.	Exceedances of Current Background UTL in Downgradient UCRS Wells	9
6.	Monitoring Wells Included in Statistical Analysis	. 12

ACRONYMS

CFR	Code of Federal Regulations
KAR	Kentucky Administrative Regulations
KRS	Kentucky Revised Statutes
LEL	lower explosive limit
LRGA	Lower Regional Gravel Aquifer
LTL	lower tolerance limit
MCL	maximum contaminant level
MW	monitoring well
RGA	Regional Gravel Aquifer
UCRS	Upper Continental Recharge System
URGA	Upper Regional Gravel Aquifer
UTL	upper tolerance limit

1. INTRODUCTION

This report, C-746-S&T Landfills First Quarter Calendar Year 2025 (January–March) Compliance Monitoring Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, is being submitted in accordance with Solid Waste Landfill Permit No. SW07300014, SW07300015, SW07300045.

The Groundwater, Surface Water, Leachate, and Methane Monitoring Sample Data Reporting Form is provided in Appendix A. The facility information sheet is provided in Appendix B. Groundwater analytical results are presented in groundwater sample analyses tables and laboratory reports that are presented in Appendix C. The statistical analyses and qualification statement are provided in Appendix D. The groundwater flow rate and direction determinations are provided in Appendix E. Appendix F contains the notifications for all permit required parameters whose concentrations exceed the maximum contaminant level (MCL) for Kentucky solid waste facilities provided in 401 KAR 47:030 § 6 and for all permit required parameters listed in 40 CFR § 302.4, Appendix A, that do not have an MCL and whose concentrations exceed the historical background concentrations [upper tolerance limit (UTL), or both UTL and lower tolerance limit (LTL) for pH, as established at a 95% confidence]. Appendix G provides a chart of exceedances of the MCL and historical UTL that have occurred since the fourth quarter calendar year 2002. Methane monitoring results are documented on the approved C-746-S&T Landfills Methane Monitoring Report form provided in Appendix H. The form includes pertinent remarks/observations as required by 401 KAR 48:090 § 5. Surface water results are provided in Appendix I. Analytical laboratory certification is provided in Appendix J. Laboratory analytical methods used to analyze the included data set are provided in Appendix K. Micro-purging stability parameter results are provided in Appendix L.

1.1 BACKGROUND

The C-746-S&T Landfills are closed, solid waste landfills located north of the Paducah Site and south of the C-746-U Landfill. Construction and operation of the C-746-S Residential Landfill were permitted in April 1981 under Solid Waste Landfill Permit No. 073-00014. The permitted C-746-S Landfill area covers about 16 acres and contains a clay liner with a final cover of compacted soil. The C-746-S Landfill was a sanitary landfill for the Paducah Gaseous Diffusion Plant operations. The C-746-S Landfill is closed and has been inactive since July 1995.

Construction and operation of the C-746-T Inert Landfill were permitted in February 1985 under Solid Waste Landfill Permit No. 073-00015. The permitted C-746-T Landfill area covers about 20 acres and contains a clay liner with a final cover of compacted soil. The C-746-T Landfill was used to dispose of construction debris (e.g., concrete, wood, rock) and steam plant fly ash from the Paducah Gaseous Diffusion Plant operations. The C-746-T Landfill is closed and has been inactive since June 1992.

1.2 MONITORING PERIOD ACTIVITIES

1.2.1 Groundwater Monitoring

Three zones are monitored at the site: the Upper Continental Recharge System (UCRS), the Upper Regional Gravel Aquifer (URGA), and the Lower Regional Gravel Aquifer (LRGA). There are 23 monitoring wells (MWs) under permit for the C-746-S&T Landfills: 5 UCRS wells, 11 URGA wells, and 7 LRGA wells. A map of the MW locations is presented in Figure 1. All MWs listed on the permit were sampled this quarter, except MW389 (screened in the UCRS), which had insufficient amounts of water to obtain samples.



Figure 1. C-746-S&T Landfills Groundwater Monitoring Well Network

Consistent with the approved Groundwater Monitoring Plan for the Solid Waste Permitted Landfills (C-746-S Residential Landfill, C-746-T Inert Landfill, and C-746-U Contained Landfill) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, PAD-PROJ-0139 (Groundwater Monitoring Plan), UCRS wells are included in the monitoring program (LATA Kentucky 2014). Groundwater flow gradients are downward through the UCRS, but the underlying Regional Gravel Aquifer (RGA) flows laterally. Groundwater flow in the RGA is typically in a north-northeasterly direction in the vicinity of the C-746-S&T Landfills. The Ohio River and lower reaches of Little Bayou Creek are the discharge areas for the RGA flow system from the vicinity of the landfills. Consistent with the conceptual site model, the constituent concentrations in UCRS wells are considered to be representative only of the conditions local to the well or sourced from overlying soils; thus, no discussion of potential "upgradient" sources is relevant to the discussion for the UCRS. Nevertheless, a UTL for background also has been calculated for UCRS wells using concentrations from UCRS wells located in the same direction (relative to the landfill) as those RGA wells identified as upgradient. The results from these wells are considered to represent historical "background" for UCRS water quality. Similarly, other gradient references for UCRS wells are identified using the same gradient references (relative to the landfill) that are attributed to nearby RGA wells. Results from UCRS wells are compared to this UTL (for background), and exceedances of these values are reported in the quarterly report.

Groundwater sampling was conducted within the first quarter 2025 in accordance with the Groundwater Monitoring Plan (LATA Kentucky 2014) using the Deactivation and Remediation Contractor, procedure CP4-ES-2101, *Groundwater Sampling*. Groundwater sampling for the first quarter 2025 was conducted on January 28–30, 2025. The analytical laboratory used U.S. Environmental Protection Agency-approved methods, as applicable. The parameters specified in Permit Condition GSTR0003, Special Condition 3, were analyzed for all locations sampled.

The groundwater flow rate and direction determination are provided in Appendix E. Depth-to-water was measured on January 21–22, 2025, in MWs of the C-746-S&T Landfills (see Appendix E, Table E.1); in MWs of the C-746-U Landfill; and in MWs of the surrounding region (shown on Appendix E, Figure E.3). Water level measurements in 39 vicinity wells define the potentiometric surface for the RGA. Typical regional flow in the RGA is northeastward, toward the Ohio River. During January 2025, RGA groundwater flow was directed inward and then north towards the Ohio River. The hydraulic gradient for the RGA in the vicinity of the C-746-S&T Landfills in January 2025 was 3.16×10^{-4} ft/ft, while the gradient beneath the C-746-S&T Landfills was approximately 3.81×10^{-4} ft/ft (see Appendix E, Table E.2). Calculated groundwater flow rates (average linear velocities) for the RGA at the C-746-S&T Landfills ranged from 6.47×10^{-1} to 1.10 ft/day (see Appendix E, Table E.3).

1.2.2 Methane Monitoring

Methane monitoring was conducted in accordance with 401 *KAR* 48:090 § 5 and the Solid Waste Landfill Permit. Industrial Hygiene staff monitored for the occurrence of methane in one on-site building location, four locations along the landfill boundary, and 27 passive gas vents located in Cells 1, 2, and 3 of the C-746-S Landfill on January 29, 2025. Appendix H provides a map of the monitoring locations (Appendix H, Figure H.1). Monitoring results identified that all locations were compliant with the regulatory requirement of < 100% lower explosive limit (LEL) at boundary locations and < 25% LEL at all other locations. The results are documented on the C-746-S&T Landfills Methane Monitoring Report provided in Appendix H.

1.2.3 Surface Water Monitoring

Surface water sampling was performed on January 31, 2025, at the three locations monitored for the C-746-S&T Landfills: (1) upstream location L135, (2) instream location L154, and (3) instream location L136 (Figure 2). Surface water was monitored, as specified in 401 KAR 48:300 § 2, and the approved Surface Water Monitoring Plan for C-746-U and C-746-S&T Landfills Permit Number SW07300014, SW07300015, SW07300045, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Agency Interest Number 3059 (FRNP 2021), which is Technical Application Attachment 24 of the Solid Waste Permit. Surface water results are provided in Appendix I.



Figure 2. C-746-S&T Landfill Surface Water Monitoring Locations

1.3 KEY RESULTS

Groundwater data were evaluated in accordance with the approved Groundwater Monitoring Plan (LATA Kentucky 2014), which is Technical Application Attachment 25, of the Solid Waste Permit. MCL exceedances are listed in Table 1. Those constituents that exceeded their respective MCL were evaluated further against their historical background UTL. Table 2 identifies parameters that have concentrations that exceeded the statistically derived historical background UTL during the first quarter 2025.¹ Those constituents (present in downgradient wells) that exceed their historical background UTL were evaluated against their current UTL-derived background using the most recent eight quarters of data from wells designated as background wells (Table 3).

Table 1. Summary of MCL Exceedances

UCRS	URGA	LRGA	
None	MW387: Beta Activity	None	

The notification of parameters that exceeded the MCL has been submitted electronically to the Kentucky Division of Waste Management, in accordance with 401 *KAR* 48:300 § 7, prior to the submittal of this report.

The constituents that exceeded their MCL were subjected to a comparison against the UTL concentrations calculated using historical concentrations from wells identified as background. In accordance with the approved groundwater monitoring plan (LATA Kentucky 2014), the MCL exceedance for beta activity in downgradient well MW387 exceeds the historical background concentration and is further compared to the current background UTL.

UCRS ^a	URGA	LRGA
MW386: Oxidation-	MW220: Oxidation-reduction	MW370: Oxidation-reduction
reduction potential ^b	potential ^b and sulfate	potential ^b and sulfate
MW390: Oxidation-	MW221: Oxidation-reduction	MW373: Calcium,
reduction potential ^b and	potential ^b	conductivity, dissolved solids,
technetium-99		magnesium, oxidation-
		reduction potential, ^b sodium,
		and sulfate
MW393: Oxidation-	MW222: Oxidation-reduction	MW385: Oxidation-reduction
reduction potential ^b	potential ^b	potential, ^b sulfate, and
		technetium-99
MW396: Oxidation-	MW223: Oxidation-reduction	MW388: Conductivity,
reduction potential ^b	potential ^b	oxidation-reduction potential, ^b
		sulfate, and technetium-99
	MW224: Oxidation-reduction	MW392: Oxidation-reduction
	potential, ^b sodium, and sulfate	potential ^b
	MW369: Oxidation-reduction	MW395: Oxidation-reduction
	potential ^b and technetium-99	potential ^b

Table 2. Exceedances of Statistically Derived Historical Background Concentrations

¹ The UTL comparison for pH uses a two-sided test, both UTL and LTL.

Table 2. Exceedances of Statistically Derived Historical Background Concentrations
(Continued)

UCRS ^a	URGA	LRGA
	MW372: Calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential, ^b sodium, and sulfate	MW397: Oxidation-reduction potential ^b and sodium
	MW384: Oxidation-reduction potential, ^b sulfate, and technetium-99	
	MW387: Beta activity, magnesium, oxidation-reduction potential, ^b sulfate, and technetium-99	

^a Gradients in the UCRS are downward. UCRS gradient designations are identified using the same gradient reference (relative to the landfill) that is attributed to nearby RGA wells.

^b Oxidation-reduction potential calibrated as Eh.

Sidegradient wells: MW221, MW222, MW223, MW224, MW384, MW385, and MW386.

Downgradient wells: MW369, MW370, MW372, MW373, MW387, MW388, MW389, MW390, MW391, MW392, and MW393. Background wells: MW220, MW394, MW395, MW396, and MW397.

Table 3. Exceedances of Current Background UTL in Downgradient Wells

URGA	LRGA
MW369: Technetium-99	MW370: Sulfate
MW372: Calcium, conductivity, dissolved solids,	MW373: Calcium, conductivity, dissolved
magnesium, sodium, and sulfate	solids, magnesium, sodium, and sulfate
MW387: Beta activity, magnesium, sulfate, and	MW388: Conductivity, sulfate, and
technetium-99	technetium-99

This report serves as the notification of parameters that had statistically significant increased concentrations relative to historical background concentrations, as required by Permit No. SW07300014, SW07300015, SW07300045, Condition GSTR0003, Standard Requirement 5, and 401 *KAR* 48:300 § 7.

The constituents listed in Table 2 that had exceedances of the statistically derived historical background UTL underwent additional statistical evaluation. The current quarter concentrations were compared to the current background UTL to identify if the current downgradient well concentrations are consistent with current background values. The current background UTL was developed using the most recent eight quarters of data from wells identified as background wells. Table 3 summarizes the evaluation against current background UTL for those constituents present in downgradient wells with historical UTL exceedances. In accordance with the approved Groundwater Monitoring Plan (LATA Kentucky 2014), constituents in downgradient wells that exceed the historical UTL, but do not exceed the current UTL, are considered not to have a C-746-S&T Landfills source; therefore, they are Type 1 exceedances—not attributable to the C-746-S&T Landfills.

The constituents listed in Table 3 that exceed both the historical UTL and the current UTL and do not have an identified source are considered preliminarily to be Type 2 exceedances, per the approved Groundwater Monitoring Plan (LATA Kentucky 2014). To evaluate these preliminary Type 2 exceedances further, the parameters were subjected to the Mann-Kendall statistical test for trend using the most recent eight quarters of data. The results are summarized in Table 4. Sixteen of the 21 preliminary Type 2 exceedances in downgradient wells do not have increasing trends and are considered to be Type 1 exceedances—not attributable to the C-746-S&T Landfills.

Location	Well ID	Parameter	Sample Size	Alpha ^a	p-Value ^b	Sc	Decision
	MW369	Technetium-99	8	0.05	0.274	6	No Trend
	MW370	Sulfate	8	0.05	0.36	5	No Trend
		Calcium	8	0.05	0.089	12	No Trend
		Conductivity	8	0.05	0.119	9	No Trend
	MW372	Dissolved Solids	8	0.05	0.089	12	No Trend
	101 00 572	Magnesium	8	0.05	0.274	6	No Trend
		Sodium	8	0.05	0.138	11	No Trend
		Sulfate	8	0.05	0.452	2	No Trend
	MW373	Calcium	8	0.05	0.007	20	Increasing
C-746-		Conductivity	8	0.05	0.002	22	Increasing
S&T		Dissolved Solids	8	0.05	0.001	24	Increasing
Landfills		Magnesium	8	0.05	0.054	15	No Trend
		Sodium	8	0.05	0.002	22	Increasing
		Sulfate	8	0.05	0.007	20	Increasing
	MW387	Beta Activity	8	0.05	0.089	12	No Trend
		Magnesium	8	0.05	0.452	-3	No Trend
		Sulfate	8	0.05	0.119	-9	No Trend
		Technetium-99	8	0.05	0.452	2	No Trend
	MW388	Conductivity	8	0.05	0.138	10	No Trend
		Sulfate	8	0.05	0.274	-6	No Trend
		Technetium-99	8	0.05	0.274	-6	No Trend

 Table 4. C-746-S&T Landfills Downgradient Wells Trend Summary

 Utilizing the Previous Eight Quarters

^a An alpha of 0.05 represents a 95% confidence interval.

^b The p-value represents the risk of acceptance of the H_a hypothesis of a trend, in terms of a percentage.

^c The initial value of the Mann-Kendall statistic, S, is assumed to be 0 (i.e., no trend). If a data value from a later time period is higher than a data value from an earlier time period, S is incremented by 1. On the other hand, if the data value from a later time period is lower than a data value sampled earlier, S is decremented by 1. The net result of all such increments and decrements yields the final value of S. A very high positive value of S is an indicator of an increasing trend, and a very low negative value indicates a decreasing trend.

NOTE: Statistics were generated using ProUCL.

Five of the 21 preliminary Type 2 exceedances in downgradient wells had an increasing trend. Specifically, the Mann-Kendall statistical test indicates increasing trends for calcium, conductivity, dissolved solids, sodium, and sulfate in LRGA well MW373. It should be noted that over the past eight quarters concentrations of calcium, conductivity, dissolved solids, sodium, and sulfate in URGA well MW372 are consistently lower than those shown in collocated LRGA well MW373. Since calcium, conductivity, dissolved solids, sodium, and sulfate concentrations are lower in the shallower screened well at this location, the C-746-S&T Landfills are likely not the source of the concentrations observed in the deeper screened well. Therefore, the observed trends in MW373 should be considered Type 2 exceedances— sources undetermined. Evaluation of calcium, conductivity, dissolved solids, sodium, and sulfate trends through future quarterly monitoring events is recommended.

In accordance with Permit Condition GSTR0003, Special Condition 2, of the Solid Waste Landfill Permit, the groundwater assessment and corrective action requirements of 401 KAR 48:300 § 8 shall not apply to

the C-746-S Residential Landfill and the C-746-T Inert Landfill. This variance in the permit provides that groundwater assessment and corrective actions for these landfills will be conducted in accordance with the corrective action requirements of 401 *KAR* 39:090.

The statistical evaluation of UCRS concentrations against the current UCRS background UTL identified one downgradient UCRS well exceeding both the historical and current backgrounds (Table 5).

Table 5. Exceedances of Current Background UTL in Downgradient UCRS Wells*

UCRS	
MW390: Technetium-99	
*In the same direction (relative to the landfill) as RGA wells.	

All MCL and UTL exceedances reported for this quarter, except for calcium, conductivity, dissolved solids, sodium, and sulfate in MW373, were evaluated and considered to be Type 1 exceedances—not attributable to the C-746-S&T Landfills.

2. DATA EVALUATION/STATISTICAL SYNOPSIS

The statistical analyses conducted on the first quarter 2025 groundwater data collected from the C-746-S&T Landfill MWs were performed in accordance with the Groundwater Monitoring Plan (LATA Kentucky 2014). The statistical analyses for this report utilize data from the first eight quarters that were sampled for each parameter, beginning with the first two baseline sampling events in 2002, when available. The sampling dates associated with background data are listed next to the result in the statistical analysis sheets in Appendix D (Attachments D1 and D2).

For those parameters that exceed the MCL for Kentucky solid waste facilities found in 401 *KAR* 47:030 § 6, exceedances are documented and evaluated further as follows. Exceedances are reviewed against historical background results (UTL). If the MCL exceedance is found not to exceed the historical UTL, the exceedance is noted as a Type 1 exceedance—an exceedance not attributable to the landfills. If there is an exceedance of the MCL in a downgradient well and this constituent also exceeds the historical background, the quarterly result is compared to the current background UTL (developed using the most recent eight quarters of data from wells identified as downgradient wells) to identify if this exceedance is attributable to upgradient/non-landfill sources. If the downgradient well concentration is less than the current background, the exceedance is noted as a Type 1 exceedance. If a constituent exceeds its Kentucky solid waste facility MCL, historical background UTL, and current background UTL, it is reported as a Type 2 exceedance—source undetermined. Type 2 exceedances (undetermined source) are further evaluated using the Mann-Kendall test for trend. If there is not a statistically significant increasing trend for a constituent in a downgradient well, the exceedance is reclassified as a Type 1 exceedance—not attributable to the landfills.

For those parameters that do not have a Kentucky solid waste facility MCL, the same process is used. If a constituent without an MCL exceeds its historical background UTL and its current background UTL, it is evaluated further to identify the source of the exceedance, if possible. If the source of the exceedance cannot be identified, it is reported as a Type 2 exceedance—source undetermined. Type 2 exceedances (undetermined source) are further evaluated using the Mann-Kendall test for trend. If there is not a statistically significant increasing trend for a constituent in a downgradient well, the exceedance is reclassified as a Type 1 exceedance—not attributable to the landfills.

To calculate the UTL, the data are divided into censored (nondetects) and uncensored (detected) observations. The one-sided tolerance interval statistical test is conducted only on parameters that have at least one uncensored observation. Results of the one-sided tolerance interval statistical test are used to determine whether the data show a statistical exceedance in concentrations with respect to historical background concentrations (UTL).

For the statistical analysis of pH, a two-sided tolerance interval statistical test is conducted. The test well results are compared to both the UTL and LTL to determine if statistically significant deviations in concentrations exist with respect to background well data.

A stepwise list of the one-sided tolerance interval statistical procedures applied to the data is provided in Appendix D under Statistical Analysis Process. The statistical analysis was conducted separately for each parameter in each well. The MWs included in the statistical analyses are listed in Table 6.

UCRS	URGA	LRGA
MW386	MW220 (background)	MW370
MW389 ^b	MW221	MW373
MW390	MW222	MW385
MW393	MW223	MW388
MW396 ^c	MW224	MW392
	MW369	MW395 (background)
	MW372	MW397 (background)
	MW384	
	MW387	
	MW391	
	MW394 (background)	

Table 6. Monitoring	Wells Included in Statistica	l Analysis ^a
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^a Map showing the MW locations is shown on Figure 1.

^b Well had insufficient water to permit a water sample for laboratory analysis.

^c In the same direction (relative to the landfill) as RGA wells considered to be background.

2.1 STATISTICAL ANALYSIS OF GROUNDWATER DATA

Parameters requiring statistical analysis are summarized in Appendix D for each hydrological unit. A stepwise list for determining exceedances of statistically derived historical background concentrations is provided in Appendix D under Statistical Analysis Process. A comparison of the current quarter's results to the statistically derived historical background was conducted for parameters that do not have MCLs and also for those parameters whose concentrations exceed MCLs. Appendix G summarizes the occurrences (by well and by quarter) of exceedances of historical UTLs and MCL exceedances. The constituents that had exceedances of the statistically derived historical background UTL underwent additional statistical evaluation. The current quarter concentrations were compared to the current background UTL developed using the most recent eight quarters of data from wells identified as background in order to determine if the current downgradient well concentrations are consistent with current background values. Table 3 summarizes the constituents that have exceeded both the historical UTL exceedances that are above the current UTL. Those constituents that have exceeded both the historical and current background UTLs in downgradient wells were further evaluated for increasing trends and are listed in Table 4.

2.1.1 Upper Continental Recharge System

In this quarter, 25 parameters, including those with MCLs, required statistical analysis in the UCRS. During the first quarter, oxidation-reduction potential and technetium-99 concentrations exceeded the respective historical UTL and are listed in Table 2. Technetium-99 exceeded the current background UTL in downgradient UCRS well MW390 and is shown in Table 5.

2.1.2 Upper Regional Gravel Aquifer

In this quarter, 25 parameters, including those with MCLs, required statistical analysis in the URGA. During the first quarter, beta activity, calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential, sodium, sulfate, and technetium-99 displayed concentrations that exceeded their respective historical UTLs and are listed in Table 2. Beta activity, calcium, conductivity, dissolved solids, magnesium, sodium, sulfate, and technetium-99 exceeded the current background UTL in downgradient URGA wells and are included in Table 3.

2.1.3 Lower Regional Gravel Aquifer

In this quarter, 25 parameters, including those with MCLs, required statistical analysis in the LRGA. During the first quarter, calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential, sodium, sulfate, and technetium-99 displayed concentrations that exceeded their respective historical UTL and are listed in Table 2. Calcium, conductivity, dissolved solids, magnesium, sodium, sulfate, and technetium-99 exceeded the current background UTL in downgradient wells and are included in Table 3.

2.2 DATA VERIFICATION AND VALIDATION

Data verification is the process of comparing a data set against set standard or contractual requirements. In accordance with the approved Groundwater Monitoring Plan, (LATA Kentucky 2014), data verification is performed for 100% of the data. Data are flagged as necessary.

Data validation was performed on 100% of the organic, inorganic, and radiochemical analytical data for groundwater by a qualified individual independent from sampling, laboratory, project management, or other decision-making personnel. Data validation evaluates the laboratory adherence to analytical method requirements. Validation codes are added by the independent validator and not the laboratory.

Field quality control samples are collected for each sampling event. Field blanks, rinseate blanks, and trip blanks are obtained to ensure quality of field and laboratory practices and data are reported in the Groundwater Sample Analysis tables in Appendix C. Laboratory quality control samples, such as matrix spikes, matrix spike duplicates, and method blanks, are performed by the laboratory. Both field and laboratory quality control sample results are reviewed as part of the data verification/validation process.

Data verification and validation results for this data set indicated that all data were considered usable.

3. PROFESSIONAL GEOLOGIST AUTHORIZATION

DOCUMENT IDENTIFICATION:

C-746-S&T Landfills First Quarter Calendar Year 2025 (January–March) Compliance Monitoring Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky (FRNP-RPT-0386/V1)

Stamped and signed pursuant to my authority as a duly registered geologist under the provisions of *KRS* Chapter 322A.



ave

Kenneth R. Davis

PG113927

May 20, 2025

4. REFERENCES

- FRNP (Four Rivers Nuclear Partnership, LLC) 2021. Surface Water Monitoring Plan for C-746-U and C-746-S&T Landfills Permit Number SW07300014, SW07300015, SW07300045, Paducah Gaseous Diffusion Plant, Paducah, Kentucky, Agency Interest Number 3059, Solid Waste Landfill Permit No. SW07300014, SW07300015, SW07300045, Technical Application, Attachment 24, Four Rivers Nuclear Partnership, LLC, Paducah, KY, March.
- LATA Kentucky (LATA Environmental Services of Kentucky, LLC) 2014. Groundwater Monitoring Plan for the Solid Waste Permitted Landfills (C-746-S Residential Landfill, C-746-T Inert Landfill, and C-746-U Contained Landfill) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky, PAD-PROJ-0139, Solid Waste Landfill Permit No. SW07300014, SW07300015, SW07300045, Technical Application, Attachment 25, LATA Environmental Services of Kentucky, LLC, Kevil, KY, June.

APPENDIX A

GROUNDWATER, SURFACE WATER, LEACHATE, AND METHANE MONITORING SAMPLE DATA REPORTING FORM

GROUNDWATER, SURFACE WATER, LEACHATE, AND METHANE MONITORING SAMPLE DATA REPORTING FORM

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION DIVISION OF WASTE MANAGEMENT SOLID WASTE BRANCH 14 REILLY ROAD FRANKFORT, KY 40601

Facility Name:	U.S. DOE-Paducah Gaseous Diffusion Plant		Activity:	C-746-S&T Landfills
	(As officially shown	n on DWM Permit Face)		
Permit No:	SW07300014, SW07300015, SW07300045	Finds/Unit No:	Quarter & Year	1st Qtr. CY 2025
Please check the	following as applicable	::		
Character	rization <u>X</u> Qua	arterly Semiannual	Annual	Assessment
Please check app	licable submittal(s):	X Groundwater	<u> </u>	urface Water
	-	Leachate	<u> </u>	fethane Monitoring

This form is to be utilized by those sites required by regulation (Kentucky Waste Management Regulations-401 *KAR* 48:300 and 45:160) or by statute (Kentucky Revised Statues Chapter 224) to conduct groundwater and surface water monitoring under the jurisdiction of the Division of Waste Management. You must report any indication of contamination within forty-eight (48) hours of making the determination using statistical analyses, direct comparison, or other similar techniques. Submitting the lab report is <u>NOT</u> considered notification. Instructions for completing the form are attached. Do not submit the instruction pages.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for such violations.

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

April Ladd, Paducah Site Lead/Date U.S. Department of Energy

APPENDIX B

FACILITY INFORMATION SHEET
FACILITY	INFORMATION	SHEET
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Sampling Date: Facility Name:	Groundwater: January 2025 Methane: January 2025 Surface Water: January 202 U.S. DOE—Paducah Gaseo (As officia	5County: McCracke	n Permit Nos.	SW07300014, SW07300015, SW07300045
Site Address:	5600 Hobbs Road	Kevil, Kentucky		42053
Sile Address.	Street	City/State		Zip
Phone No:	(270) 441-6800 La	N 37° 07' 37.70"	Longitude:	W 88° 47' 55.41"
		OWNER INFORMATION		
Facility Owner:	U.S. DOE, Joel Bradburne,	Manager, Portsmouth/Paducah Project Office	Phone No:	(859) 219-4000
Contact Person:	Bruce Ford	_	Phone No:	(270) 441-5357
Contact Person Ti	tle: <u>Four Rivers Nuclear I</u>			
Mailing Address:	5511 Hobbs Road	Kevil, Kentucky		42053
	Street	City/State		Zip
Company: Contact Person:	(IF OTH Four Rivers Nuclear Partn Chris Skinner	IER THAN LANDFILL OR LABORATORY	-	(270) 441-5675
Mailing Address:	5511 Hobbs Road	Kevil, Kentucky	Those ivo.	42053
Manning Address.	Street	City/State		Zip
		LABORATORY RECORD #1		
Laboratory:	GEL Laboratories, LLC	Lab ID No:	KY90129	
Contact Person:	Valerie Davis		Phone No:	(843) 769-7391
Mailing Address:	2040 Savage Road	Charleston, South Carolina		29407
	Street	City/State		Zip
		LABORATORY RECORD #2		
Laboratory:	N/A	Lab ID No): N/A	
Contact Person:	N/A		Phone No:	N/A
Mailing Address:	N/A			
	Street	City/State		Zip
		LABORATORY RECORD #3		
Laboratory:	N/A	Lab ID No): N/A	
Contact Person:	N/A		Phone No:	N/A
Mailing Address:	N/A			
	Street	City/State		Zip

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APPENDIX C

GROUNDWATER SAMPLE ANALYSES AND LABORATORY REPORTS

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Compling Delet			DCA T			Dovied: 4	Ourset -	2025	
Sampling Point: <u>MW2</u>			RGA Ty			Period: 1st			
AKGWA Well Tag #:	8000-5201		SAMPL	EID: M	IW220SG2-2	<u>.5</u> S	ample ly	vpe: <u>REG</u>	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior
Bromide	J	0.197	mg/L	0.2	1/29/2025			SW846-9056A	=
hloride	J	16.5	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.217	mg/L	4	1/29/2025			SW846-9056A	=
itrate as Nitrogen	J	0.934	mg/L	10	1/29/2025			SW846-9056A	=
ulfate		19.1	mg/L	0.4	1/29/2025			SW846-9056A	=
arometric Pressure Reading		30.08	Inches/Hg		1/29/2025				Х
onductivity		463	µmhos/cm		1/29/2025				Х
epth to Water		58.28	ft		1/29/2025				Х
issolved Oxygen		5.36	mg/L		1/29/2025				х
h (approx)		439.4	mV		1/29/2025				Х
Н		5.98	Std Unit		1/29/2025				х
emperature		60.6	deg F		1/29/2025				Х
urbidity		1.26	NTU		1/29/2025				Х
luminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
ntimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
rsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
arium		0.204	mg/L	0.004	1/29/2025			SW846-6020B	=
eryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
oron	J	0.00658	mg/L	0.015	1/29/2025			SW846-6020B	=
admium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
alcium	0	24	mg/L	0.001	1/29/2025			SW846-6020B	=
hromium	J	0.00575	mg/L	0.01	1/29/2025			SW846-6020B	=
obalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
	1	0.000984	-	0.001				SW846-6020B	=
Copper	J		mg/L		1/29/2025				=
on	U	0.1	mg/L	0.1	1/29/2025			SW846-6020B	
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
/lagnesium		9.82	mg/L	0.03	1/29/2025			SW846-6020B	=
langanese	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
1olybdenum	J	0.000824	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel		0.00572	mg/L	0.002	1/29/2025			SW846-6020B	=
otassium		2.18	mg/L	0.3	1/29/2025			SW846-6020B	=
hodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	J	0.0016	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		41.2	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
ranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	J	0.00471	mg/L	0.02	1/29/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
arium, Dissolved		0.209	mg/L	0.004	1/29/2025			SW846-6020B	J
hromium, Dissolved	J	0.00579	mg/L	0.01	1/29/2025			SW846-6020B	J
Iranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
adium-226	U	0.771	pCi/L	1.39	1/29/2025	1.12	1.12	AN-1418	=

Strontium-90	U	-0.307	pCi/L	3.55	1/29/2025	1.9	1.9	EPA-905.0-M	=
Tritium	U	-43.8	pCi/L	172	1/29/2025	90.8	90.8	EPA-906.0-M	=
Technetium-99	U	8.02	pCi/L	19	1/29/2025	11.2	11.3	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.292	pCi/L	1.91	1/29/2025	0.999	1	HASL 300, Th-01- RC M	=
Alpha activity	U	3.36	pCi/L	5.03	1/29/2025	3.45	3.5	SW846-9310	=
Beta activity		9.86	pCi/L	8.93	1/29/2025	5.98	6.2	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Acrylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	U	1		1				SW846-8260D	– UJ
Chlorobenzene	UY1	1	ug/L ug/L	1	1/29/2025 1/29/2025			SW846-8260D	=
	U		-						=
Chloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	
Chloroform Chloromethane		1	ug/L	1	1/29/2025			SW846-8260D	=
	UU	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,2-Dichloroethene		1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Ethylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Styrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Toluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Total Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids	В	205	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	HJ	4.84	ug/L	10	1/29/2025	SW846-9020B	J
Total Organic Carbon (TOC)	J	0.595	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW2</u>	21 SID	E	RGA Ty	pe: URGA	4	Period: 1st	Quarter	2025	
AKGWA Well Tag #:	8000-5202	-	SAMPL	-	W221SG2-2		ample Ty		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior
Bromide		0.421	mg/L	0.2	1/29/2025			SW846-9056A	=
Chloride	J	33	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.216	mg/L	4	1/29/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.88	mg/L	10	1/29/2025			SW846-9056A	=
Sulfate		15.2	mg/L	0.4	1/29/2025			SW846-9056A	=
Barometric Pressure Reading		30	Inches/Hg		1/29/2025				Х
Conductivity		494	µmhos/cm		1/29/2025				Х
Depth to Water		67.83	ft		1/29/2025				Х
Dissolved Oxygen		5.24	mg/L		1/29/2025				x
Eh (approx)		477.2	mV		1/29/2025				x
он		5.72	Std Unit		1/29/2025				x
emperature		55.9	deg F		1/29/2025				x
Turbidity		1.46	NTU		1/29/2025				X
Aluminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
	U		-						
Antimony		0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
Barium		0.213	mg/L	0.004	1/29/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
Boron		0.0211	mg/L	0.015	1/29/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Calcium		21.9	mg/L	0.2	1/29/2025			SW846-6020B	=
Chromium	J	0.00409	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	J	0.000396	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper	J	0.00129	mg/L	0.002	1/29/2025			SW846-6020B	=
ron	U	0.1	mg/L	0.1	1/29/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Magnesium		9.4	mg/L	0.03	1/29/2025			SW846-6020B	=
Manganese	J	0.00322	mg/L	0.005	1/29/2025			SW846-6020B	=
Volybdenum		0.00402	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel		0.02	mg/L	0.002	1/29/2025			SW846-6020B	=
Potassium		7.24	mg/L	0.3	1/29/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		47.3	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
'anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
linc	J	0.00336	mg/L	0.02	1/29/2025			SW846-6020B	=
Aercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
Barium, Dissolved	-	0.216	mg/L	0.004	1/29/2025			SW846-6020B	J
Chromium, Dissolved	J	0.00367	mg/L	0.01	1/29/2025			SW846-6020B	J
Jranium, Dissolved	U J	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UI
Radium-226	U	0.0002	pCi/L	0.0002	1/29/2025	0.296	0.297	AN-1418	=

Strontium-90	U	-1.26	pCi/L	2.56	1/29/2025	1.24	1.24	EPA-905.0-M	UJ
Tritium	U	77.6	pCi/L	172	1/29/2025	101	102	EPA-906.0-M	=
Technetium-99	U	8.82	pCi/L	19.3	1/29/2025	11.4	11.5	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.336	pCi/L	1.87	1/29/2025	0.995	0.999	HASL 300, Th-01- RC M	=
Alpha activity	U	1.12	pCi/L	6.78	1/29/2025	3.34	3.35	SW846-9310	=
Beta activity		11.4	pCi/L	10.6	1/29/2025	6.98	7.23	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0187	ug/L	0.0187	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Acrylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Ethylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Styrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Toluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Total Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichloroethene									

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids	В	218	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	HJ	5.1	ug/L	10	1/29/2025	SW846-9020B	J
Total Organic Carbon (TOC)	J	0.572	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW2</u>	222 SIDI	-	RGA Ty	pe: URGA	7	Period: 1s	t Ouartor	2025	
AKGWA Well Tag #:	8000-5242	_	SAMPL	-	<u>w222</u> SG2-2		Sample Ty		
	8000-3242		JAIVIPL				anipie ry	pe. <u>KLO</u>	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide		0.4	mg/L	0.2	1/29/2025			SW846-9056A	=
Chloride	J	32.9	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.247	mg/L	4	1/29/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.852	mg/L	10	1/29/2025			SW846-9056A	=
Sulfate		12.9	mg/L	0.4	1/29/2025			SW846-9056A	=
Barometric Pressure Reading		30.03	Inches/Hg		1/29/2025				Х
Conductivity		484	µmhos/cm		1/29/2025				Х
Depth to Water		71.65	ft		1/29/2025				Х
Dissolved Oxygen		4.44	mg/L		1/29/2025				Х
Eh (approx)		426.3	mV		1/29/2025				Х
рН		5.96	Std Unit		1/29/2025				х
emperature		60.3	deg F		1/29/2025				х
Turbidity		1.05	NTU		1/29/2025				Х
Aluminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
Barium	0	0.287	mg/L	0.004	1/29/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0004	1/29/2025			SW846-6020B	=
Boron	1	0.00873	mg/L	0.0005				SW846-6020B	=
Cadmium			-		1/29/2025				
	0	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Calcium		22.6	mg/L	0.2	1/29/2025			SW846-6020B	=
Chromium		0.0111	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt		0.00128	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper	l	0.00139	mg/L	0.002	1/29/2025			SW846-6020B	=
ron	J	0.0543	mg/L	0.1	1/29/2025			SW846-6020B	=
.ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Magnesium		9.41	mg/L	0.03	1/29/2025			SW846-6020B	=
Manganese		0.0186	mg/L	0.005	1/29/2025			SW846-6020B	=
Molybdenum		0.00637	mg/L	0.001	1/29/2025			SW846-6020B	=
Vickel		0.14	mg/L	0.002	1/29/2025			SW846-6020B	=
Potassium		0.735	mg/L	0.3	1/29/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		45.9	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
⁻ hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Jranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
/anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
linc	J	0.00471	mg/L	0.02	1/29/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
Barium, Dissolved		0.281	mg/L	0.004	1/29/2025			SW846-6020B	J
Chromium, Dissolved	J	0.00339	mg/L	0.01	1/29/2025			SW846-6020B	J
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
Radium-226	U	0.247	pCi/L	0.646	1/29/2025	0.431	0.431	AN-1418	=

Strontium-90	U	0.134	pCi/L	2.47	1/29/2025	1.33	1.33	EPA-905.0-M	=
Tritium	U	10.8	pCi/L	179	1/29/2025	99.7	99.7	EPA-906.0-M	=
Technetium-99	U	7.13	pCi/L	20.1	1/29/2025	11.8	11.8	HASL 300, Tc-02- RC M	=
Thorium-230	U	1.14	pCi/L	1.76	1/29/2025	1.21	1.22	HASL 300, Th-01- RC M	=
Alpha activity	U	1.2	pCi/L	8.36	1/29/2025	4.24	4.24	SW846-9310	=
Beta activity	U	6.41	pCi/L	8.69	1/29/2025	5.43	5.53	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0189	ug/L	0.0189	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	– UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroethane	U		-		1/29/2025				=
Chloroform	U	1	ug/L	1	1/29/2025			SW846-8260D SW846-8260D	=
		1	ug/L	1	1/29/2025				
Chloromethane	U	1	ug/L	1				SW846-8260D	=
is-1,2-Dichloroethene		1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
bibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Nethylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
tyrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
oluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
otal Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Frichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		202	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	HU	10	ug/L	10	1/29/2025	SW846-9020B	UJ
Total Organic Carbon (TOC)	J	0.534	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW2</u>	223 SIDE		RGA Ty	pe: URGA	λ	Period: 1s	t Quarter	2025	
AKGWA Well Tag #:	8000-5243		SAMPL		W223SG2-2		Sample Ty		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior
Bromide		0.418	mg/L	0.2	1/29/2025			SW846-9056A	=
Chloride	J	35.2	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.207	mg/L	4	1/29/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.797	mg/L	10	1/29/2025			SW846-9056A	=
Sulfate		14.4	mg/L	0.4	1/29/2025			SW846-9056A	=
Barometric Pressure Reading		30.03	Inches/Hg		1/29/2025				Х
Conductivity		497	µmhos/cm		1/29/2025				Х
Depth to Water		70.68	ft		1/29/2025				Х
Dissolved Oxygen		3.71	mg/L		1/29/2025				х
Th (approx)		410.7	mV		1/29/2025				Х
он		5.94	Std Unit		1/29/2025				x
emperature		59.5	deg F		1/29/2025				x
Turbidity		1.81	NTU		1/29/2025				X
Aluminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
Barium	0	0.003	mg/L	0.003					=
	U		_		1/29/2025			SW846-6020B	
Beryllium		0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
loron	J	0.00787	mg/L	0.015	1/29/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Calcium		22.5	mg/L	0.2	1/29/2025			SW846-6020B	=
Chromium		0.0198	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt		0.0024	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper		0.00304	mg/L	0.002	1/29/2025			SW846-6020B	=
ron	J	0.0756	mg/L	0.1	1/29/2025			SW846-6020B	=
.ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Aagnesium		9.37	mg/L	0.03	1/29/2025			SW846-6020B	=
Aanganese		0.0256	mg/L	0.005	1/29/2025			SW846-6020B	=
Molybdenum		0.00275	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel		0.606	mg/L	0.002	1/29/2025			SW846-6020B	=
Potassium		4.78	mg/L	0.3	1/29/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		44.5	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Jranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
/anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
linc	J	0.00383	mg/L	0.02	1/29/2025			SW846-6020B	=
Vercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
Barium, Dissolved		0.246	mg/L	0.004	1/29/2025			SW846-6020B	J
Chromium, Dissolved		0.0102	mg/L	0.01	1/29/2025			SW846-6020B	J
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
Radium-226	U	0.389	pCi/L	0.598	1/29/2025	0.487	0.488	AN-1418	=

Strontium-90	U	-0.269	pCi/L	2.98	1/29/2025	1.57	1.57	EPA-905.0-M	=
Fritium	U	59.2	pCi/L	170	1/29/2025	98.4	99.1	EPA-906.0-M	=
Fechnetium-99	U	7.48	pCi/L	20.8	1/29/2025	12.2	12.2	HASL 300, Tc-02- RC M	=
Fhorium-230	U	0.162	pCi/L	1.69	1/29/2025	0.852	0.854	HASL 300, Th-01- RC M	=
Alpha activity	U	0.824	pCi/L	6.25	1/29/2025	2.97	2.98	SW846-9310	=
Beta activity		16	pCi/L	9.83	1/29/2025	7.06	7.53	SW846-9310	=
I,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
hloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1.2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L ug/L	5	1/29/2025			SW846-8260D	=
tyrene	UY1 U	1	ug/L ug/L	1	1/29/2025			SW846-8260D SW846-8260D	
etrachloroethene		1	-		1/29/2025				=
oluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
otal Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	- UJ
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
richloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		200	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	BN1	27	ug/L	10	1/29/2025	SW846-9020B	UJ
Total Organic Carbon (TOC)	J	0.516	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW2</u>	224 SIDE		RGA Type: URGA Period:			Period: 1s	<u>st Qua</u> rter			
AKGWA Well Tag #:	8000-5244		SAMPLE ID: MW224SG2		W224SG2-2	2-25 Sample Type: <u>REG</u>				
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior	
Bromide		0.298	mg/L	0.2	1/29/2025			SW846-9056A	=	
Chloride	J	22.1	mg/L	250	1/29/2025			SW846-9056A	=	
luoride	J	0.284	mg/L	4	1/29/2025			SW846-9056A	=	
litrate as Nitrogen	J	0.616	mg/L	10	1/29/2025			SW846-9056A	=	
Sulfate		19.3	mg/L	0.4	1/29/2025			SW846-9056A	=	
Barometric Pressure Reading		30.06	Inches/Hg		1/29/2025				Х	
Conductivity		550	µmhos/cm		1/29/2025				Х	
Depth to Water		72.22	ft		1/29/2025				Х	
Dissolved Oxygen		3.7	mg/L		1/29/2025				х	
Th (approx)		435.7	mV		1/29/2025				Х	
)H		6	Std Unit		1/29/2025				X	
emperature		60.1	deg F		1/29/2025				x	
urbidity		0.83	NTU		1/29/2025				x	
Aluminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=	
Antimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=	
Arsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
Barium	0	0.248	mg/L	0.003					=	
	U		_		1/29/2025			SW846-6020B		
Beryllium	0	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=	
Boron		0.0274	mg/L	0.015	1/29/2025			SW846-6020B	=	
Cadmium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Calcium		26.9	mg/L	0.2	1/29/2025			SW846-6020B	=	
Chromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=	
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Copper	J	0.000753	mg/L	0.002	1/29/2025			SW846-6020B	=	
ron	U	0.1	mg/L	0.1	1/29/2025			SW846-6020B	=	
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
Aagnesium		11.6	mg/L	0.03	1/29/2025			SW846-6020B	=	
/langanese		0.00638	mg/L	0.005	1/29/2025			SW846-6020B	=	
Molybdenum		0.00119	mg/L	0.001	1/29/2025			SW846-6020B	=	
lickel		0.00993	mg/L	0.002	1/29/2025			SW846-6020B	=	
Potassium		1.08	mg/L	0.3	1/29/2025			SW846-6020B	=	
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
odium		61.9	mg/L	1.25	1/29/2025			SW846-6020B	=	
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
Jranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=	
/anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=	
inc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=	
Aercury		0.00024	mg/L	0.0002	1/29/2025			SW846-7470A	=	
Barium, Dissolved		0.251	mg/L	0.004	1/29/2025			SW846-6020B	J	
Chromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ	
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ	
Radium-226	U	0.322	pCi/L	0.372	1/29/2025	0.321	0.322	AN-1418	=	

Strontium-90	U	1.03	pCi/L	3.23	1/29/2025	1.86	1.87	EPA-905.0-M	=
Tritium	U	7.73	pCi/L	170	1/29/2025	94.1	94.1	EPA-906.0-M	=
Technetium-99	U	-4.06	pCi/L	22.4	1/29/2025	12.6	12.6	HASL 300, Tc-02- RC M	=
Thorium-230	U	-0.0319	pCi/L	1.62	1/29/2025	0.74	0.741	HASL 300, Th-01- RC M	=
Alpha activity	U	2.77	pCi/L	7.45	1/29/2025	4.25	4.28	SW846-9310	=
eta activity	U	3.83	pCi/L	13.1	1/29/2025	7.51	7.54	SW846-9310	=
.,2-Dibromo-3-chloropropane	U	0.0196	ug/L	0.0196	1/29/2025			SW846-8011	=
.,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
arbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
arbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	– UJ
hlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroethane	U	1	-	1	1/29/2025			SW846-8260D	=
hloroform	U		ug/L		1/29/2025			SW846-8260D	=
		1	ug/L	1	1/29/2025				
hloromethane	UU	1	ug/L	1				SW846-8260D	=
s-1,2-Dichloroethene		1	ug/L	1	1/29/2025			SW846-8260D	=
s-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
1ethylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
tyrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
oluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
otal Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
richloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		239	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	U	10	ug/L	10	1/29/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.923	mg/L	2	1/29/2025	SW846-9060A	=

•	ndfill County: <u>N</u>								300045
Sampling Point: <u>MW3</u>	369 DOWN		RGA Type: URGA		4	Period: 1st	t Quarter		
AKGWA Well Tag #:	8004-4820		SAMPL	E ID:	W369UG2-2	<u>25</u> S	ample Ty	vpe: <u>REG</u>	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide		0.354	mg/L	0.2	1/28/2025			SW846-9056A	=
Chloride	J	27.5	mg/L	250	1/28/2025			SW846-9056A	=
luoride	J	0.198	mg/L	4	1/28/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.989	mg/L	10	1/28/2025			SW846-9056A	=
Sulfate		8.48	mg/L	0.4	1/28/2025			SW846-9056A	=
Barometric Pressure Reading		30.06	Inches/Hg		1/28/2025				Х
Conductivity		343	µmhos/cm		1/28/2025				Х
Depth to Water		40.4	ft		1/28/2025				Х
Dissolved Oxygen		4.72	mg/L		1/28/2025				х
Eh (approx)		463	mV		1/28/2025				X
оН		6.25	Std Unit		1/28/2025				X
		57	deg F		1/28/2025				X
Turbidity		2.25	NTU		1/28/2025				X
Aluminum		0.0555	mg/L	0.05	1/28/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/28/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
Barium	N	0.353	mg/L	0.003	1/28/2025			SW846-6020B	=
	U	0.0005	-	0.004					=
Beryllium	0		mg/L	0.0005	1/28/2025			SW846-6020B	=
Boron		0.0153	mg/L		1/28/2025			SW846-6020B	
Cadmium	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Calcium		16.2	mg/L	0.2	1/28/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/28/2025			SW846-6020B	=
Cobalt		0.00442	mg/L	0.001	1/28/2025			SW846-6020B	=
Copper		0.00237	mg/L	0.002	1/28/2025			SW846-6020B	=
ron	J	0.0652	mg/L	0.1	1/28/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Magnesium		6.91	mg/L	0.03	1/28/2025			SW846-6020B	=
Vlanganese	J*	0.00141	mg/L	0.005	1/28/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Nickel		0.00314	mg/L	0.002	1/28/2025			SW846-6020B	=
Potassium		0.576	mg/L	0.3	1/28/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
Selenium	J	0.00299	mg/L	0.005	1/28/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
odium		47.7	mg/L	1.25	1/28/2025			SW846-6020B	=
Fantalum	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Jranium	U	0.0002	mg/L	0.0002	1/28/2025			SW846-6020B	=
/anadium	U	0.02	mg/L	0.02	1/28/2025			SW846-6020B	=
linc	J	0.00423	mg/L	0.02	1/28/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	1/28/2025			SW846-7470A	=
, Barium, Dissolved	Ν	0.381	mg/L	0.004	1/28/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	1/28/2025			SW846-6020B	UJ
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/28/2025			SW846-6020B	UJ
PCB-1016	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	=

PCB-1221	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	=
PCB-1232	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	=
PCB-1242	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	=
PCB-1248	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	=
PCB-1254	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	=
PCB-1260	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	UJ
PCB-1268	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0943	ug/L	0.0943	1/28/2025			SW846-8082A	UJ
Radium-226	U	0.848	pCi/L	2.03	1/28/2025	1.34	1.34	AN-1418	=
Radium-228	U	3.06	pCi/L	4.59	1/28/2025	2.81	2.92	EPA-904.0-M	=
Strontium-90	U	-3.27	pCi/L	5.65	1/28/2025	2.79	2.79	EPA-905.0-M	UJ
Tritium	U		-	197		96.6	96.6	EPA-906.0-M	=
	0	-25.3	pCi/L		1/28/2025				
Technetium-99		52.7	pCi/L	20.7	1/28/2025	14.3	15.7	HASL 300, Tc-02- RC M	=
Thorium-230	U	-0.0119	pCi/L	2.19	1/28/2025	1.04	1.04	HASL 300, Th-01- RC M	UJ
Thorium-232	U	-0.111	pCi/L	1.07	1/28/2025	0.394	0.394	HASL 300, Th-01- RC M	=
Alpha activity	U	1.34	pCi/L	6.03	1/28/2025	3.12	3.13	SW846-9310	UJ
Beta activity		47.9	pCi/L	9.54	1/28/2025	9.58	12.3	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/28/2025			SW846-8011	UJ
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
,	U	1						SW846-8260D	
1,1-Dichloroethene	U		ug/L	1	1/28/2025				=
1,2,3-Trichloropropane		1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acrylonitrile	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloromethane	U	1	ug/L ug/L	1	1/28/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=

Ethylbenzene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
lodomethane	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Styrene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Toluene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/28/2025	SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Trichloroethene	J	0.97	ug/L	1	1/28/2025	SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Dissolved Solids	*	205	mg/L	10	1/28/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/28/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/28/2025	EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	1/28/2025	SW846-9012B	=
Total Organic Halides (TOX)	U	10	ug/L	10	1/28/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.657	mg/L	2	1/28/2025	SW846-9060A	=

Facility: <u>C-746-S&T Lar</u>	ndfill County: <u>N</u>		McCracken Permit #: SW07300014,SW07300015,SW0						
Sampling Point: <u>MW3</u>	Z370 DOWN		RGA Type: LRGA		<u> </u>	Period: 1st	Quarter	2025	
AKGWA Well Tag #:	8004-4818		SAMPL	EID: N	W370UG2-2	<u>25</u> S	ample Ty	vpe: <u>REG</u>	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide		0.551	mg/L	0.2	1/28/2025			SW846-9056A	=
Chloride	J	41.5	mg/L	250	1/28/2025			SW846-9056A	=
luoride	J	0.185	mg/L	4	1/28/2025			SW846-9056A	=
litrate as Nitrogen	J	1.01	mg/L	10	1/28/2025			SW846-9056A	=
ulfate		20.3	mg/L	2	1/28/2025			SW846-9056A	=
arometric Pressure Reading		30.04	Inches/Hg		1/28/2025				Х
Conductivity		416	µmhos/cm		1/28/2025				Х
Depth to Water		41.29	ft		1/28/2025				Х
) Dissolved Oxygen		6.23	mg/L		1/28/2025				х
h (approx)		602	mV		1/28/2025				Х
)H		6.28	Std Unit		1/28/2025				x
emperature		52.9	deg F		1/28/2025				X
urbidity		46.34	NTU		1/28/2025				x
Aluminum	U	0.05	mg/L	0.05	1/28/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/28/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
	-		-						=
arium	N	0.209	mg/L	0.004	1/28/2025			SW846-6020B	
eryllium	U	0.0005	mg/L	0.0005	1/28/2025			SW846-6020B	=
Boron		0.0826	mg/L	0.015	1/28/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Calcium		29.2	mg/L	0.2	1/28/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/28/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Copper		0.0036	mg/L	0.002	1/28/2025			SW846-6020B	=
ron	U	0.1	mg/L	0.1	1/28/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Magnesium		12.9	mg/L	0.03	1/28/2025			SW846-6020B	=
Manganese	U*	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
lickel	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Potassium		2.47	mg/L	0.3	1/28/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
odium		45.9	mg/L	0.25	1/28/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/28/2025			SW846-6020B	=
/anadium	U	0.02	mg/L	0.02	1/28/2025			SW846-6020B	=
inc	J	0.00761	mg/L	0.02	1/28/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/28/2025			SW846-7470A	=
Barium, Dissolved	N	0.0002	mg/L	0.0002	1/28/2025			SW846-6020B	J
Chromium, Dissolved	U	0.220	-	0.004				SW846-6020B	IJ
Iranium, Dissolved	U U	0.001	mg/L mg/L	0.002	1/28/2025 1/28/2025			SW846-6020B	UJ
									(11

PCB-1221	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	=
PCB-1232	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	=
PCB-1242	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	UJ
PCB-1248	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	=
PCB-1254	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	=
PCB-1260	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	UJ
PCB-1268	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0967	ug/L	0.0967	1/28/2025			SW846-8082A	UJ
Radium-226	U	0.55	pCi/L	0.999	1/28/2025	0.742	0.743	AN-1418	=
Radium-228	U	0.0913	pCi/L	4.12	1/28/2025	2.12	2.12	EPA-904.0-M	=
Strontium-90	U	0.674	pCi/L	2.62	1/28/2025	1.47	1.48	EPA-905.0-M	=
Tritium	U	38.2	pCi/L	203	1/28/2025	111	111	EPA-906.0-M	=
Technetium-99	U	11	pCi/L	20.9	1/28/2025	12.4	12.5	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.565	pCi/L	1.65	1/28/2025	0.985	0.992	HASL 300, Th-01- RC M	UJ
Thorium-232	U	-0.11	pCi/L	1.07	1/28/2025	0.392	0.393	HASL 300, Th-01- RC M	=
Alpha activity	U	0.42	pCi/L	6.39	1/28/2025	2.74	2.75	SW846-9310	UJ
Beta activity	U	8.43	pCi/L	14.7	1/28/2025	8.81	8.92	SW846-9310	=
1,2-Dibromo-3-chloropropane	US	0.0193	ug/L	0.0193	1/28/2025			SW846-8011	UJ
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acrylonitrile	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromodichloromethane	U	1		1	1/28/2025			SW846-8260D	=
Bromoform	U	1	-	1	1/28/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chlorobenzene	U	- 1	ug/L	1	1/28/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Sistementation	0	Ţ	~6/ L	1	1,20,2023			5110-10 02000	

U	1	ug/L	1	1/28/2025	SW846-8260D	=
U	5	ug/L	5	1/28/2025	SW846-8260D	=
U	5	ug/L	5	1/28/2025	SW846-8260D	=
U	1	ug/L	1	1/28/2025	SW846-8260D	=
U	1	ug/L	1	1/28/2025	SW846-8260D	=
U	1	ug/L	1	1/28/2025	SW846-8260D	=
U	3	ug/L	3	1/28/2025	SW846-8260D	=
U	1	ug/L	1	1/28/2025	SW846-8260D	=
U	1	ug/L	1	1/28/2025	SW846-8260D	=
U	5	ug/L	5	1/28/2025	SW846-8260D	=
	1.8	ug/L	1	1/28/2025	SW846-8260D	=
U	1	ug/L	1	1/28/2025	SW846-8260D	=
U	5	ug/L	5	1/28/2025	SW846-8260D	=
U	1	ug/L	1	1/28/2025	SW846-8260D	=
*	212	mg/L	10	1/28/2025	EPA-160.1	=
U	0.5	mg/L	0.5	1/28/2025	EPA-300.0	=
U	20	mg/L	20	1/28/2025	EPA-410.4	=
UN	0.2	mg/L	0.2	1/28/2025	SW846-9012B	=
	52.3	ug/L	10	1/28/2025	SW846-9020B	=
1	0.636	mg/L	2	1/28/2025	SW846-9060A	=
	U U U U U U U U U U U U U U U U U U U	U 5 U 5 U 1 U 1 U 1 U 1 U 1 U 1 U 1 U 1 U 1 U 1 U 1 U 5 U 1 U 5 U 1 * 212 U 0.5 U 20 UN 0.2 UN 0.2 UN 0.2	U 5 ug/L U 5 ug/L U 1 ug/L U 5 ug/L U 1 ug/L U 5 ug/L U 1 ug/L U 1 ug/L U 1 ug/L U 0.5 mg/L U 20 mg/L UN 0.2 mg/L UN 52.3 ug/L	U 5 ug/L 5 U 5 ug/L 5 U 1 ug/L 1 U 5 ug/L 5 U 1 ug/L 1 U 5 ug/L 1 U 1 ug/L 1 U 1 ug/L 1 U 1 ug/L 1 V 1 ug/L 1 * 212 mg/L 10 U 0.5 mg/L 0.5 U 0 mg/L	U 5 ug/L 5 1/28/2025 U 5 ug/L 5 1/28/2025 U 1 ug/L 1 1/28/2025 U 1 ug/L 3 1/28/2025 U 1 ug/L 1 1/28/2025 U 0.5<	U 5 ug/L 5 1/28/2025 SW846-8260D U 5 ug/L 1 1/28/2025 SW846-8260D U 1 ug/L 1 1/28/2025 SW846-8260D U 3 ug/L 3 1/28/2025 SW846-8260D U 1 ug/L 1 1/28/2025 SW846-8260D U 1<

Facility: <u>C-746-S&T Lar</u>	ndfill County: N		AcCracken Permit #: SW07300014,SW0730001						
Sampling Point: <u>MW3</u>	DOWN		RGA Ty	pe: URG/	URGA Period:		Quarter		
AKGWA Well Tag #:	8004-4808		SAMPL	E ID:∕	IW372UG2-2	<u>25</u> S	ample Ty	/pe: <u>REG</u>	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide		0.483	mg/L	0.2	1/28/2025			SW846-9056A	=
Chloride	J	37.5	mg/L	250	1/28/2025			SW846-9056A	=
luoride	J	0.202	mg/L	4	1/28/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.903	mg/L	10	1/28/2025			SW846-9056A	=
Sulfate		149	mg/L	4	1/28/2025			SW846-9056A	=
Barometric Pressure Reading		29.93	Inches/Hg		1/28/2025				Х
Conductivity		758	µmhos/cm		1/28/2025				Х
Depth to Water		35.49	ft		1/28/2025				Х
Dissolved Oxygen		3.71	mg/L		1/28/2025				х
Eh (approx)		410	mV		1/28/2025				х
оН		6.27	Std Unit		1/28/2025				X
emperature		60	deg F		1/28/2025				x
urbidity		2.62	NTU		1/28/2025				x
Aluminum	U	0.05	mg/L	0.05	1/28/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/28/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
Barium	N	0.0541	-	0.003				SW846-6020B	=
	U		mg/L		1/28/2025				=
Beryllium	U	0.0005	mg/L	0.0005	1/28/2025			SW846-6020B	
Boron		1.54	mg/L	0.3	1/28/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Calcium		66.9	mg/L	2	1/28/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/28/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Copper	J	0.00162	mg/L	0.002	1/28/2025			SW846-6020B	=
ron	U	0.1	mg/L	0.1	1/28/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Magnesium		24.3	mg/L	0.03	1/28/2025			SW846-6020B	=
Vlanganese	J*	0.00215	mg/L	0.005	1/28/2025			SW846-6020B	=
Volybdenum	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Nickel	J	0.000643	mg/L	0.002	1/28/2025			SW846-6020B	=
Potassium		2.27	mg/L	0.3	1/28/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
silver	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
odium		59.5	mg/L	2.5	1/28/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Jranium	U	0.0002	mg/L	0.0002	1/28/2025			SW846-6020B	=
'anadium	U	0.02	mg/L	0.02	1/28/2025			SW846-6020B	=
linc	U	0.02	mg/L	0.02	1/28/2025			SW846-6020B	=
Vercury	U	0.0002	mg/L	0.0002	1/28/2025			SW846-7470A	=
Barium, Dissolved	Ν	0.0594	mg/L	0.004	1/28/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	1/28/2025			SW846-6020B	UJ
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/28/2025			SW846-6020B	UJ
PCB-1016	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	=

PCB-1221	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	=
PCB-1232	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	=
PCB-1242	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	UJ
PCB-1248	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	=
PCB-1254	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	=
PCB-1260	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	UJ
PCB-1268	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.103	ug/L	0.103	1/28/2025			SW846-8082A	UJ
Radium-226	U	0.143	pCi/L	1.03	1/28/2025	0.538	0.539	AN-1418	=
Radium-228	U	-0.189	pCi/L	4.97	1/28/2025	2.44	2.44	EPA-904.0-M	=
Strontium-90	U	0.214	pCi/L	4.76	1/28/2025	2.52	2.52	EPA-905.0-M	=
Tritium	U	0.0328	pCi/L	199	1/28/2025	102	102	EPA-906.0-M	=
Technetium-99	U	7.82	pCi/L	21.3	1/28/2025	12.5	12.5	HASL 300, Tc-02-	=
Technetium-99	0	7.02	pci/L	21.5	1/20/2025	12.5	12.5	RC M	-
Thorium-230	U	0.105	pCi/L	2.05	1/28/2025	0.977	0.979	HASL 300, Th-01- RC M	UJ
Thorium-232	U	-0.0789	pCi/L	1.2	1/28/2025	0.494	0.495	HASL 300, Th-01- RC M	=
Alpha activity	U	-1.14	pCi/L	7.51	1/28/2025	2.72	2.72	SW846-9310	UJ
Beta activity		24.7	pCi/L	9.41	1/28/2025	7.83	8.81	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/28/2025		-	SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
	U							SW846-8260D	
1,2-Dichloroethane		1	ug/L	1	1/28/2025				=
1,2-Dichloropropane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/28/2025			SW846-8260D	UJ
Acrylonitrile	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromodichloromethane	U	1		1	1/28/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
	0	-	~B/ =	T	1/20/2025			30040-02000	

Ethylbenzene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
lodomethane	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Styrene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Toluene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/28/2025	SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Trichloroethene		2.94	ug/L	1	1/28/2025	SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Dissolved Solids	*	446	mg/L	20	1/28/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/28/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/28/2025	EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	1/28/2025	SW846-9012B	=
Total Organic Halides (TOX)		25.1	ug/L	10	1/28/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.772	mg/L	2	1/28/2025	SW846-9060A	=

•		• -							300045
Sampling Point: <u>MW3</u>	373 DO	WN	RGA Ty	pe: LRGA	<u>ا</u>	Period: 1s	t Quarter	2025	
AKGWA Well Tag #:	8004-4792		SAMPL	E ID:	W373UG2-2	<u>25</u>	Sample Ty	vpe: <u>REG</u>	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide		0.448	mg/L	0.2	1/28/2025			SW846-9056A	=
Chloride	J	30.5	mg/L	250	1/28/2025			SW846-9056A	=
luoride	J	0.204	mg/L	4	1/28/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.562	mg/L	10	1/28/2025			SW846-9056A	=
Sulfate		211	mg/L	8	1/28/2025			SW846-9056A	=
Barometric Pressure Reading		30.01	Inches/Hg		1/28/2025				Х
Conductivity		945	µmhos/cm		1/28/2025				Х
Depth to Water		35.81	ft		1/28/2025				Х
Dissolved Oxygen		2.08	mg/L		1/28/2025				х
Th (approx)		428	mV		1/28/2025				Х
)H		6.14	Std Unit		1/28/2025				х
emperature		58.6	deg F		1/28/2025				Х
		0.99	NTU		1/28/2025				X
Numinum	U	0.05	mg/L	0.05	1/28/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/28/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
Barium	N	0.033	mg/L	0.004	1/28/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0004	1/28/2025			SW846-6020B	=
Boron	0	2.47	mg/L	0.3	1/28/2025			SW846-6020B	=
Cadmium	U		-						=
	0	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Calcium		91	mg/L	4	1/28/2025			SW846-6020B	
Chromium	U	0.01	mg/L	0.01	1/28/2025			SW846-6020B	=
Cobalt	J	0.000877	mg/L	0.001	1/28/2025			SW846-6020B	=
Copper		0.00326	mg/L	0.002	1/28/2025			SW846-6020B	=
ron	J	0.0562	mg/L	0.1	1/28/2025			SW846-6020B	=
_ead	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Magnesium		33.9	mg/L	0.03	1/28/2025			SW846-6020B	=
Manganese	*	0.136	mg/L	0.005	1/28/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
Vickel		0.00212	mg/L	0.002	1/28/2025			SW846-6020B	=
Potassium		3.03	mg/L	0.3	1/28/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/28/2025			SW846-6020B	=
odium		73.2	mg/L	5	1/28/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/28/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/28/2025			SW846-6020B	=
Jranium	J	0.000126	mg/L	0.0002	1/28/2025			SW846-6020B	=
'anadium	U	0.02	mg/L	0.02	1/28/2025			SW846-6020B	=
inc	J	0.00584	mg/L	0.02	1/28/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	1/28/2025			SW846-7470A	=
Barium, Dissolved	Ν	0.0363	mg/L	0.004	1/28/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	1/28/2025			SW846-6020B	UJ
Jranium, Dissolved	J	0.000122	mg/L	0.0002	1/28/2025			SW846-6020B	J
PCB-1016	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	=

PCB-1221	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	=
PCB-1232	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	=
PCB-1242	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	UJ
PCB-1248	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	=
PCB-1254	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	=
PCB-1260	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	UJ
PCB-1268	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0966	ug/L	0.0966	1/28/2025			SW846-8082A	UJ
Radium-226	U	-0.162	pCi/L	1.24	1/28/2025	0.459	0.46	AN-1418	=
Radium-228	U	0.521	pCi/L	4.63	1/28/2025	2.46	2.46	EPA-904.0-M	=
Strontium-90	U	-0.139	pCi/L	2.47	1/28/2025	1.28	1.28	EPA-905.0-M	=
Fritium	U	82.2	pCi/L	196	1/28/2025	1.20	1.20	EPA-906.0-M	-
Technetium-99	U	-6.18	pCi/L	21.6		114	11.9	HASL 300, Tc-02-	=
recimentum-99	0	-0.10	pci/L	21.0	1/28/2025	11.9	11.9	RC M	-
Thorium-230	U	0.0965	pCi/L	1.75	1/28/2025	0.841	0.843	HASL 300, Th-01- RC M	UJ
Thorium-232	U	-0.17	pCi/L	1.3	1/28/2025	0.449	0.45	HASL 300, Th-01- RC M	=
Alpha activity	U	-0.183	pCi/L	9.07	1/28/2025	3.75	3.76	SW846-9310	UJ
Beta activity	U	3.62	pCi/L	8.42	1/28/2025	4.92	4.96	SW846-9310	=
L,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/28/2025	-		SW846-8011	=
,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
.,1,1-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
.,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
,1,2-Trichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
,1-Dichloroethene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
·	U								
.,2,3-Trichloropropane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
.,2-Dibromoethane		1	ug/L	1	1/28/2025			SW846-8260D	=
L,2-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
L,2-Dichloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
I-Methyl-2-pentanone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/28/2025			SW846-8260D	UJ
Acrylonitrile	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/28/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
hloroethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/28/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/28/2025			SW846-8260D	=
			-						
Dibromochloromethane	U	1	ug/L	1	1/28/2025			SW846-8260D	=

Ethylbenzene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Styrene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Toluene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/28/2025	SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/28/2025	SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Trichloroethene		2.5	ug/L	1	1/28/2025	SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	1/28/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/28/2025	SW846-8260D	=
Dissolved Solids	*	562	mg/L	20	1/28/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/28/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/28/2025	EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	1/28/2025	SW846-9012B	=
Total Organic Halides (TOX)	BN1	35.7	ug/L	10	1/28/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.953	mg/L	2	1/28/2025	SW846-9060A	=

Sampling Point: MV	V384 SID	F	RGA T	ype: URG	7	Period: 1st	Ouarter	2025	
AKGWA Well Tag #:	8004-4809	<u> </u>	SAMP		W384DSG2		ample Ty		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide	Quanner	0.264	mg/L	0.2	1/30/2025	- (77		SW846-9056A	=
Chloride	J	21.6	mg/L	250	1/30/2025			SW846-9056A	=
luoride	J	0.172	mg/L	4	1/30/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.807	mg/L	10	1/30/2025			SW846-9056A	=
Sulfate	Ĵ	18.9	mg/L	0.4	1/30/2025			SW846-9056A	=
Numinum	U	0.05	mg/L	0.05	1/30/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/30/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
arium	0	0.194	mg/L	0.004	1/30/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	1/30/2025			SW846-6020B	=
Boron	0	0.0803	mg/L	0.0005	1/30/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Calcium	0	23.1	mg/L	0.001	1/30/2025			SW846-6020B	=
Chromium	U	0.01	-	0.2				SW846-6020B	=
	U	0.001	mg/L	0.01	1/30/2025			SW846-6020B	=
obalt			mg/L		1/30/2025				
opper	J	0.000686	mg/L	0.002	1/30/2025			SW846-6020B	=
on	U	0.1	mg/L	0.1	1/30/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
/lagnesium		9.96	mg/L	0.03	1/30/2025			SW846-6020B	=
langanese	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Aolybdenum	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
lickel	J	0.000782	mg/L	0.002	1/30/2025			SW846-6020B	=
otassium		1.36	mg/L	0.3	1/30/2025			SW846-6020B	=
thodium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
odium		44.4	mg/L	0.25	1/30/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Jranium	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	=
'anadium	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=
inc	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=
Aercury	J	0.00017	mg/L	0.0002	1/30/2025			SW846-7470A	J
arium, Dissolved		0.195	mg/L	0.004	1/30/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	UJ
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	UJ
Radium-226	U	0.309	pCi/L	0.795	1/30/2025	0.487	0.488	AN-1418	=
itrontium-90	U	-0.605	pCi/L	1.98	1/30/2025	0.931	0.931	EPA-905.0-M	=
ritium	U	64.5	pCi/L	235	1/30/2025	136	136	EPA-906.0-M	=
echnetium-99		46.8	pCi/L	17	1/30/2025	12.3	13.3	HASL 300, Tc-02- RC M	=
Fhorium-230	U	0.692	pCi/L	1.85	1/30/2025	1.13	1.14	HASL 300, Th-01- RC M	- <u>=</u>
Alpha activity	U	-0.452	pCi/L	8.05	1/30/2025	3.44	3.44	SW846-9310	=
Beta activity		34.5	-	8.97	1/30/2025	8.47	10.2	SW846-9310	J

1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/30/2025	SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Acetone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Acrylonitrile	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Benzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromoform	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloroform	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloromethane	UQ	1	ug/L	1	1/30/2025	SW846-8260D	– UJ
cis-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
lodomethane	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Styrene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Toluene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/30/2025	SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Trichloroethene	J	0.87	ug/L	1	1/30/2025	SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Vinyl acetate	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Vinyl chloride	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dissolved Solids		185	mg/L	10	1/30/2025	EPA-160.1	=
lodide	U	0.5	mg/L	0.5	1/30/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/30/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/30/2025	SW846-9012B	=
Total Organic Halides (TOX)	U	10	ug/L	10	1/30/2025	SW846-9020B	=
	č	10	~6/ L	10	2,00,2020	54646 50265	

Total Organic Carbon (TOC)	J	0.836 mg/L	2	1/30/2025	SW846-9060A =

Sampling Point: MW3	84 SID	F	RGA Ty	pe: URGA	\	Period: 1s	t Ouarter	2025	
Sampling Point: <u>MW3</u> AKGWA Well Tag #:		<u> </u>	-	-					
AROWA Well Tag #.	8004-4809		SAMPL		W384SG2-2		Sample Ty	ре. <u>кео</u>	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide		0.277	mg/L	0.2	1/30/2025			SW846-9056A	=
Chloride	J	21.8	mg/L	250	1/30/2025			SW846-9056A	=
luoride	J	0.173	mg/L	4	1/30/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.792	mg/L	10	1/30/2025			SW846-9056A	=
Sulfate		19.5	mg/L	0.4	1/30/2025			SW846-9056A	=
Barometric Pressure Reading		30.07	Inches/Hg		1/30/2025				Х
Conductivity		499	µmhos/cm		1/30/2025				Х
Depth to Water		41.46	ft		1/30/2025				Х
Dissolved Oxygen		5.03	mg/L		1/30/2025				Х
Eh (approx)		469.2	mV		1/30/2025				Х
ρΗ		5.8	Std Unit		1/30/2025				х
emperature		56.5	deg F		1/30/2025				Х
Turbidity		0	NTU		1/30/2025				Х
Aluminum	U	0.05	mg/L	0.05	1/30/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/30/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
arium	0	0.197	mg/L	0.004	1/30/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0004	1/30/2025			SW846-6020B	=
Boron	0	0.0818	mg/L	0.0005	1/30/2025			SW846-6020B	=
Cadmium	U		-						
	0	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Calcium		23.3	mg/L	0.2	1/30/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Copper	J	0.000866	mg/L	0.002	1/30/2025			SW846-6020B	=
ron	U	0.1	mg/L	0.1	1/30/2025			SW846-6020B	=
.ead	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Magnesium		10.1	mg/L	0.03	1/30/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Volybdenum	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Vickel	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Potassium		1.4	mg/L	0.3	1/30/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
odium		44.9	mg/L	0.25	1/30/2025			SW846-6020B	=
「antalum	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
⁻ hallium	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Jranium	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	=
/anadium	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=
linc	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	1/30/2025			SW846-7470A	UJ
Barium, Dissolved		0.199	mg/L	0.004	1/30/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	UJ
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	UJ
Radium-226	U	0.313	pCi/L	0.524	1/30/2025	0.357	0.357	AN-1418	=

Strontium-90	U	1.31	pCi/L	2.74	1/30/2025	1.62	1.63	EPA-905.0-M	=
Tritium	U	39.4	pCi/L	233	1/30/2025	133	134	EPA-906.0-M	=
Technetium-99		37.1	pCi/L	17.4	1/30/2025	12	12.7	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.299	pCi/L	2.31	1/30/2025	1.19	1.19	HASL 300, Th-01- RC M	=
Alpha activity	U	0.0458	pCi/L	7.06	1/30/2025	3.07	3.08	SW846-9310	=
Beta activity		24	pCi/L	11	1/30/2025	8.29	9.2	SW846-9310	J
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	1/30/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Acrylonitrile	UQ	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Benzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloromethane	UQ	1	ug/L	1	1/30/2025			SW846-8260D	UJ
cis-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	- 1	ug/L	1	1/30/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/30/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
	U			1					
trans-1,3-Dichloropropene	U	5	ug/L	5	1/30/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene			ug/L		1/30/2025			SW846-8260D	=
			-						=
Trichloroethene Trichlorofluoromethane	IJ	0.6 1	ug/L ug/L	1 1	1/30/2025 1/30/2025			SW846-8260D SW846-8260D	
Vinyl acetate	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ		
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Vinyl chloride	U	1	ug/L	1	1/30/2025	SW846-8260D	=		
Dissolved Solids		200	mg/L	10	1/30/2025	EPA-160.1	=		
Iodide	U	0.5	mg/L	0.5	1/30/2025	EPA-300.0	=		
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/30/2025	EPA-410.4	=		
Cyanide	U	0.2	mg/L	0.2	1/30/2025	SW846-9012B	=		
Total Organic Halides (TOX)		12.3	ug/L	10	1/30/2025	SW846-9020B	=		
Total Organic Carbon (TOC)	J	0.826	mg/L	2	1/30/2025	SW846-9060A	=		

Sampling Point: <u>MW3</u>	385 SID	F	RGA Ty	pe: LRGA		Period: 1s		2025		
AKGWA Well Tag #:	8004-4810	<u> </u>	SAMPL	•	MW385SG2-25		ample Ty			
	010+ +010						ampic ry	pc. <u>NEG</u>		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation	
Bromide		0.256	mg/L	0.2	1/30/2025			SW846-9056A	=	
Chloride	J	21.9	mg/L	250	1/30/2025			SW846-9056A	=	
luoride	J	0.145	mg/L	4	1/30/2025			SW846-9056A	=	
Nitrate as Nitrogen	J	0.821	mg/L	10	1/30/2025			SW846-9056A	=	
Sulfate		19.4	mg/L	0.4	1/30/2025			SW846-9056A	=	
Barometric Pressure Reading		30.04	Inches/Hg		1/30/2025				Х	
Conductivity		491	µmhos/cm		1/30/2025				Х	
Depth to Water		41.85	ft		1/30/2025				Х	
Dissolved Oxygen		3.54	mg/L		1/30/2025				х	
h (approx)		433.7	mV		1/30/2025				Х	
θH		5.91	Std Unit		1/30/2025				х	
emperature		57	deg F		1/30/2025				Х	
urbidity		0	NTU		1/30/2025				Х	
Aluminum	U	0.05	mg/L	0.05	1/30/2025			SW846-6020B	=	
Antimony	U	0.003	mg/L	0.003	1/30/2025			SW846-6020B	=	
Arsenic	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=	
Barium	0	0.209	mg/L	0.004	1/30/2025			SW846-6020B	=	
Beryllium	U	0.0005	mg/L	0.0005	1/30/2025			SW846-6020B	=	
Boron	0	0.0823	mg/L	0.015	1/30/2025			SW846-6020B	=	
Cadmium	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=	
Calcium	0	23.4	mg/L	0.001	1/30/2025			SW846-6020B	=	
Chromium	U	0.01	-	0.01				SW846-6020B	=	
	0		mg/L	0.001	1/30/2025				=	
Cobalt		0.00154	mg/L		1/30/2025			SW846-6020B		
Copper	J	0.00079	mg/L	0.002	1/30/2025			SW846-6020B	=	
ron	U	0.1	mg/L	0.1	1/30/2025			SW846-6020B	=	
.ead	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=	
Magnesium		9.82	mg/L	0.03	1/30/2025			SW846-6020B	=	
Manganese	J	0.00105	mg/L	0.005	1/30/2025			SW846-6020B	=	
Molybdenum	J	0.000218	mg/L	0.001	1/30/2025			SW846-6020B	=	
Vickel	J	0.00108	mg/L	0.002	1/30/2025			SW846-6020B	=	
Potassium		1.56	mg/L	0.3	1/30/2025			SW846-6020B	=	
Rhodium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=	
Selenium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=	
Silver	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=	
odium		45.2	mg/L	0.25	1/30/2025			SW846-6020B	=	
antalum	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=	
Thallium	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=	
Jranium	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	=	
/anadium	J	0.00337	mg/L	0.02	1/30/2025			SW846-6020B	=	
Zinc	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=	
Mercury	U	0.0002	mg/L	0.0002	1/30/2025			SW846-7470A	UJ	
Barium, Dissolved		0.205	mg/L	0.004	1/30/2025			SW846-6020B	J	
Chromium, Dissolved	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	UJ	
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	UJ	
Radium-226	U	0.38	pCi/L	0.604	1/30/2025	0.404	0.404	AN-1418	=	

Strontium-90	U	-0.105	pCi/L	3.98	1/30/2025	2.12	2.12	EPA-905.0-M	=
Tritium	U	38.8	pCi/L	227	1/30/2025	130	130	EPA-906.0-M	=
Technetium-99		43.6	pCi/L	17.3	1/30/2025	12.3	13.2	HASL 300, Tc-02- RC M	=
Thorium-230	U	1.14	pCi/L	1.87	1/30/2025	1.27	1.29	HASL 300, Th-01- RC M	=
Alpha activity	U	1.02	pCi/L	7.36	1/30/2025	3.6	3.6	SW846-9310	=
Beta activity		33	pCi/L	8.99	1/30/2025	8.29	9.93	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0189	ug/L	0.0189	1/30/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
L,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
L,1,2-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
L,1-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
I,1-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
.,2-Dibromoethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
.,2-Dichlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
.,2-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
	U				1/30/2025				=
L,2-Dichloropropane	U	1	ug/L ug/L	1	1/30/2025			SW846-8260D SW846-8260D	=
•	U								
P-Butanone		5	ug/L	5	1/30/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/30/2025			SW846-8260D	UJ
crylonitrile	UQ	5	ug/L	5	1/30/2025			SW846-8260D	UJ
enzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
bromoform	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloromethane	UQ	1	ug/L	1	1/30/2025			SW846-8260D	UJ
sis-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
thylbenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/30/2025			SW846-8260D	=
/lethylene chloride	U	5	ug/L	5	1/30/2025			SW846-8260D	=
tyrene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
oluene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
otal Xylene	U	3	ug/L	3	1/30/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Frichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
nemorocululu	0	1	46/L	-	1, 30, 2023			J V V U T U U Z U U D	-

Vinyl acetate	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Vinyl chloride	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dissolved Solids		193	mg/L	10	1/30/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/30/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/30/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/30/2025	SW846-9012B	=
Total Organic Halides (TOX)		16.7	ug/L	10	1/30/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.8	mg/L	2	1/30/2025	SW846-9060A	=

Sampling Point: MW3	386 SIDE		RGA Type: UCRS Period: 1st Quarter 2025						
		<u> </u>							
AKGWA Well Tag #:	8004-4804		SAMPLE ID: MW		W386SG2-2	<u>.5</u> S	Sample Type: <u>REG</u>		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior
Bromide	U	0.2	mg/L	0.2	1/30/2025			SW846-9056A	=
hloride	J	9.52	mg/L	250	1/30/2025			SW846-9056A	=
luoride	J	0.887	mg/L	4	1/30/2025			SW846-9056A	=
litrate as Nitrogen	U	10	mg/L	10	1/30/2025			SW846-9056A	=
ulfate		31	mg/L	0.8	1/30/2025			SW846-9056A	=
arometric Pressure Reading		30.01	Inches/Hg		1/30/2025				Х
onductivity		694	µmhos/cm		1/30/2025				Х
epth to Water		19.16	ft		1/30/2025				Х
issolved Oxygen		0.99	mg/L		1/30/2025				х
h (approx)		168.2	mV		1/30/2025				Х
Н		6.55	Std Unit		1/30/2025				X
emperature		59.1	deg F		1/30/2025				X
urbidity		0.08	NTU		1/30/2025				x
luminum	U	0.05	mg/L	0.05	1/30/2025			SW846-6020B	=
ntimony	U	0.003	mg/L	0.003	1/30/2025			SW846-6020B	=
rsenic	1	0.00284	mg/L	0.005	1/30/2025			SW846-6020B	=
arium	J	0.00284	-	0.003	1/30/2025			SW846-6020B	=
	U		mg/L					SW846-6020B	=
eryllium	U	0.0005	mg/L	0.0005	1/30/2025				
oron		0.0231	mg/L	0.015	1/30/2025			SW846-6020B	=
admium	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
alcium		20.2	mg/L	0.2	1/30/2025			SW846-6020B	=
hromium	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	=
Cobalt		0.00943	mg/L	0.001	1/30/2025			SW846-6020B	=
Copper	J	0.00047	mg/L	0.002	1/30/2025			SW846-6020B	=
ron		1.52	mg/L	0.1	1/30/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
/lagnesium		8.63	mg/L	0.03	1/30/2025			SW846-6020B	=
langanese		0.87	mg/L	0.005	1/30/2025			SW846-6020B	=
/lolybdenum	J	0.000947	mg/L	0.001	1/30/2025			SW846-6020B	=
lickel		0.0026	mg/L	0.002	1/30/2025			SW846-6020B	=
otassium	J	0.297	mg/L	0.3	1/30/2025			SW846-6020B	=
thodium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
odium		111	mg/L	5	1/30/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	=
anadium	J	0.00367	mg/L	0.02	1/30/2025			SW846-6020B	=
inc	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/30/2025			SW846-7470A	UJ
arium, Dissolved		0.128	mg/L	0.004	1/30/2025			SW846-6020B	J
hromium, Dissolved	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	UJ
Iranium, Dissolved	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	UJ
adium-226	U	0.536	pCi/L	0.541	1/30/2025	0.435	0.436	AN-1418	=

Strontium-90	U	0.652	pCi/L	2.97	1/30/2025	1.66	1.66	EPA-905.0-M	=
Tritium	U	133	pCi/L	236	1/30/2025	141	143	EPA-906.0-M	=
Technetium-99	U	4.16	pCi/L	17.3	1/30/2025	9.99	10	HASL 300, Tc-02- RC M	=
Thorium-230	U	1.42	pCi/L	1.65	1/30/2025	1.33	1.35	HASL 300, Th-01- RC M	=
Alpha activity	U	-0.317	pCi/L	8.23	1/30/2025	3.46	3.46	SW846-9310	=
Beta activity	U	3.88	pCi/L	9.13	1/30/2025	5.33	5.37	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0188	ug/L	0.0188	1/30/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/30/2025			SW846-8260D	
Acrylonitrile	UQ	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Benzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Bromochloromethane	U	1	-	1	1/30/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L					SW846-8260D SW846-8260D	=
Bromoform	U		ug/L	1	1/30/2025				=
		1	ug/L	1	1/30/2025			SW846-8260D	
Bromomethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Chloromethane	UQ	1	ug/L	1	1/30/2025			SW846-8260D	UJ
cis-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/30/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/30/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=

Vinyl acetate	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Vinyl chloride	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dissolved Solids		341	mg/L	10	1/30/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/30/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/30/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/30/2025	SW846-9012B	=
Total Organic Halides (TOX)		135	ug/L	10	1/30/2025	SW846-9020B	=
Total Organic Carbon (TOC)		6.54	mg/L	2	1/30/2025	SW846-9060A	=

Sampling Point: <u>MW3</u>	387 DOWN		RGA Type: URGA Period: 1st Quarter 2025						
AKGWA Well Tag #:		VVIN							
ANGWA Well Tag #:	8004-4815		SAIVIPL	SAMPLE ID: MW387					
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Bromide		0.479	mg/L	0.2	1/29/2025			SW846-9056A	=
hloride	J	35.7	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.879	mg/L	4	1/29/2025			SW846-9056A	=
litrate as Nitrogen	J	1.27	mg/L	10	1/29/2025			SW846-9056A	=
ulfate		25.7	mg/L	2	1/29/2025			SW846-9056A	=
arometric Pressure Reading		30.08	Inches/Hg		1/29/2025				Х
onductivity		601	µmhos/cm		1/29/2025				Х
epth to Water		39.82	ft		1/29/2025				Х
vissolved Oxygen		3.99	mg/L		1/29/2025				х
h (approx)		457	mV		1/29/2025				Х
Н		6.11	Std Unit		1/29/2025				X
emperature		60.7	deg F		1/29/2025				X
urbidity		2.35	NTU		1/29/2025				X
luminum	J	0.0218	mg/L	0.05	1/29/2025			SW846-6020B	=
ntimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
rsenic	U	0.005	-	0.005				SW846-6020B	=
	0		mg/L		1/29/2025				
arium	U	0.107	mg/L	0.004	1/29/2025			SW846-6020B	=
eryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
oron		0.0334	mg/L	0.015	1/29/2025			SW846-6020B	=
admium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Calcium		39.1	mg/L	0.2	1/29/2025			SW846-6020B	=
Chromium	J	0.00406	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper	J	0.000463	mg/L	0.002	1/29/2025			SW846-6020B	=
ron	J	0.0693	mg/L	0.1	1/29/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
/lagnesium		16.1	mg/L	0.03	1/29/2025			SW846-6020B	=
langanese	J	0.00207	mg/L	0.005	1/29/2025			SW846-6020B	=
Aolybdenum	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
otassium		1.74	mg/L	0.3	1/29/2025			SW846-6020B	=
thodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		53.5	mg/L	1.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
arium, Dissolved		0.105	mg/L	0.004	1/29/2025			SW846-6020B	J
hromium, Dissolved	J	0.00392	mg/L	0.01	1/29/2025			SW846-6020B	J
Iranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
adium-226	U	0.00588	pCi/L	0.594	1/29/2025	0.27	0.27	AN-1418	=

Strontium-90	U	-0.741	pCi/L	1.94	1/29/2025	0.868	0.869	EPA-905.0-M	=
Tritium	U	3.57	pCi/L	179	1/29/2025	99.1	99.1	EPA-906.0-M	=
Technetium-99		88.6	pCi/L	20.8	1/29/2025	15.5	19	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.921	pCi/L	1.67	1/29/2025	1.07	1.09	HASL 300, Th-01- RC M	=
Alpha activity	U	6.06	pCi/L	6.38	1/29/2025	4.87	4.98	SW846-9310	=
Beta activity		74.1	pCi/L	10.5	1/29/2025	12	17.1	SW846-9310	=
.,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/29/2025			SW846-8011	=
,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
arbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
arbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Aethylene chloride	U	5	ug/L ug/L	5	1/29/2025			SW846-8260D	=
•			ug/L ug/L						=
tyrene	UY1	1		1	1/29/2025			SW846-8260D	
etrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
oluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
otal Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
richloroethene	J	0.37	ug/L	1	1/29/2025			SW846-8260D	=
Frichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		250	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)		21.2	ug/L	10	1/29/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	1.05	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: MW3	388 DOWN		RGA Type: LRGA Period: 1st Quarter 2025						
		VVIN	SAMPLE ID:MW38850						
AKGWA Well Tag #:	8004-4816				W3885G2-25		Sample Type: <u>REG</u>		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior
Bromide		0.435	mg/L	0.2	1/29/2025			SW846-9056A	=
hloride	J	34.1	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.307	mg/L	4	1/29/2025			SW846-9056A	=
litrate as Nitrogen	J	0.928	mg/L	10	1/29/2025			SW846-9056A	=
ulfate		20.7	mg/L	2	1/29/2025			SW846-9056A	=
arometric Pressure Reading		30.08	Inches/Hg		1/29/2025				Х
onductivity		529	µmhos/cm		1/29/2025				Х
epth to Water		39.69	ft		1/29/2025				Х
vissolved Oxygen		4.69	mg/L		1/29/2025				х
h (approx)		403.7	mV		1/29/2025				Х
H		5.97	Std Unit		1/29/2025				х
emperature		59.9	deg F		1/29/2025				X
urbidity		1.17	NTU		1/29/2025				x
luminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
ntimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
rsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
	0		-	0.003				SW846-6020B	
arium	U	0.18	mg/L		1/29/2025				=
eryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	
oron		0.0268	mg/L	0.015	1/29/2025			SW846-6020B	=
admium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
alcium		28.9	mg/L	0.2	1/29/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper	J	0.000645	mg/L	0.002	1/29/2025			SW846-6020B	=
ron	J	0.0387	mg/L	0.1	1/29/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
/lagnesium		12.4	mg/L	0.03	1/29/2025			SW846-6020B	=
langanese	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
Aolybdenum	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
otassium		1.75	mg/L	0.3	1/29/2025			SW846-6020B	=
thodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		45.3	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
arium, Dissolved		0.189	mg/L	0.004	1/29/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ
Iranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
adium-226	U	0.315	pCi/L	0.767	1/29/2025	0.464	0.464	AN-1418	=

Strontium-90	U	-0.122	pCi/L	2.9	1/29/2025	1.51	1.51	EPA-905.0-M	=
Tritium	U	2.03	pCi/L	179	1/29/2025	98.5	98.6	EPA-906.0-M	=
Technetium-99		35.5	pCi/L	19.8	1/29/2025	12.9	13.6	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.298	pCi/L	1.5	1/29/2025	0.81	0.814	HASL 300, Th-01- RC M	=
Alpha activity	U	5.82	pCi/L	7.76	1/29/2025	5.25	5.35	SW846-9310	=
Beta activity		28.1	pCi/L	10.1	1/29/2025	8.4	9.58	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,1-Trichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
L,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
L,2-Dichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
2-Butanone	US	5	ug/L	5	1/29/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
I-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Benzene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	US	1	ug/L	1	1/29/2025			SW846-8260D	– UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroethane	U		-		1/29/2025				=
Chloroform	US	1	ug/L	1	1/29/2025			SW846-8260D SW846-8260D	=
		1	ug/L	1	1/29/2025				
Chloromethane	U	1	ug/L	1				SW846-8260D	=
is-1,2-Dichloroethene		1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Ethylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Styrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Toluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Total Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Trichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	US	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		199	mg/L	10	1/29/2025	EPA-160.1	=
lodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	U	10	ug/L	10	1/29/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.795	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW3</u>	90 DO	WN	RGA Type: UCRS Period: 1st Quarter 2025							
AKGWA Well Tag #:	8004-4811		-	SAMPLE ID: MW390SG2-						
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior	
Bromide		0.263	mg/L	0.2	1/29/2025			SW846-9056A	=	
Chloride	J	18.9	mg/L	250	1/29/2025			SW846-9056A	=	
luoride	J	0.313	mg/L	4	1/29/2025			SW846-9056A	=	
litrate as Nitrogen	J	0.99	mg/L	10	1/29/2025			SW846-9056A	=	
ulfate	J	33	mg/L	2	1/29/2025			SW846-9056A	=	
Barometric Pressure Reading		30.08	Inches/Hg	-	1/29/2025				Х	
Conductivity		665	µmhos/cm		1/29/2025				X	
Depth to Water		36.83	ft		1/29/2025				x	
Dissolved Oxygen		3.34			1/29/2025				x	
			mg/L						X	
h (approx)		435.9	mV Std Unit		1/29/2025					
H		6.21	Std Unit		1/29/2025				X	
emperature		60	deg F		1/29/2025					
urbidity		1.94	NTU	0.05	1/29/2025				Х	
Aluminum		0.098	mg/L	0.05	1/29/2025			SW846-6020B	=	
Antimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=	
rsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
arium		0.227	mg/L	0.004	1/29/2025			SW846-6020B	=	
Beryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=	
oron		0.0235	mg/L	0.015	1/29/2025			SW846-6020B	=	
Cadmium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Calcium		28	mg/L	0.2	1/29/2025			SW846-6020B	=	
Chromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=	
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Copper	J	0.00105	mg/L	0.002	1/29/2025			SW846-6020B	=	
ron	J	0.0813	mg/L	0.1	1/29/2025			SW846-6020B	=	
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
/lagnesium		11.8	mg/L	0.03	1/29/2025			SW846-6020B	=	
/langanese	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
Aolybdenum	J	0.000213	mg/L	0.001	1/29/2025			SW846-6020B	=	
lickel	J	0.00106	mg/L	0.002	1/29/2025			SW846-6020B	=	
Potassium		0.348	mg/L	0.3	1/29/2025			SW846-6020B	=	
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
odium		99.8	mg/L	1.25	1/29/2025			SW846-6020B	=	
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
Jranium	~	0.000207	mg/L	0.0002	1/29/2025			SW846-6020B	=	
/anadium	U	0.00207	mg/L	0.02	1/29/2025			SW846-6020B	=	
linc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=	
Mercury	U	0.002		0.002	1/29/2025			SW846-6020B SW846-7470A	=	
•	U		mg/L							
Barium, Dissolved		0.239	mg/L	0.004	1/29/2025			SW846-6020B	J	
Chromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ	
Jranium, Dissolved		0.000211	mg/L	0.0002	1/29/2025			SW846-6020B	J	

Strontium-90 Tritium Technetium-99 Thorium-230 Alpha activity	UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU	2.23 7.67 77.5	pCi/L pCi/L pCi/L	3.18 178 19.3	1/29/2025 1/29/2025	1.94 98.6	1.97 98.6	EPA-905.0-M EPA-906.0-M	=
Technetium-99 Thorium-230								EPA-906.0-M	=
Thorium-230	U	//.5	pCi/L		1/00/0005				
	U			19.5	1/29/2025	14.2	17.1	HASL 300, Tc-02- RC M	=
Alpha activity		0.763	pCi/L	1.31	1/29/2025	0.891	0.9	HASL 300, Th-01- RC M	=
	U	-0.164	pCi/L	7.53	1/29/2025	3.28	3.28	SW846-9310	=
Beta activity		48.9	pCi/L	9.85	1/29/2025	9.86	12.7	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0187	ug/L	0.0187	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	-	5	1/29/2025			SW846-8260D	=
	U	5	ug/L ug/L	5	1/29/2025			SW846-8260D	=
Acetone	-		-						
Acrolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Acrylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Ethylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Styrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Toluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Total Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		319	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	J	7.74	ug/L	10	1/29/2025	SW846-9020B	=
Total Organic Carbon (TOC)		2.07	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: MW3	391 DOWN		RGA Type: URGA Period: 1st Quarter 2025						
AKGWA Well Tag #:	8004-4805		SAMPL	•	<u>.</u> W391SG2-2		ample Ty		
	0004 4005			Reporting	Date	Counting	unpicity	<u>neo</u>	
Parameter	Qualifier	Result	Units	Limit	Collected	Error (+/-)	TPU	Method	Validatior
Bromide		0.515	mg/L	0.2	1/29/2025			SW846-9056A	=
Chloride	J	40.6	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.172	mg/L	4	1/29/2025			SW846-9056A	=
litrate as Nitrogen	J	1.1	mg/L	10	1/29/2025			SW846-9056A	=
ulfate		12.1	mg/L	0.4	1/29/2025			SW846-9056A	=
arometric Pressure Reading		30.06	Inches/Hg		1/29/2025				Х
Conductivity		373	µmhos/cm		1/29/2025				Х
epth to Water		42.95	ft		1/29/2025				Х
vissolved Oxygen		4.4	mg/L		1/29/2025				Х
h (approx)		322	mV		1/29/2025				Х
н		6	Std Unit		1/29/2025				х
emperature		56.6	deg F		1/29/2025				Х
urbidity		2.8	NTU		1/29/2025				Х
luminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
Intimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
rsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
arium	-	0.21	mg/L	0.004	1/29/2025			SW846-6020B	=
eryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
oron		0.0222	mg/L	0.015	1/29/2025			SW846-6020B	=
admium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
alcium	0	25.2	mg/L	0.2	1/29/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
	1	0.0015	-	0.001					=
Copper			mg/L		1/29/2025			SW846-6020B	
ron	J	0.0635	mg/L	0.1	1/29/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
/agnesium		10.6	mg/L	0.03	1/29/2025			SW846-6020B	=
Aanganese	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
/lolybdenum	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
otassium		1.51	mg/L	0.3	1/29/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		32.5	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
Barium, Dissolved		0.22	mg/L	0.004	1/29/2025			SW846-6020B	J
hromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ
Iranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
adium-226	U	0.351	pCi/L	0.855	1/29/2025	0.558	0.559	AN-1418	=

Strontium-90	U	-1	pCi/L	2.87	1/29/2025	1.41	1.41	EPA-905.0-M	=
Fritium	U	5.1	pCi/L	171	1/29/2025	94.8	94.8	EPA-906.0-M	=
Fechnetium-99	U	3.71	pCi/L	19.5	1/29/2025	11.3	11.3	HASL 300, Tc-02- RC M	=
horium-230	U	1.1	pCi/L	1.55	1/29/2025	1.11	1.13	HASL 300, Th-01- RC M	=
lpha activity	U	1.82	pCi/L	5.72	1/29/2025	3.13	3.15	SW846-9310	=
eta activity	U	9.85	pCi/L	9.97	1/29/2025	6.49	6.69	SW846-9310	=
,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/29/2025			SW846-8011	=
,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,1-Trichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
-Butanone	US	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	US	1		1				SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025				=
romoform	U		ug/L		1/29/2025			SW846-8260D	
		1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
arbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
arbon tetrachloride	US	1	ug/L	1	1/29/2025			SW846-8260D	UJ
hlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroform	US	1	ug/L	1	1/29/2025			SW846-8260D	=
hloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
1ethylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
tyrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
oluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
otal Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
richloroethene	JS	0.42	ug/L	1	1/29/2025			SW846-8260D	J
richlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	US	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		164	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	J	4.78	ug/L	10	1/29/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.71	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW3</u>	392 DOWN		RGA Type: LRGA Period: 1st Quarter 2025						
AKGWA Well Tag #:	8004-4806	////	SAMPL	-	W392SG2-2		ample Ty		
	8004-4800		JAIVIPL	Reporting	Date	Counting		pe. <u>red</u>	
Parameter	Qualifier	Result	Units	Limit	Collected	Error (+/-)	TPU	Method	Validation
romide		0.558	mg/L	0.2	1/29/2025			SW846-9056A	=
hloride	J	43	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.199	mg/L	4	1/29/2025			SW846-9056A	=
itrate as Nitrogen	J	0.806	mg/L	10	1/29/2025			SW846-9056A	=
ulfate		7.43	mg/L	0.4	1/29/2025			SW846-9056A	=
arometric Pressure Reading		30.03	Inches/Hg		1/29/2025				Х
onductivity		338	µmhos/cm		1/29/2025				Х
epth to Water		42.14	ft		1/29/2025				Х
issolved Oxygen		2.56	mg/L		1/29/2025				Х
h (approx)		471	mV		1/29/2025				Х
H		5.74	Std Unit		1/29/2025				Х
emperature		55.8	deg F		1/29/2025				Х
urbidity		2.77	NTU		1/29/2025				Х
luminum	J	0.0197	mg/L	0.05	1/29/2025			SW846-6020B	=
ntimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
rsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
arium	0	0.252	mg/L	0.004	1/29/2025			SW846-6020B	=
eryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
oron	0	0.0214	mg/L	0.015	1/29/2025			SW846-6020B	=
admium	U	0.0214	mg/L	0.001	1/29/2025			SW846-6020B	=
alcium	0		-	0.001					=
	U	24.3	mg/L		1/29/2025			SW846-6020B	
hromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper		0.00205	mg/L	0.002	1/29/2025			SW846-6020B	=
ron .	J	0.0479	mg/L	0.1	1/29/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
/lagnesium		10.4	mg/L	0.03	1/29/2025			SW846-6020B	=
langanese		0.0177	mg/L	0.005	1/29/2025			SW846-6020B	=
Aolybdenum	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel	J	0.00124	mg/L	0.002	1/29/2025			SW846-6020B	=
otassium		2.07	mg/L	0.3	1/29/2025			SW846-6020B	=
hodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		24.4	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	J	0.00337	mg/L	0.02	1/29/2025			SW846-6020B	=
Nercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
arium, Dissolved		0.257	mg/L	0.004	1/29/2025			SW846-6020B	J
hromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ
Iranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
adium-226	U	0.355	pCi/L	0.701	1/29/2025	0.447	0.448	AN-1418	=

Strontium-90	U	1.42	pCi/L	2.76	1/29/2025	1.64	1.66	EPA-905.0-M	=
Tritium	U	-19.1	pCi/L	178	1/29/2025	96.2	96.2	EPA-906.0-M	=
Fechnetium-99	U	-5.13	pCi/L	19.7	1/29/2025	11	11	HASL 300, Tc-02- RC M	=
horium-230	U	1.21	pCi/L	2.35	1/29/2025	1.52	1.54	HASL 300, Th-01- RC M	=
lpha activity	U	-2.67	pCi/L	7.52	1/29/2025	2.11	2.11	SW846-9310	UJ
eta activity	U	0.287	pCi/L	10.1	1/29/2025	5.35	5.35	SW846-9310	=
,2-Dibromo-3-chloropropane	U	0.0189	ug/L	0.0189	1/29/2025			SW846-8011	=
,1,1,2-Tetrachloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,1,1-Trichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,1,2,2-Tetrachloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,1,2-Trichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,1-Dichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,1-Dichloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,2,3-Trichloropropane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,2-Dibromoethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,2-Dichlorobenzene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,2-Dichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
,2-Dichloropropane	HU	1		1	1/29/2025			SW846-8260D	UJ
,2-Dichlorobenzene	HUY1	1	ug/L ug/L	1	1/29/2025			SW846-8260D	UJ
-Butanone	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
-Hexanone	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
-Methyl-2-pentanone	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
cetone	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crolein	HUQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	HUQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
enzene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
romochloromethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
romodichloromethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
romoform	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
romomethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
arbon disulfide	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
arbon tetrachloride	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
hlorobenzene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
hloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
hloroform	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
hloromethane	HUQ	1	ug/L	1	1/29/2025			SW846-8260D	UJ
is-1,2-Dichloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
is-1,3-Dichloropropene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
ibromochloromethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
ibromomethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
thylbenzene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
odomethane	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
1ethylene chloride	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
tyrene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
etrachloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
oluene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
otal Xylene	HUY1	3	ug/L	3	1/29/2025			SW846-8260D	UJ
ans-1,2-Dichloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
rans-1,3-Dichloropropene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
rans-1,4-Dichloro-2-butene	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
richloroethene	HJ	0.65	ug/L	1	1/29/2025			SW846-8260D	1
	L LI	0.05	ч6/ L	1	1/20/2020			J ## 070-0200D	J

Vinyl acetate	HUQ	5	ug/L	5	1/29/2025	SW846-8260D	UJ
Vinyl chloride	HU	1	ug/L	1	1/29/2025	SW846-8260D	UJ
Dissolved Solids		149	mg/L	10	1/29/2025	EPA-160.1	=
lodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)		21.1	ug/L	10	1/29/2025	SW846-9020B	=
Total Organic Carbon (TOC)	J	0.437	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW3</u>	סס 893 מאני	WN	RGA Type: UCRS Period: 1st Quarter 2025						
AKGWA Well Tag #:	8004-4807		-	SAMPLE ID: MW393SG2-2					
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validatior
Bromide	U	0.2	mg/L	0.2	1/29/2025			SW846-9056A	=
Chloride	J	7.85	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.253	mg/L	4	1/29/2025			SW846-9056A	=
litrate as Nitrogen	U	10	mg/L	10	1/29/2025			SW846-9056A	=
ulfate		27	mg/L	0.8	1/29/2025			SW846-9056A	=
Barometric Pressure Reading		30.03	Inches/Hg		1/29/2025				Х
Conductivity		427	µmhos/cm		1/29/2025				Х
Depth to Water		28.83	ft		1/29/2025				Х
) Dissolved Oxygen		1.8	mg/L		1/29/2025				х
h (approx)		229	mV		1/29/2025				Х
H		6.16	Std Unit		1/29/2025				х
emperature		57.1	deg F		1/29/2025				X
urbidity		7.68	NTU		1/29/2025				X
Numinum	J	0.0363	mg/L	0.05	1/29/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
Arsenic	1	0.00421	mg/L	0.005	1/29/2025			SW846-6020B	=
arium	J	0.153	mg/L	0.003	1/29/2025			SW846-6020B	=
Beryllium	U	0.0005	-	0.0005				SW846-6020B	=
	0		mg/L		1/29/2025				=
loron		0.0176	mg/L	0.015	1/29/2025			SW846-6020B	
Cadmium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Calcium		18.4	mg/L	0.2	1/29/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper	J	0.00107	mg/L	0.002	1/29/2025			SW846-6020B	=
ron		2.77	mg/L	0.1	1/29/2025			SW846-6020B	=
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Aagnesium		4.56	mg/L	0.03	1/29/2025			SW846-6020B	=
Manganese		0.0745	mg/L	0.005	1/29/2025			SW846-6020B	=
Aolybdenum	J	0.000583	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Potassium		0.58	mg/L	0.3	1/29/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		91	mg/L	1.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Jranium	J	0.000156	mg/L	0.0002	1/29/2025			SW846-6020B	=
'anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
Aercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
, Barium, Dissolved		0.0897	mg/L	0.004	1/29/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ
Jranium, Dissolved	J	0.000107	mg/L	0.0002	1/29/2025			SW846-6020B	J
Radium-226	U	0.274	pCi/L	0.727	1/29/2025	0.434	0.434	AN-1418	=

Strontium-90	U	0.186	pCi/L	2.95	1/29/2025	1.56	1.56	EPA-905.0-M	=
Tritium	U	31	pCi/L	177	1/29/2025	100	101	EPA-906.0-M	=
Technetium-99	U	-4.56	pCi/L	19.4	1/29/2025	10.9	10.9	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.533	pCi/L	1.77	1/29/2025	1.02	1.02	HASL 300, Th-01- RC M	=
Alpha activity	U	0.223	pCi/L	5.76	1/29/2025	2.27	2.28	SW846-9310	=
Beta activity		10.1	pCi/L	9.62	1/29/2025	6.3	6.52	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,1-Trichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
I,1-Dichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
.,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
.,2-Dichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
-Butanone	US	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
bromoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	US	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroform	US	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
bibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Aethylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	-
tyrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1				SW846-8260D	=
oluene	UY1		-	1	1/29/2025			SW846-8260D SW846-8260D	=
	UY1 UY1	1	ug/L		1/29/2025				
otal Xylene		3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Trichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	US	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		265	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	J	9.2	ug/L	10	1/29/2025	SW846-9020B	=
Total Organic Carbon (TOC)		2.27	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW3</u>	94 UP		RGA Type: URGA Period: 1st Quarter 2025						
AKGWA Well Tag #:	8004-4802		SAMPL	-	W394SG2-2		Sample Type: REG		
				Reporting	Date	Counting		·	
Parameter	Qualifier	Result	Units	Limit	Collected	Error (+/-)	TPU	Method	Validation
Bromide		0.574	mg/L	0.2	1/29/2025			SW846-9056A	=
hloride	J	46.7	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.129	mg/L	4	1/29/2025			SW846-9056A	=
itrate as Nitrogen	J	1.42	mg/L	10	1/29/2025			SW846-9056A	=
ulfate		11.6	mg/L	0.4	1/29/2025			SW846-9056A	=
arometric Pressure Reading		30.08	Inches/Hg		1/29/2025				Х
onductivity		436	µmhos/cm		1/29/2025				Х
epth to Water		54.65	ft		1/29/2025				Х
issolved Oxygen		4.8	mg/L		1/29/2025				Х
h (approx)		378	mV		1/29/2025				Х
Н		5.99	Std Unit		1/29/2025				х
emperature		58.8	deg F		1/29/2025				Х
urbidity		1.45	NTU		1/29/2025				Х
luminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
ntimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
rsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
arium		0.263	mg/L	0.004	1/29/2025			SW846-6020B	=
eryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
oron		0.0191	mg/L	0.015	1/29/2025			SW846-6020B	=
admium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
alcium	Ũ	27.9	mg/L	0.2	1/29/2025			SW846-6020B	=
hromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper	1	0.00174	mg/L	0.002	1/29/2025			SW846-6020B	=
ron	J	0.00174	mg/L	0.002	1/29/2025			SW846-6020B	=
ead	U	0.0418	mg/L	0.002				SW846-6020B	=
	0	11.7	-	0.002	1/29/2025			SW846-6020B	=
Aagnesium			mg/L		1/29/2025				
Aanganese	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
1olybdenum	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel		0.00685	mg/L	0.002	1/29/2025			SW846-6020B	=
otassium		1.44	mg/L	0.3	1/29/2025			SW846-6020B	=
thodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		33.6	mg/L	0.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
ranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	J	0.012	mg/L	0.02	1/29/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
arium, Dissolved		0.287	mg/L	0.004	1/29/2025			SW846-6020B	J
hromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ
ranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
adium-226	U	0.586	pCi/L	0.665	1/29/2025	0.505	0.506	AN-1418	=

Strontium-90	U	0.107	pCi/L	1.85	1/29/2025	0.963	0.963	EPA-905.0-M	=
Tritium	U	21.7	pCi/L	179	1/29/2025	100	100	EPA-906.0-M	=
Technetium-99	U	9.28	pCi/L	18.9	1/29/2025	11.2	11.3	HASL 300, Tc-02- RC M	=
Fhorium-230	U	1.06	pCi/L	1.68	1/29/2025	1.17	1.19	HASL 300, Th-01- RC M	=
Ipha activity	U	1.17	pCi/L	5.7	1/29/2025	2.86	2.87	SW846-9310	=
eta activity	U	4.58	pCi/L	9.62	1/29/2025	5.68	5.73	SW846-9310	=
,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/29/2025			SW846-8011	=
,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,1-Trichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U				1/29/2025			SW846-8260D	
· · · ·	UY1	1	ug/L	1	1/29/2025				=
,4-Dichlorobenzene		1	ug/L	1				SW846-8260D	=
-Butanone	US	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
arbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
arbon tetrachloride	US	1	ug/L	1	1/29/2025			SW846-8260D	UJ
hlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroform	US	1	ug/L	1	1/29/2025			SW846-8260D	=
hloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
s-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
1ethylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
tyrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
oluene	UY1		-	1	1/29/2025			SW846-8260D	=
	UY1	1	ug/L						
otal Xylene		3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
richloroethene	S	3.07	ug/L	1	1/29/2025			SW846-8260D	J
Frichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	US	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids	U	10	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	HU	10	ug/L	10	1/29/2025	SW846-9020B	UJ
Total Organic Carbon (TOC)	J	0.534	mg/L	2	1/29/2025	SW846-9060A	=

	· _			IcCracken Permit #: <u>SW07300014,SW07300015,SW0</u>						
Sampling Point: <u>MW3</u>	95 UP		RGA Ty	pe: <u>LRGA</u>	<u> </u>	Period: 1st Quarter 2025				
AKGWA Well Tag #:	8004-4801		SAMPL	E ID:	W395SG2-2	<u>25</u> S	ample Ty	vpe: <u>REG</u>		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation	
Bromide		0.544	mg/L	0.2	1/29/2025			SW846-9056A	=	
Chloride	J	48.4	mg/L	250	1/29/2025			SW846-9056A	=	
luoride	J	0.132	mg/L	4	1/29/2025			SW846-9056A	=	
litrate as Nitrogen	J	1.28	mg/L	10	1/29/2025			SW846-9056A	=	
ulfate		11.1	mg/L	0.4	1/29/2025			SW846-9056A	=	
arometric Pressure Reading		30.08	Inches/Hg		1/29/2025				Х	
Conductivity		387	µmhos/cm		1/29/2025				Х	
) Depth to Water		55.31	ft		1/29/2025				Х	
Dissolved Oxygen		5.05	mg/L		1/29/2025				х	
:h (approx)		384	mV		1/29/2025				X	
iH		5.97	Std Unit		1/29/2025				x	
emperature		58.7	deg F		1/29/2025				x	
urbidity		1.05	NTU		1/29/2025				X	
	U			0.05				SW846-6020B	=	
Aluminum		0.05	mg/L		1/29/2025					
Antimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=	
vrsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
arium		0.262	mg/L	0.004	1/29/2025			SW846-6020B	=	
Beryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=	
Boron		0.0196	mg/L	0.015	1/29/2025			SW846-6020B	=	
Cadmium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Calcium		27.9	mg/L	0.2	1/29/2025			SW846-6020B	=	
Chromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=	
Cobalt	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Copper	J	0.00157	mg/L	0.002	1/29/2025			SW846-6020B	=	
ron	J	0.0415	mg/L	0.1	1/29/2025			SW846-6020B	=	
ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
Magnesium		11.8	mg/L	0.03	1/29/2025			SW846-6020B	=	
/langanese	J	0.00134	mg/L	0.005	1/29/2025			SW846-6020B	=	
Aolybdenum	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
lickel	J	0.000671	mg/L	0.002	1/29/2025			SW846-6020B	=	
Potassium		1.63	mg/L	0.3	1/29/2025			SW846-6020B	=	
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
odium	-	31.1	mg/L	0.25	1/29/2025			SW846-6020B	=	
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
hallium	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=	
Jranium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
'anadium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
	U		-							
linc		0.02	mg/L	0.02	1/29/2025			SW846-6020B	=	
Aercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=	
Barium, Dissolved		0.267	mg/L	0.004	1/29/2025			SW846-6020B	J	
hromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ	
Jranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ	
adium-226	U	0.379	pCi/L	0.748	1/29/2025	0.477	0.478	AN-1418	=	

Strontium-90	U	-1.52	pCi/L	2.82	1/29/2025	1.28	1.28	EPA-905.0-M	UJ
Tritium	U	56.5	pCi/L	173	1/29/2025	100	101	EPA-906.0-M	=
Technetium-99	U	2.8	pCi/L	20.6	1/29/2025	11.9	11.9	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.822	pCi/L	1.98	1/29/2025	1.2	1.21	HASL 300, Th-01- RC M	=
Alpha activity	U	1.71	pCi/L	6.5	1/29/2025	3.44	3.46	SW846-9310	=
Beta activity		11.5	pCi/L	9.81	1/29/2025	6.58	6.86	SW846-9310	=
I,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	1/29/2025			SW846-8011	=
I,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
-Butanone	U	5		5				SW846-8260D	=
	U	5	ug/L		1/29/2025				
-Hexanone			ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
arbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
is-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Nethylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
tyrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
	UY1		-						
oluene		1	ug/L	1	1/29/2025			SW846-8260D	=
otal Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Trichloroethene		3.81	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		178	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	HU	10	ug/L	10	1/29/2025	SW846-9020B	UJ
Total Organic Carbon (TOC)	J	0.524	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW3</u>	96 UP		RGA Ty	pe: UCRS		Period: 1s	t Ouarter	2025		
AKGWA Well Tag #:	8004-4803		SAMPL	•	W396SG2-2		Sample Ty			
	8004-4803		JAIVIPL				bailiple ly	pe. <u>REG</u>		
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation	
Bromide		0.882	mg/L	0.2	1/29/2025			SW846-9056A	=	
Chloride	J	57.4	mg/L	250	1/29/2025			SW846-9056A	=	
Fluoride	J	0.569	mg/L	4	1/29/2025			SW846-9056A	=	
Nitrate as Nitrogen	U	10	mg/L	10	1/29/2025			SW846-9056A	=	
Sulfate		27.6	mg/L	0.8	1/29/2025			SW846-9056A	=	
Barometric Pressure Reading		30.09	Inches/Hg		1/29/2025				Х	
Conductivity		686	µmhos/cm		1/29/2025				Х	
Depth to Water		10.63	ft		1/29/2025				Х	
Dissolved Oxygen		1.06	mg/L		1/29/2025				Х	
Eh (approx)		369	mV		1/29/2025				Х	
рН		6.43	Std Unit		1/29/2025				х	
Temperature		60.1	deg F		1/29/2025				Х	
Furbidity		4.17	NTU		1/29/2025				Х	
Aluminum		0.0647	mg/L	0.05	1/29/2025			SW846-6020B	=	
Antimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=	
Arsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
Barium	0	0.135	mg/L	0.004	1/29/2025			SW846-6020B]	
Beryllium	U	0.0005	mg/L	0.0004	1/29/2025			SW846-6020B	=	
Boron	1	0.00715	mg/L	0.0005	1/29/2025			SW846-6020B	=	
Cadmium	J		-							
	0	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Calcium		18.6	mg/L	0.2	1/29/2025			SW846-6020B	=	
Chromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=	
Cobalt	-	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Copper	J	0.00142	mg/L	0.002	1/29/2025			SW846-6020B	=	
ron		0.157	mg/L	0.1	1/29/2025			SW846-6020B	=	
_ead	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
Magnesium		7.84	mg/L	0.03	1/29/2025			SW846-6020B	=	
Vanganese	J	0.00363	mg/L	0.005	1/29/2025			SW846-6020B	=	
Molybdenum	J	0.000214	mg/L	0.001	1/29/2025			SW846-6020B	=	
Nickel	J	0.00196	mg/L	0.002	1/29/2025			SW846-6020B	=	
Potassium		1.82	mg/L	0.3	1/29/2025			SW846-6020B	=	
Rhodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
Selenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
Silver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=	
Sodium		32.6	mg/L	0.25	1/29/2025			SW846-6020B	=	
Tantalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=	
Fhallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=	
Jranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=	
/anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=	
Zinc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=	
Mercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=	
Barium, Dissolved		0.391	mg/L	0.004	1/29/2025			SW846-6020B	J	
Chromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ	
Uranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ	
Radium-226	U	-0.0531	pCi/L	0.921	1/29/2025	0.426	0.426	AN-1418	=	

Strontium-90	U	-1.2	pCi/L	3.23	1/29/2025	1.65	1.65	EPA-905.0-M	=
Tritium	U	36.3	pCi/L	177	1/29/2025	101	101	EPA-906.0-M	=
Technetium-99	U	-4.73	pCi/L	19.8	1/29/2025	11.1	11.1	HASL 300, Tc-02- RC M	=
Thorium-230	U	-0.173	pCi/L	1.94	1/29/2025	0.862	0.863	HASL 300, Th-01- RC M	=
Alpha activity	U	-0.598	pCi/L	7.37	1/29/2025	2.91	2.91	SW846-9310	=
Beta activity	U	-1.26	pCi/L	9.34	1/29/2025	4.75	4.75	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,1-Trichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloroethane	US	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
2-Butanone	US	5	ug/L	5	1/29/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Acrylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Benzene	US	1	-	1	1/29/2025			SW846-8260D	=
Bromochloromethane	U		ug/L	1					=
		1	ug/L		1/29/2025			SW846-8260D	
Bromodichloromethane	UU	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromoform		1	ug/L	1	1/29/2025			SW846-8260D	
Bromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	US	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloroform	US	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Ethylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Styrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Toluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Total Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Trichloroethene	US	1	ug/L	1	1/29/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	US	1	ug/L	1	1/29/2025	SW846-8260D	=
Dissolved Solids		376	mg/L	10	1/29/2025	EPA-160.1	=
Iodide	J	0.465	mg/L	0.5	1/29/2025	EPA-300.0	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=
Total Organic Halides (TOX)	Н	33.7	ug/L	10	1/29/2025	SW846-9020B	J
Total Organic Carbon (TOC)		3.59	mg/L	2	1/29/2025	SW846-9060A	=

Sampling Point: <u>MW3</u>	97 UP		RGA Type: LRGA Period:			Period: 1st	d: 1st Quarter 2025		
AKGWA Well Tag #:	8004-4817		SAMPL	•	W397SG2-2				
				Reporting	Date	Counting	ample Ty	·	
Parameter	Qualifier	Result	Units	Limit	Collected	Error (+/-)	TPU	Method	Validation
Bromide		0.393	mg/L	0.2	1/29/2025			SW846-9056A	=
Chloride	J	32.8	mg/L	250	1/29/2025			SW846-9056A	=
luoride	J	0.186	mg/L	4	1/29/2025			SW846-9056A	=
litrate as Nitrogen	J	1.05	mg/L	10	1/29/2025			SW846-9056A	=
oulfate		11.4	mg/L	0.4	1/29/2025			SW846-9056A	=
arometric Pressure Reading		30.08	Inches/Hg		1/29/2025				Х
Conductivity		316	µmhos/cm		1/29/2025				Х
epth to Water		63.2	ft		1/29/2025				Х
Dissolved Oxygen		6.38	mg/L		1/29/2025				Х
h (approx)		389	mV		1/29/2025				Х
Н		6	Std Unit		1/29/2025				х
emperature		60.4	deg F		1/29/2025				Х
urbidity		3.17	NTU		1/29/2025				Х
luminum	U	0.05	mg/L	0.05	1/29/2025			SW846-6020B	=
ntimony	U	0.003	mg/L	0.003	1/29/2025			SW846-6020B	=
rsenic	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
arium		0.386	mg/L	0.004	1/29/2025			SW846-6020B	=
eryllium	U	0.0005	mg/L	0.0005	1/29/2025			SW846-6020B	=
oron	U	0.015	mg/L	0.015	1/29/2025			SW846-6020B	=
admium	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
alcium	0	31.8	mg/L	0.2	1/29/2025			SW846-6020B	=
hromium	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	=
Cobalt	J	0.000406	mg/L	0.001	1/29/2025			SW846-6020B	=
Copper	J	0.00165	mg/L	0.002	1/29/2025			SW846-6020B	=
ron	J	0.266	mg/L	0.002	1/29/2025			SW846-6020B	=
	U	0.200	-	0.002					=
ead	0		mg/L		1/29/2025			SW846-6020B	=
Aagnesium		14.2	mg/L	0.03	1/29/2025			SW846-6020B	
Aanganese		0.287	mg/L	0.005	1/29/2025			SW846-6020B	=
1olybdenum	J	0.000359	mg/L	0.001	1/29/2025			SW846-6020B	=
lickel	J	0.00137	mg/L	0.002	1/29/2025			SW846-6020B	=
otassium		0.79	mg/L	0.3	1/29/2025			SW846-6020B	=
thodium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
elenium	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
ilver	U	0.001	mg/L	0.001	1/29/2025			SW846-6020B	=
odium		99.2	mg/L	1.25	1/29/2025			SW846-6020B	=
antalum	U	0.005	mg/L	0.005	1/29/2025			SW846-6020B	=
hallium	U	0.002	mg/L	0.002	1/29/2025			SW846-6020B	=
Iranium	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	=
anadium	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
inc	U	0.02	mg/L	0.02	1/29/2025			SW846-6020B	=
/lercury	U	0.0002	mg/L	0.0002	1/29/2025			SW846-7470A	=
arium, Dissolved		0.133	mg/L	0.004	1/29/2025			SW846-6020B	J
hromium, Dissolved	U	0.01	mg/L	0.01	1/29/2025			SW846-6020B	UJ
Iranium, Dissolved	U	0.0002	mg/L	0.0002	1/29/2025			SW846-6020B	UJ
adium-226	U	0.234	pCi/L	0.671	1/29/2025	0.431	0.431	AN-1418	=

Strontium-90	U	-1.09	pCi/L	2.36	1/29/2025	1.07	1.07	EPA-905.0-M	UJ
Tritium	U	17.1	pCi/L	172	1/29/2025	96	96.1	EPA-906.0-M	=
Technetium-99	U	19	pCi/L	19.7	1/29/2025	12.1	12.3	HASL 300, Tc-02- RC M	=
Thorium-230	U	0.153	pCi/L	1.71	1/29/2025	0.847	0.85	HASL 300, Th-01- RC M	=
Alpha activity	U	2.09	pCi/L	7.45	1/29/2025	4.02	4.03	SW846-9310	=
Beta activity		15.3	pCi/L	8.59	1/29/2025	6.43	6.93	SW846-9310	=
L,2-Dibromo-3-chloropropane	U	0.0188	ug/L	0.0188	1/29/2025			SW846-8011	=
,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
.,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
cetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
crolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
crylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
enzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
romodichloromethane	U	1	ug/L ug/L	1	1/29/2025			SW846-8260D	=
romoform	U	1	ug/L ug/L	1	1/29/2025			SW846-8260D	=
romomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
arbon disulfide	U	5	-	5	1/29/2025			SW846-8260D	-
arbon tetrachloride	U		ug/L					SW846-8260D	
	UY1	1	ug/L	1	1/29/2025				=
hlorobenzene		1	ug/L		1/29/2025			SW846-8260D	=
hloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloroform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
hloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
s-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
s-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
ibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
thylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
odomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
1ethylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
tyrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
etrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
oluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
otal Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
rans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
rans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
richloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
richlorofluoromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	1/29/2025	SW846-8260D	=		
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Vinyl chloride	U	1	ug/L	1	1/29/2025	SW846-8260D	=		
Dissolved Solids		152	mg/L	10	1/29/2025	EPA-160.1	=		
Iodide	U	0.5	mg/L	0.5	1/29/2025	EPA-300.0	=		
Chemical Oxygen Demand (COD)	U	20	mg/L	20	1/29/2025	EPA-410.4	=		
Cyanide	U	0.2	mg/L	0.2	1/29/2025	SW846-9012B	=		
Total Organic Halides (TOX)	HJ	3.56	ug/L	10	1/29/2025	SW846-9020B	J		
Total Organic Carbon (TOC)	J	0.444	mg/L	2	1/29/2025	SW846-9060A	=		

Facility: <u>C-746-S&T L</u>	anunn	County:	IVICCIACKE	:11	Permit #:	3000/30001	.4,3000	7300015,SW0730	00045
Sampling Point:	QC				F	Period: 1st C	Quarter	2025	
AKGWA Well Tag #:	N/A		SAMP	LE ID: FE	31SG2-25	Sample Type: FB			
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	/alidation
Aluminum	U	0.05	mg/L	0.05	1/30/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/30/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Barium	U	0.004	mg/L	0.004	1/30/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	1/30/2025			SW846-6020B	=
Boron	U	0.015	mg/L	0.015	1/30/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Calcium	U	0.2	mg/L	0.2	1/30/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Copper	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Iron	U	0.1	mg/L	0.1	1/30/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Magnesium	U	0.03	mg/L	0.03	1/30/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Nickel	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Potassium	U	0.3	mg/L	0.3	1/30/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Sodium	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Tantalum	U	0.23	mg/L	0.005				SW846-6020B	=
	U		-		1/30/2025				=
Thallium		0.002	mg/L	0.002	1/30/2025			SW846-6020B	
Uranium	<u> </u>	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	=
Vanadium	J	0.00407	mg/L	0.02	1/30/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	1/30/2025			SW846-7470A	UJ
Radium-226	U	0.198	pCi/L	0.41	1/30/2025	0.275	0.275	AN-1418	=
Strontium-90	U	-0.986	pCi/L	2.64	1/30/2025	1.22	1.22	EPA-905.0-M	=
Tritium	U	75.3	pCi/L	231	1/30/2025	135	135	EPA-906.0-M	=
Technetium-99	U	-0.000827	pCi/L	17.6	1/30/2025	9.86	9.86	HASL 300, Tc-02-RC I	
Thorium-230	U	0.389	pCi/L	1.59	1/30/2025	0.886	0.891	HASL 300, Th-01-RC	
Alpha activity	U	-1.65	pCi/L	7.54	1/30/2025	2.71	2.71	SW846-9310	=
Beta activity	U	-1.73	pCi/L	9.37	1/30/2025	4.65	4.65	SW846-9310	=
1,2-Dibromo-3-chloropropan		0.0189	ug/L	0.0189	1/30/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	-	1	1/30/2025			SW846-8260D	=
1,1,1-Trichloroethane	US	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethene	US	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=

1,2-Dichloroethane	US	1	ug/L	1	1/30/2025	SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
2-Butanone	US	5	ug/L	5	1/30/2025	SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Acetone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Acrylonitrile	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Benzene	US	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromoform	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Carbon tetrachloride	US	1	ug/L	1	1/30/2025	SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloroform	US	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloromethane	UQ	1	ug/L	1	1/30/2025	SW846-8260D	UJ
cis-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
lodomethane	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Styrene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Toluene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/30/2025	SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Trichloroethene	US	1	ug/L	1	1/30/2025	SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Vinyl acetate	UQ	5	ug/L	5	1/30/2025	SW846-8260D	
Vinyl chloride	US	1	ug/L	1	1/30/2025	SW846-8260D	=
lodide	U	0.5	mg/L	0.5	1/30/2025	EPA-300.0	=
Iouiue	U	0.5	IIIB/ L	0.5	1/30/2023	EPA-500.0	-

Facility: <u>C-746-S&T La</u>	indfill (County:	McCracke	en	Permit #:	SW0730001	L4,SWC	7300015,SW0730	<u>)00</u> 45
Sampling Point:	QC				P	Period: 1st (Quarte	2025	
AKGWA Well Tag #:	N/A		SAMP	LE ID: RI	1SG2-25	Sampl	е Туре	RI	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Aluminum	U	0.05	mg/L	0.05	1/30/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	1/30/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Barium	U	0.004	mg/L	0.004	1/30/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	1/30/2025			SW846-6020B	=
Boron	U	0.015	mg/L	0.015	1/30/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Calcium	U	0.2	mg/L	0.2	1/30/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	1/30/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Copper	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Iron	U	0.1	mg/L	0.1	1/30/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Magnesium	U	0.03	mg/L	0.03	1/30/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Nickel	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	=
Potassium	U	0.002	mg/L	0.3	1/30/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Selenium	U	0.005	-	0.005	1/30/2025			SW846-6020B	=
	U	0.003	mg/L	0.003				SW846-6020B	=
Silver Sodium	U	0.001	mg/L	0.001	1/30/2025			SW846-6020B	
	U		mg/L		1/30/2025				=
Tantalum		0.005	mg/L	0.005	1/30/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	1/30/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	1/30/2025			SW846-6020B	=
Vanadium 	J	0.00425	mg/L	0.02	1/30/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	1/30/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	1/30/2025			SW846-7470A	UJ
Radium-226	U	0.0823	pCi/L	0.542	1/30/2025	0.283	0.283	AN-1418	=
Strontium-90	U	0.118	pCi/L	1.48	1/30/2025	0.772	0.773	EPA-905.0-M	=
Tritium	U	23.7	pCi/L	225	1/30/2025	128	128	EPA-906.0-M	=
Technetium-99	U	3.36	pCi/L	17.2	1/30/2025	9.86	9.86	HASL 300, Tc-02-RC	
Thorium-230	U	0.363	pCi/L	2.1	1/30/2025	1.12	1.12	HASL 300, Th-01-RC	M =
Alpha activity	U	0.585	pCi/L	5.4	1/30/2025	2.45	2.45	SW846-9310	=
Beta activity	U	2.57	pCi/L	8.82	1/30/2025	4.99	5.01	SW846-9310	=
1,2-Dibromo-3-chloropropane	e U	0.0189	ug/L	0.0189	1/30/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/30/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	1/30/2025			SW846-8260D	=

1,2-Dichloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Acetone	J	2.66	ug/L	5	1/30/2025	SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Acrylonitrile	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Benzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromoform	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chlorobenzene	J	0.39	ug/L	1	1/30/2025	SW846-8260D	=
Chloroethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloroform	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Chloromethane	UQ	1	ug/L	1	1/30/2025	SW846-8260D	UJ
cis-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Styrene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Toluene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Total Xylene	U	3	ug/L	3	1/30/2025	SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/30/2025	SW846-8260D	=
Trichloroethene	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	1/30/2025	SW846-8260D	=
Vinyl acetate	UQ	5	ug/L	5	1/30/2025	SW846-8260D	UJ
Vinyl chloride	U	1	ug/L	1	1/30/2025	SW846-8260D	=
lodide	U	0.5	mg/L	0.5	1/30/2025	EPA-300.0	=
	0	5.5		0.0	_, 00, 2020	2	

Facility C 746 SST Lar	adfill (SW0720001		7200015 514/0-	200045
Facility: <u>C-746-S&T Lar</u>		county:	IVICCIACKE	20				7300015,SW07	<u>3000</u> 45
Sampling Point: 0	QC				F	Period: 1st Q	uarter	2025	
AKGWA Well Tag #:	N/A		SAMP	LE ID: TE	31SG2-25	Sample	e Type:	ТВ	
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
1,4-Dichlorobenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Acrolein	UQ	5	ug/L	5	1/29/2025			SW846-8260D	IJ
Acrylonitrile	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chlorobenzene	JY1	0.39	ug/L ug/L	1	1/29/2025			SW846-8260D	=
Chloroethane	U	0.39	ug/L ug/L	1					
			-		1/29/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Chloromethane	U	1	0,	1	1/29/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Ethylbenzene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Styrene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
Toluene	UY1	1	ug/L	1	1/29/2025			SW846-8260D	=
Total Xylene	UY1	3	ug/L	3	1/29/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	1/29/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	1/29/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	1/29/2025			SW846-8260D	=

Trichlorofluoromethane	U	1 ug/L	1	1/29/2025	SW846-8260D	=
Vinyl acetate	U	5 ug/L	5	1/29/2025	SW846-8260D	=
Vinyl chloride	U	1 ug/L	1	1/29/2025	SW846-8260D	=

		GROUNI	DWATER	MONITORIN	IG REPORT				
Facility: <u>C-746-S&T Land</u>	lfill C	ounty:	McCracke	en	Permit #:	SW0730001	4,SW0	7300015,SW07	<u>73000</u> 45
Sampling Point:	2				F	Period: 1st Q	uarter	2025	
AKGWA Well Tag #:	N/A		SAMP	PLE ID: TE	2SG2-25	Sample	Type	ТВ	
			_	Reporting	Date	Counting			
Parameter	Qualifier	Result	Units	Limit	Collected	Error (+/-)	TPU	Method	Validation
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	1/29/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	HU	1	-	1	1/29/2025			SW846-8260D	UJ
1,1,1-Trichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1.1.2.2-Tetrachloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,1,2-Trichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,1-Dichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,1-Dichloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,2,3-Trichloropropane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,2-Dibromoethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,2-Dichlorobenzene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,2-Dichloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,2-Dichloropropane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
1,4-Dichlorobenzene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
2-Butanone	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
2-Hexanone	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
4-Methyl-2-pentanone	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Acetone	ВНЈ	1.76	ug/L	5	1/29/2025			SW846-8260D	UJ
Acrolein	HUQ	5	ug/L	5	1/29/2025			SW846-8260D	UJ
	HU	5		5					UJ
Acrylonitrile			ug/L		1/29/2025			SW846-8260D	· · · · · ·
Benzene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Bromochloromethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Bromodichloromethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Bromoform	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Bromomethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Carbon disulfide	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Carbon tetrachloride	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chlorobenzene	HJY1	0.46	ug/L	1	1/29/2025			SW846-8260D	J
Chloroethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chloroform	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Chloromethane	HU	1	0,	1	1/29/2025			SW846-8260D	UJ
cis-1,2-Dichloroethene	HU	1	0.	1	1/29/2025			SW846-8260D	UJ
cis-1,3-Dichloropropene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Dibromochloromethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Dibromomethane	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Ethylbenzene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Iodomethane	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Methylene chloride	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Styrene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Tetrachloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Toluene	HUY1	1	ug/L	1	1/29/2025			SW846-8260D	UJ
Total Xylene	HUY1	3	ug/L	3	1/29/2025			SW846-8260D	UJ
trans-1,2-Dichloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
trans-1,3-Dichloropropene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ
trans-1,4-Dichloro-2-butene	HU	5	ug/L	5	1/29/2025			SW846-8260D	UJ
Trichloroethene	HU	1	ug/L	1	1/29/2025			SW846-8260D	UJ

Trichlorofluoromethane	HU	1 ug/L	1	1/29/2025	SW846-8260D	UJ
Vinyl acetate	HU	5 ug/L	5	1/29/2025	SW846-8260D	UJ
Vinyl chloride	HU	1 ug/L	1	1/29/2025	SW846-8260D	UJ

				MONITORIN					
Facility: <u>C-746-S&T Lanc</u>	<u>dfill</u> C	ounty:	McCracke	en	Permit #:	SW0730001	4,SW0	7300015,SW07	<u>73000</u> 45
Sampling Point: <u>QC</u>	2				F	Period: 1st Q	uarter	2025	
AKGWA Well Tag #:	N/A		SAMP	PLE ID: TE	33SG2-25	Sample	e Type:	тв	
				Reporting	Date	Counting			
Parameter	Qualifier	Result	Units	Limit	Collected	Error (+/-)	TPU	Method	Validation
1,2-Dibromo-3-chloropropane	U	0.0189	ug/L	0.0189	1/30/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,1,1-Trichloroethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,1,2,2-Tetrachloroethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,1,2-Trichloroethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,1-Dichloroethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,1-Dichloroethene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,2,3-Trichloropropane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,2-Dibromoethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,2-Dichlorobenzene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,2-Dichloroethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,2-Dichloropropane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
1,4-Dichlorobenzene	HJ	0.35	ug/L	1	1/30/2025			SW846-8260D	J
2-Butanone	HU	5	ug/L	5	1/30/2025			SW846-8260D	UJ
2-Hexanone	HU	5	ug/L	5	1/30/2025			SW846-8260D	UJ
4-Methyl-2-pentanone	HU	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Acetone	BHJ	3.66	ug/L	5	1/30/2025			SW846-8260D	UJ
Acrolein	HUQ	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Acrylonitrile	HUQ	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Benzene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Bromochloromethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Bromodichloromethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Bromoform	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Bromomethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Carbon disulfide	HU	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Carbon tetrachloride	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Chlorobenzene	HJ	0.44	ug/L	1	1/30/2025			SW846-8260D	J
Chloroethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Chloroform	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Chloromethane	HUQ	1	ug/L	1	1/30/2025			SW846-8260D	UJ
cis-1,2-Dichloroethene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
cis-1,3-Dichloropropene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Dibromochloromethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Dibromomethane	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Ethylbenzene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Iodomethane	HU	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Methylene chloride	HU	5	ug/L	5	1/30/2025			SW846-8260D	UJ
Styrene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Tetrachloroethene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Toluene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
Total Xylene	HU	3	ug/L	3	1/30/2025			SW846-8260D	UJ
trans-1,2-Dichloroethene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
trans-1,3-Dichloropropene	HU	1	ug/L	1	1/30/2025			SW846-8260D	UJ
trans-1,4-Dichloro-2-butene	HU	5	ug/L ug/L	5	1/30/2025			SW846-8260D	U
Trichloroethene	HU	1	ug/L ug/L	1	1/30/2025			SW846-8260D SW846-8260D	UJ
	110	Ţ	ч <u>6</u> / L	1	1, 30, 2023			J # # 0 - 0 - 0 2 0 0 D	01

Trichlorofluoromethane	HU	1 ug/L	1	1/30/2025	SW846-8260D	UJ
Vinyl acetate	HUQ	5 ug/L	5	1/30/2025	SW846-8260D	UJ
Vinyl chloride	HU	1 ug/L	1	1/30/2025	SW846-8260D	UJ

Qualifier	Code Definitions
*	Duplicate analysis not within control limits.
В	Analyte was detected in the associated blank.
н	Analysis performed outside holding time requirement.
J	Estimated quantitation.
L	LCS and/or LCSD recovery outside of control limits.
L1	LCS/LCSD RPD outside acceptance criteria.
N	Sample spike (MS/MSD) recovery not within control limits
N1	MS/MSD or PS/PSD RPD outside acceptance criteria.
Q	Quality issue exists with instrument calibration.
Р	Difference between results from two GC columns outside control limits.
S	Sample surrogate recovery outside acceptance criteria.
Т	Tracer recovery outside control limits of 30-110%.
U	Not detected. RADS: Value reported is < MDA and/or TPU.
W	Post-digestion spike recovery out of control limits.
W1	Post-digestion spike and post-digestion spike duplicate RPD out of control limits.
х	Other specific flags and footnotes may be required to properly define the results.
Y1	MS/MSD recovery outside acceptance criteria.
Y2	MS/MSD RPD outside acceptance criteria.

RGA Type	Code Definitions
LRGA	Lower Regional Gravel Aquifer
UCRS	Upper Continental Recharge System
URGA	Upper Regional Gravel Aquifer
NA	Not Applicable.

Sample Type Code Definitions

Regular
Field Replicate (code used for Field Duplicate)
Equipment Rinsate Blank
Field Blank
Trip Blank
F F

Validation Code Definitions

=	Validated result, no additional qualifier necessary
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
	The analyte was analyzed for, but was not detected above the reported sample quantitation
U	limit.
UJ	Analyte not detected above the reported detection limit, and the reported detection limit is approximated due to quality deficiency.
Х	Not validated

ATTACHMENT C1

GEL LABORATORIES CERTIFICATE OF ANALYSIS

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GEL LABORATORIES LLC 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Report Date: April 29, 2025 Contact: M. Jaine Morrow Project: C-746-U1 andfill Quarterly(UG25-02) Client Sample ID: MW3/309/UG2-25 FNNP00607 Sample ID: WOOD COLSPAN Second Date: 2.9.1AN-25 Collect Date: 2.9.1AN-25 Collect Date: 2.9.1AN-25 Collect Date: 2.9.1AN-25 Received? Thomas Received? RAM-148 AlphaSpec Ra25, Liquid "As Received? Thomas 2.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.01.010 Class Rade Ford Protocol Colspan="2">Class Rade Ford Protocol Colspan="2">Class Rade Ford Protocol Colspan="2">Notable Rade Ford Protocol Colspan="2">0.010000000000000000000000000000000000	Company : Address :	Four Rivers N LLC 5600 Hobbs R		ıership,										
Project: C-74-UI Land/FIII Quarterly(UG25-02) Client Sample ID: MV369UC32-25 Sample ID: FRNP00607 Sample ID: Collect: Client ID: FRNP00607 Sample ID: Collect: Project: FRNP00607 Matrix: WG Collect: Client ID: FRNP00607 Parameter Qualife Neartine Towe Project: FRNP00607 Collect: Client ID: FRNP00607 Client Matrix: Project: FRNP00607 Client Matrix: Project: FRNP00607 Client Matrix: Project: Client Matrix: Project: Client Matrix: Project: Client Matrix: Project: Client Matrix: Project: Client Matrix: Project: Project: Projeci: Projeci: <td></td> <td>Kevil, Kentuc</td> <td>ky 42053-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Repo</td> <td>rt Date:</td> <td>April 29,</td> <td>2025</td> <td>ļ</td>		Kevil, Kentuc	ky 42053-						Repo	rt Date:	April 29,	2025	ļ	
Client Sample D: Sample D: Sample D: Sample D: VO(92013 - VO(92013 -	Contact:	Ms. Jaime Mc	orrow										ļ	
Client Sample D: Sample D: Sample D: Sample D: VO(92013 - VO(92013 -	Project:	C-746-U Lan	dfill Quarter	cly(UG25-02	.)								ļ	
Parameter Qualifier Result Uncertainty MDC TPU RL Units PF DF Date Time Rate Muttable Rad Alpha Spec August 3000 U 0.848 +/a1.34 2.03 +/a1.34 5.00 pC/iL CM 0.20625 2741552 1 Th-OI-RC M, Th Isotopes, Liquid "As Received" T 1.01 +/a.03 1.07 +/a.034 5.00 pC/iL CM4 0.20225 1602 2741552 1 Thorium-232 U -0.011 +/a.03 1.07 +/a.034 5.00 pC/iL CM4 0.20225 1602 2741652 2 MBG Cas Flow Propertional Communit 3.06 +/2.81 4.59 +/2.92 4.99 pC/iL H13 0.217125 10.7 2 2 2 10.8 2 2 10.8 2 2 2 11.62 2 2 11.62 5 2 11.62 5 2 11.62 5 2 11.62 5 2 11.62 5 2 11.62 5 2	Client Sample Sample ID: Matrix: Collect Date: Receive Date:	ID: MW369 7060920 WG 28-JAN 29-JAN	9UG2-25 013 N-25											
Rad Alpha Spec Analysis ANI-1418 AlphaSpec Ra226, Liquid "As Received" COL 0.848 + -1.134 2.03 + +1.134 5.00 pCi/L CM 0.02025 1091 2741552 1 The-OL-RC M. Th Isotopes, Liquid "As Received" COL 0.0488 + -1.134 2.03 + +1.134 5.00 pCi/L CM 0.02025 1091 2741552 1 The-OL-RC M. Th Isotopes, Liquid "As Received" COL 0.0111 + +0.394 1.07 + +0.394 pCi/L CM 0.02025 1005 2741553 2 Projectional Counting 904.0Mod. Ra228, Liquid "As Received" Strontum-228 0 3.06 + -2.81 4.59 +1.2.92 4.99 pCi/L ST2 02/14/25 0824 2741662 3 905.0Mod.27.09. liquid "As Received" Strontum-90 0 -2.3. +/-2.12 6.03 + +/-3.13 15.0 pCi/L AH 0.0204/25 1501 2741642 5 Strontum-90 2.5.3 + +/-96.6 197 + +/-12.3 50.0 pCi/L Rad Liquid Scintillation Analysis 906.0M, Tritum Dist, Liquid "As Received" The Coloving Amateria Methods were performed Materia Methods were performed Matoread Scintillion Analysis <th co<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th>	<td></td>													
AN-1418 AlphaSpec Ra226. Liquid "As Received" Radium-226 U 0.0848 ++1.134 5.00 C/L C/L 271152 1 Thorium-230 U 0.01119 +1.104 5.00 C/L C/L 2741552 2 Thorium-230 U 0.0119 +1.104 5.00 C/L C/L 2741552 2 Thorium-230 U 0.0119 +1.107 +1.104 5.00 C/L C/L <th colspa<="" td=""><td></td><td></td><td>Result Ur</td><td>ncertainty</td><td>MDC</td><td>TPU</td><td>RL</td><td>Units</td><td>PF DI</td><td>F Analyst</td><td>Date Time</td><td>Batch M</td><td>Mtd.</td></th>	<td></td> <td></td> <td>Result Ur</td> <td>ncertainty</td> <td>MDC</td> <td>TPU</td> <td>RL</td> <td>Units</td> <td>PF DI</td> <td>F Analyst</td> <td>Date Time</td> <td>Batch M</td> <td>Mtd.</td>			Result Ur	ncertainty	MDC	TPU	RL	Units	PF DI	F Analyst	Date Time	Batch M	Mtd.
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Technetium-99 52.7 +/-14.3 20.7 +/-15.7 25.0 pCi/L GS3 02/12/25 012.7 2742288 7 The following Ametrical Methods were performed Method Description								r					-	
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Thorium-229 TracerTh-01-RC M, Th Isotopes, Liquid "As Received"274155397.3(30%-110%)Barium-133 Tracer904.0Mod, Ra228, Liquid "As Received"274166283.5(30%-110%)Strontium Carrier905.0Mod, Sr90, liquid "As Received"2751147105(30%-110%)	Surrogate/Tracer Re	ecovery 7	Гest						Batch ID	Recovery	% Accepta	ble Limit	IS	
Barium-133 Tracer 904.0Mod, Ra228, Liquid "As Received" 2741662 83.5 (30%-110%) Strontium Carrier 905.0Mod, Sr90, liquid "As Received" 2751147 105 (30%-110%)	Barium-133 Tracer	*	AN-1418 A	AlphaSpec Ra	a226, Liqui	d "As Received"			2741552	93.7	/ (30%-	110%)		
Strontium Carrier 905.0Mod, Sr90, liquid "As Received" 2751147 105 (30%-110%)	Thorium-229 Trace	er	Th-01-RC I	M, Th Isotor	es, Liquid	"As Received"			2741553	97.3	3 (30%-	·110%)		
	Barium-133 Tracer	ſ	904.0Mod,	Ra228, Liqu	iid "As Rec	ceived"			2741662	83.5	5 (30%-	-110%)		
Technetium-99m Tracer Tc-02-RC-MOD, Tc99, Liquid "As Received" 2742288 94 (30%-110%)	Strontium Carrier		905.0Mod,	Sr90, liquid	"As Receiv	ved"			2751147	105	(30%-	·110%)		
	Technetium-99m T	l'racer	Tc-02-RC-J	MOD, Tc99,	Liquid "A	s Received"			2742288	94	(30%-	110%)		

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road					
	Kevil, Kentucky 42053				Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow					
Project:	C-746-U Landfill Quarterly(UG25-02)					
Client Sample Sample ID:	D: MW369UG2-25 706092013			Project: Client ID:	FRNP00607 FRNP006	
Parameter	Qualifier Result Uncertainty M	MDC 1	TPU R	L Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Company : Address :	Four Rivers N LLC 5600 Hobbs R		nership,									
	Kevil, Kentuc	ky 42053						Rep	ort Date:	April 29,	2025	
Contact:	Ms. Jaime Mo	•								1 .		ļ
Project:	C-746-U Land		rlv(UG25-02	n								I
Client Sample)UG2-25	ly(0.020 0_			Pro	oject:	FRNP	00607			I
Sample ID: Matrix: Collect Date: Receive Date: Collector:	7060920 WG 28-JAN	015 -25					ient ID:	FRNP				
Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec Ana					•• v				<u></u>			12002
AN-1418 AlphaSpe		"As Receiv	ved"									
Radium-226	U	0.550	+/-0.742	0.999	+/-0.743	5.00	pCi/L		CM4 (02/05/25 0851	2741552	1
Th-01-RC M, Th Is	otopes, Liquid "A	As Received										İ
Thorium-230	U	0.565	+/-0.985	1.65	+/-0.992	50.0	pCi/L		CM4 (02/02/25 1606	2741553	2
Thorium-232	U Intional Countin	-0.110	+/-0.392	1.07	+/-0.393		pCi/L					l
Rad Gas Flow Propo 904.0Mod, Ra228,												
Radium-228	U	0.0913	+/-2.12	4.12	+/-2.12	4.99	pCi/L		ST2 (02/14/25 0817	2741072	3
905.0Mod, Sr90, lie	quid "As Receive	ed"										
Strontium-90	U	0.674	+/-1.47	2.62	+/-1.48	8.00	pCi/L		ST2 (02/11/25 1732	2741093	4
9310, Alpha/Beta A												
Alpha	U	0.420	+/-2.74	6.39	+/-2.75	15.0	pCi/L		AH4 (02/05/25 1427	2741058	5
Beta Ded Liquid Scintiller	U tion Analysis	8.43	+/-8.81	14.7	+/-8.92	50.0	pCi/L					
Rad Liquid Scintillat 906.0M, Tritium Di		eceived"										
Tritium	U	38.2	+/-111	203	+/-111	300	pCi/L		KXA1 (02/09/25 1455	2741845	6
Tc-02-RC-MOD, T	c99, Liquid "As l	Received"					-					
Technetium-99	U	11.0	+/-12.4	20.9	+/-12.5	25.0	pCi/L		GS3 (02/12/25 0144	2742288	7
The following Analy	tical Methods w	vere perfori	med									
	escription	r										
1 Ei	ichrom Industries,	AN-1418										
2 D	OE EML HASL-30	00, Th-01-RC	2 Modified									
3 EI	PA 904.0/SW846 9	320 Modified	d									
4 EF	PA 905.0 Modified	/DOE RP501	l Rev. 1 Modi	fied								
5 EI	PA 900.0/SW846 9	9310										
6 EI	PA 906.0 Modified	l										
7 D0	OE EML HASL-30	00, Tc-02-RC	Modified									
Surrogate/Tracer R	ecovery 7	ſest						Batch ID	Recovery	% Accepta	ble Limit	ts
Barium-133 Trace	r	AN-1418 A	AlphaSpec R	a226, Liqui	id "As Received"			2741552	99.4	4 (30%-	-110%)	
Thorium-229 Trac	cer	Th-01-RC	M, Th Isotor	pes, Liquid	"As Received"			2741553	96.1	1 (30%-	-110%)	
Barium-133 Trace	er	904.0Mod,	Ra228, Liqu	uid "As Rec	ceived"			2741072	84.4	4 (30%-	-110%)	
Strontium Carrier			Sr90, liquid					2741093		5 (30%-	-110%)	
Technetium-99m			MOD, Tc99,					2742288			-110%)	
recimentum-99in	11acci	10-02-KC-1	MOD, 1099,	Liquid A	s Received			2742200	75.1	(30%-	110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-U Landfill Quarterly(UG25-02)				
Client Sample Sample ID:	ID: MW370UG2-25 706092015		Project: Client ID:	FRNP00607 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU I	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

GEL LABORATORIES LLC 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Address : LLC 5600 Hobbs Road	
Kevil, Kentucky 42053 Report Date: April 29	2025
Contact: Ms. Jaime Morrow	
Project: C-746-U Landfill Quarterly(UG25-02)	
Client Sample ID:MW372UG2-25Project:FRNP00607Sample ID:706092019Client ID:FRNP006Matrix:WGCollect Date:28-JAN-25Receive Date:29-JAN-2529-JAN-25	
Collector: Client Percenter Opelities Result Uncertainte MDC TRU DI Unite RE DE Angleut Date Time	Detab M44
Parameter Qualifier Result Uncertainty MDC TPU RL Units PF DF Analyst Date Time	Batch Mtd.
Rad Alpha Spec Analysis AN-1418 AlphaSpec Ra226, Liquid "As Received"	
Radium-226 U 0.143 +/-0.538 1.03 +/-0.539 5.00 pCi/L CM4 02/05/25 0851	2741552 1
Th-01-RC M, Th Isotopes, Liquid "As Received"	
Thorium-230 U 0.105 +/-0.977 2.05 +/-0.979 50.0 pCi/L CM4 02/02/25 1606	2741553 2
Thorium-232 U -0.0789 +/-0.494 1.20 +/-0.495 pCi/L	
Rad Gas Flow Proportional Counting 904.0Mod, Ra228, Liquid "As Received"	
Radium-228 U -0.189 +/-2.44 4.97 +/-2.44 4.99 pCi/L ST2 02/14/25 0950	2741662 3
905.0Mod, Sr90, liquid "As Received"	
Strontium-90 U 0.214 +/-2.52 4.76 +/-2.52 8.00 pCi/L HH3 02/17/25 1037	2751147 4
9310, Alpha/Beta Activity, liquid "As Received"	
Alpha U -1.14 +/-2.72 7.51 +/-2.72 15.0 pCi/L AH4 02/04/25 1501	2741642 5
Beta 24.7 +/-7.83 9.41 +/-8.81 50.0 pCi/L	
Rad Liquid Scintillation Analysis 906.0M, Tritium Dist, Liquid "As Received"	
Tritium U 0.0328 +/-102 199 +/-102 300 pCi/L KXA1 02/09/25 1549	2741845 6
Tc-02-RC-MOD, Tc99, Liquid "As Received"	
Technetium-99 U 7.82 +/-12.5 21.3 +/-12.5 25.0 pCi/L GS3 02/12/25 0217	2742288 7
The following Analytical Methods were performed	
Method Description	
1 Eichrom Industries, AN-1418	
2 DOE EML HASL-300, Th-01-RC Modified	
3 EPA 904.0/SW846 9320 Modified	
4 EPA 905.0 Modified/DOE RP501 Rev. 1 Modified	
5 EPA 900.0/SW846 9310	
6 EPA 906.0 Modified	
7 DOE EML HASL-300, Tc-02-RC Modified	
Surrogate/Tracer Recovery Test Batch ID Recovery% Accepta	ble Limits
Barium-133 Tracer AN-1418 AlphaSpec Ra226, Liquid "As Received" 2741552 94 (30%)	-110%)
Thorium-229 TracerTh-01-RC M, Th Isotopes, Liquid "As Received"274155387.5(30%)	-110%)
Barium-133 Tracer 904.0Mod, Ra228, Liquid "As Received" 2741662 72.7 (30%)	-110%)
Strontium Carrier 905.0Mod, Sr90, liquid "As Received" 2751147 85.4 (30%)	-110%)
Technetium-99m Tracer Tc-02-RC-MOD, Tc99, Liquid "As Received" 2742288 91.8 (30%)	-110%)

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053		Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow			
Project:	C-746-U Landfill Quarterly(UG25-02)			
Client Sample Sample ID:	ID: MW372UG2-25 706092019	Project: Client ID:	FRNP00607 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU RL Units	PF DF Analyst	Date Time Batch Mtd.
Surrogate/Tracer Re	ecovery Test		Batch ID Recovery	% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows: DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL:** Reporting Limit MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty MDC: Minimum Detectable Concentration

GEL LABORATORIES LLC 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Company : Address :	Four Rivers N LLC 5600 Hobbs F		nership,										
	Kevil, Kentuc	ky 42053						Rep	oort Date:	Ap	ril 29,	2025	
Contact:	Ms. Jaime Mo	orrow						-		1	,		
Project:	C-746-U Lan	dfill Ouarter	lv(UG25-02)									
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: MW373 706092 WG 28-JAN 29-JAN Client	-25					oject: ent ID:	FRNI FRNI	200607 2006				_
Parameter	Oualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	t Date	Time	Batch]	Mtd.
Rad Alpha Spec Anal AN-1418 AlphaSpec Radium-226			•	1.24	+/-0.460	5.00	pCi/L					2741552	
Th-01-RC M, Th Isc				1.24	17-0.400	5.00	pel/L		0.014	02/03/23	0051	2741332	1
Thorium-230	U	0.0965	+/-0.841	1.75	+/-0.843	50.0	pCi/L		CM4	02/02/25	1606	2741553	2
Thorium-232	U	-0.170	+/-0.449	1.30	+/-0.450		pCi/L						
Rad Gas Flow Proport 904.0Mod, Ra228, I													
Radium-228 905.0Mod, Sr90, liq	U uid "As Receive	0.521 ed″	+/-2.46	4.63	+/-2.46	4.99	pCi/L		ST2	02/14/25	0818	2741072	3
Strontium-90	U	-0.139	+/-1.28	2.47	+/-1.28	8.00	pCi/L		ST2	02/12/25	1401	2741093	4
9310, Alpha/Beta A	ctivity, liquid "A	As Received	,										
Alpha	U	-0.183	+/-3.75	9.07	+/-3.76	15.0	pCi/L		AH4	02/05/25	1427	2741058	5
Beta	U	3.62	+/-4.92	8.42	+/-4.96	50.0	pCi/L						
Rad Liquid Scintillat 906.0M, Tritium Di	st, Liquid "As R												
Tritium	U	82.2	+/-114	196	+/-115	300	pCi/L		KXA1	02/09/25	1615	2741845	6
Tc-02-RC-MOD, Tc	-		. / 11.0	21.6	. / 11.0	25.0	-C:/I		C 52	02/12/25	0224	2742288	7
Technetium-99	U	-6.18	+/-11.9	21.6	+/-11.9	25.0	pCi/L		GS3	02/12/25	0234	2742288	/
The following Analyt Method De	ical Methods v scription	vere perfor	med										
	-	ANI 1410											
210	chrom Industries,		Modified										
	DE EML HASL-3 A 904.0/SW846 9												
	A 905.0 Modified			fied									
	A 900.0/SW846 9		itev. i moui	lica									
	A 906.0 Modified												
	DE EML HASL-3		2 Modified										
Surrogate/Tracer Ro	coverv 7	ſest						Batch II	O Recover	v% A	rcenta	ble Limit	ts
Barium-133 Tracer			InhaSnec R	a226 Liquid	"As Received"			2741552				110%)	
Thorium-229 Trace				•	As Received"			2741553				110%)	
Barium-133 Tracer				id "As Rece				2741072				110%)	
Strontium Carrier			-	"As Receive				2741093				110%)	
Technetium-99m T	racer		-	Liquid "As				274228				110%)	
1 connetiuni-99111 1	14001	10-02-KC-	MOD, 1099,	Liquid As	RUCIVEU			2142200	, 90		(30%)-	11070)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-U Landfill Quarterly(UG25-02)				
Client Sample Sample ID:	D: MW373UG2-25 706092021		Project: Client ID:	FRNP00607 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	C TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

			Cei	rujicate	oj Anaiy	ysts							
	~	-							Rep	ort Date:	Ap	ril 29, 2	2025
	Company : Address :		r Rivers Nuclear Partn) Hobbs Road	ership, LLC									
			il, Kentucky 42053										
	Contact:		Jaime Morrow										
	Project:	C-74	46-U Landfill Quarterl	y(UG25-02)									
	Client Sample ID:	MW	369UG2-25			Pro	oject:		FRNP	00607			
	Sample ID:	7060	092013			Cli	ient ID	:	FRNP	006			
	Matrix:	WG											
	Collect Date:		AN-25 10:31										
	Receive Date:		AN-25										
	Collector:	Clie											
	Collector.	Che	nt										
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
504 1/8011	Analysis of EDB/D												
	•		opane "As Received"										
	- 1,2-DIDFOINO-5-CIII 3-chloropropane	U U	0.0191	0.00858	0.0191	ng/I	0.954	1	LL2	02/01/25	0010	2741211	1
Carbon Ana		U	0.0191	0.00858	0.0191	ug/L	0.954	1	LL2	02/01/23	0818	2741211	1
	al Organic Carbon "	'As Re	eceived"										
	Carbon Average	J	0.657	0.330	2.00	mg/L		1	KB3	02/05/25	0049	2743988	2
Flow Inject	ion Analysis												
9012B, Cya	anide, Total "As Rec	eived	"										
Cyanide, Tota	1	UN	0.200	0.00167	0.200	mg/L	1.00	1	AXH3	01/30/25	1138	2741364	3
Halogen Ar	nalysis												
9020B, TO	X (Organic Halogen) "As	Received"										
Total Organic	Halogens	U	10.0	3.33	10.0	ug/L		1	RMJ	02/25/25	0439	2755505	4
Ion Chroma	atography												
300.0, Iodio	de in Liquid "As Red	ceived	"										
Iodide	1	U	0.500	0.167	0.500	mg/L		1	CH6	01/29/25	1602	2741107	5
SW846 905	56A Anions (5 eleme	ents) "	As Received"										
Bromide			0.354	0.0670	0.200	mg/L		1	CH6	01/29/25	1620	2741108	6
Fluoride		J	0.198	0.0330	4.00	mg/L		1					
Sulfate		_	8.48	0.133	0.400	mg/L		1		04/00/07			_
Chloride Nitroto N		J	27.5	0.335	250	mg/L		5	CH6	01/30/25	0308	2741108	7
Nitrate-N Mercury A	nalysis-CVAA	J	0.989	0.165	10.0	mg/L		3					
-	-												
	ury Liquid "As Reco			0.0000670	0.000200	. /T	1.00	1	102	02/12/25	1020	0740241	0
Mercury Motols Ano	lucie ICD MC	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/12/25	1030	2748341	8
	llysis-ICP-MS												
	ls (15+ elements) "A	As Rec		0.0102	0.0500	/T	1.00	1	DCD1	00/05/05	2020	0741460	0
Aluminum Antimony		U	0.0555 0.00300	0.0193 0.00100	0.0500 0.00300	mg/L mg/L	1.00 1.00	1 1	RCDI	02/05/25	2030	2/41468	9
Antimony		U	0.00500	0.00100	0.00500	mg/L mg/L	1.00						
Barium		0	0.353	0.000670	0.00400	mg/L mg/L	1.00						
Cadmium		U	0.00100	0.000300	0.00100	mg/L	1.00						
Calcium			16.2	0.0800	0.200	mg/L	1.00						
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00						
Cobalt			0.00442	0.000300	0.00100	mg/L	1.00						
Copper			0.00237	0.000300	0.00200	mg/L	1.00	1					

Certificate of Analysis

			Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-U Landfill Quarterly(UG25-02)				
Client Sample ID: Sample ID:	MW369UG2-25 706092013	Project: Client ID:	FRNP00607 FRNP006		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Metals Analysis-ICP-M	IS										
6020, Metals (15+ elem	ents) "As Re	ceived"									
Iron	J	0.0652	0.0330	0.100	mg/L	1.00	1				
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1				
Magnesium		6.91	0.0100	0.0300	mg/L	1.00	1				
Manganese	J	0.00141	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1				
Nickel		0.00314	0.000600	0.00200	mg/L	1.00	1				
Potassium		0.576	0.0800	0.300	mg/L	1.00	1				
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1				
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1				
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1				
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1				
Zinc	J	0.00423	0.00330	0.0200	mg/L	1.00	1				
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1	BCD1	02/06/25	1321 2741468	3 10
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1				
Sodium		47.7	0.400	1.25	mg/L	1.00	5	BCD1	02/06/25	1734 2741468	
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1	BAJ	02/20/25	1118 2753044	12
Boron		0.0153	0.00520	0.0150	mg/L	1.00					
Selenium	J	0.00299	0.00150	0.00500	mg/L	1.00	1				
Semi-Volatiles-PCB											
8082A, PCB Liquids "A	As Received"										
Aroclor-1016	U	0.0943	0.0314	0.0943	ug/L0	.000943	1	JXM	02/21/25	1942 2754144	4 13
Aroclor-1221	U	0.0943	0.0314	0.0943	ug/L0	.000943	1				
Aroclor-1232	U	0.0943	0.0314	0.0943	ug/L0	.000943	1				
Aroclor-1242	U	0.0943	0.0314	0.0943	ug/L 0	.000943	1				
Aroclor-1248	U	0.0943	0.0314	0.0943	ug/L 0	.000943	1				
Aroclor-1254	U	0.0943	0.0314	0.0943	ug/L 0	.000943	1				
Aroclor-1260	U	0.0943	0.0314	0.0943	ug/L 0	.000943	1				
Aroclor-1268	U	0.0943	0.0314	0.0943	ug/L 0	.000943	1				
Aroclor-Total	U	0.0943	0.0314	0.0943	ug/L 0	.000943	1				
Solids Analysis											
160.1, Dissolved Solids	"As Receive	d"									
Total Dissolved Solids	*	205	2.38	10.0	mg/L			RR4	01/31/25	1245 2742400) 14
Spectrometric Analysis					6 -						
410.4. Chem. Oxygen E		Received"									

410.4, Chem. Oxygen Demand "As Received"

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW369UG2-25 Project: FRNP00607 Client ID: Sample ID: 706092013 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	7 Analy	st Date	Tim	e Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen I	Demand "As I	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	JW2	01/29/25	1629	2741113	15
Volatile Organics												
8260D, Volatiles- full s	uite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/04/25	1721	2744263	16
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
2-Butanone	U	5.00	1.67	5.00	ug/L		1					
2-Hexanone	U	5.00	1.67	5.00	ug/L		1					
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1					
Acetone	U	5.00	1.74	5.00	ug/L		1					
Acrolein	U	5.00	1.67	5.00	ug/L		1					
Acrylonitrile	U	5.00	1.67	5.00	ug/L		1					
Benzene	U	1.00	0.333	1.00	ug/L		1					
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromoform	U	1.00	0.333	1.00	ug/L		1					
Bromomethane	U	1.00	0.337	1.00	ug/L		1					
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1					
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1					
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1					
Chloroethane	U	1.00	0.333	1.00	ug/L		1					
Chloroform	U	1.00	0.333	1.00	ug/L		1					
Chloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromomethane	U	1.00	0.333	1.00	ug/L		1					
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1					
Iodomethane	U	5.00	1.67	5.00	ug/L		1					

Certificate of Analysis

Report Date: April 29, 2025 Company : Four Rivers Nuclear Partnership, LLC Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW369UG2-25 Project: FRNP00607 Sample ID: 706092013 Client ID: FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full st	uite "As Rece	eived"							
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene	J	0.970	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	U	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	U	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00	ug/L		1		
The following Prep Met	thods were pe	rformed:							

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3535A	SW3535A PCB SPE Extraction	DG3	02/18/25	1042	2751765
SW846 8011 PREP	8011 Prep	LOF	01/31/25	1119	2741210
SW846 9010C Distillation	SW846 9010C Prep	ES2	01/30/25	1019	2741363
SW846 3005A	ICP-MS 3005A PREP	BB2	02/19/25	1105	2753043
SW846 3005A	ICP-MS 3005A PREP	PB1	01/30/25	1430	2741467
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	02/11/25	1200	2748339
SW846 3535A	SW3535A PCB SPE Extraction	DG3	02/21/25	1107	2754142

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-U Landfill Quarterly(UG25-02)			
Client Sample ID: Sample ID:	MW369UG2-25 706092013	Project: Client ID:	FRNP00607 FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst D	ate Time Batch Me
The following Analytic	al Methods w	vere performed:						
Method	Description					Analys	t Comments	
1	SW846 8011							
2	SW846 9060A							
	SW846 9012B							
	SW846 9020B							
	EPA 300.0							
	SW846 9056A							
	SW846 9056A							
	SW846 7470A							
1	SW846 3005A	/6020B						
0	SW846 3005A	/6020B						
1	SW846 3005A	/6020B						
2	SW846 3005A	/6020B						
3	SW846 3535A	/8082A						
4	EPA 160.1							
5	EPA 410.4							
6	SW846 8260D	•						
Surrogate/Tracer Recov	ery Test				Result	Nomin	al Recovery	% Acceptable Limit
-Chloro-2-fluorobenzene	8011 VG	DA- 1,2-Dibromo-3-chloropropane "	'As	8	3.62 ug/L	6.8	31 126	(56%-149%)
	Receive							
cmx	· · · · · ·	PCB Liquids "As Received"			159 ug/L	0.18		(26%-108%)
Decachlorobiphenyl		PCB Liquids "As Received"			165 ug/L	0.18		(30%-135%)
romofluorobenzene	· · · · · · · · · · · · · · · · · · ·	Volatiles- full suite "As Received"			4.3 ug/L	50		(85%-114%)
,2-Dichloroethane-d4	· · · · · · · · · · · · · · · · · · ·	Volatiles- full suite "As Received"			53.3 ug/L	50		(81%-118%)
'oluene-d8	8260D,	Volatiles- full suite "As Received"		4	7.9 ug/L	50	.0 96	(89%-112%)
Notes:								
Column headers are de	fined as follo	ws:						

Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

Certificate of Analysis

				Cerujicaie	<i>oj</i> հոսլ	ysts			Re	port Date:	April 29), 2025
	Company : Address :		r Rivers Nuclear 0 Hobbs Road	Partnership, LLC	2					-		
		Kev	vil, Kentucky 420	053								
	Contact:	Ms	Jaime Morrow									
	Project:	C-7	46-U Landfill Qu	arterly(UG25-02	.)							
	Client Sample ID:	MV	V369UG2-25			Pro	ject:		FRN	P00607		
	Sample ID:	706	092014				ent ID	:	FRN			
	Matrix:	WC										
	Collect Date:		JAN-25 10:31									
	Receive Date:		JAN-25 10.51									
	Collector:	Clie										
		<i>c</i> :			DI	.	DE					
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time Bate	ch Method
Metals Ana	lysis-ICP-MS											
6020, Disso	lved Metals (3 Eler	nents) "As Received"									
Barium		Ν	0.381	0.000670	0.00400	mg/L	1.00		JD2	02/05/25	1827 27418	339 1
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00					
Uranium		U	0.000200	0.0000670	0.000200	mg/L	1.00	1	BAJ	02/12/25	1132 27418	339 2
	ng Prep Methods w	-										
Method	Desci	-			Analyst	Date		Time		rep Batch		
EPA 160			iltration		SD	01/30/25		1115		741260		
SW846 3005A	ICP-M	S 3005	5A PREP		TB2	02/04/25		1525	2	741836		
The follow	ing Analytical Meth	ods v	were performed:									
Method	Descr	iptior	1			A	Analys	t Coi	nmen	ts		
1	SW846	3005/	A/6020B									
2	SW846	3005/	A/6020B									
Notes:												
Column he	aders are defined as	s folle	ows:									

DF: Dilution FactorLc/LCDL: Detection LimitPF: PrMDA: Minimum Detectable ActivityRL: RMDC: Minimum Detectable ConcentrationSQL:

Lc/LC: Critical Level PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit

			ee	i ligicale (<i>oj</i> 1 1 <i>navj</i>	, 5 . 5			Rep	ort Date:	Ap	oril 29, 2	2025
	Company :	Fou	r Rivers Nuclear Partr	nership, LLC					1		1		
	Address :	5600	0 Hobbs Road										
		Kev	il, Kentucky 42053										
	Contact:		Jaime Morrow										
	Project:	C-74	46-U Landfill Quarter	ly(UG25-02)									
	Client Sample ID:		370UG2-25			Pro	oject:		FRNP	00607			
	Sample ID:		092015				ient ID		FRNP				
	Matrix:	WG				CI		•	TININI	000			
	Collect Date:		AN-25 08:52										
	Receive Date:		AN-25										
	Collector:	Clie	nt										
		<i></i>		DI	DI	TT •.	DE		. 1				
Parameter	Quali		Result	DL	RL	Units	PF	DF	Analy	vst Date	Time	Batch	Method
504.1/8011	Analysis of EDB/D	BCP											
8011 VOA	- 1,2-Dibromo-3-chl	oropr	opane "As Received"										
1,2-Dibromo-	3-chloropropane	US	0.0193	0.00871	0.0193	ug/L	0.967	1	LL2	02/01/25	0851	2741211	1
Carbon Ana	alysis												
9060A, Tot	tal Organic Carbon '	'As Re	eceived"										
	Carbon Average	J	0.636	0.330	2.00	mg/L		1	KB3	02/05/25	0121	2743988	3
	tion Analysis					U							
	anide, Total "As Rec	reived	"										
Cyanide, Tota		UN	0.200	0.00167	0.200	mg/L	1.00	1	AXH3	01/30/25	1145	2741364	4
Halogen A		011	0.200	0.00107	01200	<u>6</u> /12	1100	-		01/00/20	11.10	2711001	·
-	X (Organic Haloger) "Ae	Received"										
Total Organic		1) 13	52.3	3.33	10.0	ug/L		1	RMJ	02/25/25	0508	2755505	5
Ion Chroma	-		52.5	5.55	10.0	ug/L		1	KWIJ	02/23/23	0500	2155505	5
		aniwad											
	de in Liquid "As Red			0 167	0.500	ma/I		1	CUA	01/20/25	1252	2741107	6
Iodide	561 Aniona (5 alam	U onto) "	0.500	0.167	0.500	mg/L		1	CH6	01/29/25	1555	2741107	6
Bromide	56A Anions (5 eleme	ents)	0.551	0.0670	0.200	ma/I		1	CH6	01/29/25	1651	2741108	7
Fluoride		J	0.185	0.0330	4.00	mg/L mg/L		1	Спо	01/29/23	1031	2/41108	1
Chloride		J	41.5	0.335	250	mg/L mg/L		5	CH6	01/30/25	0339	2741108	8
Nitrate-N		J	1.01	0.165	10.0	mg/L		5					
Sulfate			20.3	0.665	2.00	mg/L		5					
Mercury A	nalysis-CVAA												
7470, Merc	ury Liquid "As Rec	eived'	1										
Mercury	, I	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/12/25	1031	2748341	9
Metals Ana	alysis-ICP-MS												
	lls (15+ elements) "A	As Rec	ceived"										
Aluminum	(U	0.0500	0.0193	0.0500	mg/L	1.00	1	BCD1	02/05/25	2032	2741468	10
Antimony		Ū	0.00300	0.00100	0.00300	mg/L	1.00	1					
Arsenic		U	0.00500	0.00200	0.00500	mg/L	1.00	1					
Barium			0.209	0.000670	0.00400	mg/L	1.00						
Cadmium		U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium			29.2	0.0800	0.200	mg/L	1.00	1					
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00						
Cobalt		U	0.00100 0.00360	0.000300	0.00100	mg/L mg/I	1.00						
Copper			0.00500	0.000300	0.00200	mg/L	1.00	1					

Certificate of Analysis

		5	2		Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road						
_	Kevil, Kentucky 42053						
Contact:	Ms. Jaime Morrow						
Project:	C-746-U Landfill Quarterly(UG25-02)						
Client Sample ID:	MW370UG2-25			Project:	FRNP00607		
Sample ID:	706092015			Client ID:	FRNP006		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Metals Analysis-ICP-M	IS										
6020, Metals (15+ elem	ents) "As Re	ceived"									
Iron	U	0.100	0.0330	0.100	mg/L	1.00	1				
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1				
Magnesium		12.9	0.0100	0.0300	mg/L	1.00	1				
Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1				
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1				
Nickel	U	0.00200	0.000600	0.00200	mg/L	1.00	1				
Potassium		2.47	0.0800	0.300	mg/L	1.00	1				
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1				
Sodium		45.9	0.0800	0.250	mg/L	1.00	1				
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1				
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1				
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1				
Zinc	J	0.00761	0.00330	0.0200	mg/L	1.00	1				
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1	BCD1	02/06/25	1322 2741468	11
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1				
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1	BAJ	02/20/25	1119 2753044	12
Boron		0.0826	0.00520	0.0150	mg/L	1.00	1				
Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1				
Semi-Volatiles-PCB											
8082A, PCB Liquids "A	As Received"										
Aroclor-1016	U	0.0967	0.0322	0.0967	ug/L0	.000967	1	JXM	02/18/25	2217 2751900	13
Aroclor-1221	U	0.0967	0.0322	0.0967	ug/L0	.000967	1				
Aroclor-1232	U	0.0967	0.0322	0.0967	ug/L0	.000967	1				
Aroclor-1242	U	0.0967	0.0322	0.0967	ug/L0	.000967	1				
Aroclor-1248	U	0.0967	0.0322	0.0967	ug/L 0	.000967	1				
Aroclor-1254	U	0.0967	0.0322	0.0967	ug/L0	.000967	1				
Aroclor-1260	U	0.0967	0.0322	0.0967	ug/L0	.000967	1				
Aroclor-1268	U	0.0967	0.0322	0.0967	ug/L0	.000967	1				
Aroclor-Total	U	0.0967	0.0322	0.0967	ug/L0	.000967	1				
Solids Analysis					, , , , , , , , , , , , , , , , , , ,						
160.1, Dissolved Solids	"As Receive	d"									
Total Dissolved Solids	*	212	2.38	10.0	mg/L			RR4	01/31/25	1245 2742400	14
Spectrometric Analysis			2100								
410.4, Chem. Oxygen E	Demand "As I	Received"									

410.4, Chem. Oxygen Demand "As Received"

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW370UG2-25 Project: FRNP00607 Client ID: Sample ID: 706092015 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date		Tim	e Batch	Method	
Spectrometric Analysis												
410.4, Chem. Oxygen D	emand "As l	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	JW2	01/29/25	1629	2741113	15
Volatile Organics					C							
8260D, Volatiles- full su	ite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/04/25	1748	2744263	16
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
2-Butanone	U	5.00	1.67	5.00	ug/L		1					
2-Hexanone	U	5.00	1.67	5.00	ug/L		1					
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1					
Acetone	U	5.00	1.74	5.00	ug/L		1					
Acrolein	U	5.00	1.67	5.00	ug/L		1					
Acrylonitrile	U	5.00	1.67	5.00	ug/L		1					
Benzene	U	1.00	0.333	1.00	ug/L		1					
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromoform	U	1.00	0.333	1.00	ug/L		1					
Bromomethane	U	1.00	0.337	1.00	ug/L		1					
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1					
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1					
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1					
Chloroethane	U	1.00	0.333	1.00	ug/L		1					
Chloroform	U	1.00	0.333	1.00	ug/L		1					
Chloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromomethane	U	1.00	0.333	1.00	ug/L		1					
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1					
Iodomethane	U	5.00	1.67	5.00	ug/L		1					

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : 5600 Hobbs Road Address : Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW370UG2-25 Project: FRNP00607 Sample ID: 706092015 Client ID: FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full s	uite "As Rece	eived"							
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene		1.80	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	U	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	U	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00	ug/L		1		
The following Prep Mer	thods were no	rformed							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	BB2	02/19/25	1105	2753043
SW846 3535A	SW3535A PCB SPE Extraction	DG3	02/18/25	1042	2751765
SW846 3005A	ICP-MS 3005A PREP	PB1	01/30/25	1430	2741467
SW846 9010C Distillation	SW846 9010C Prep	ES2	01/30/25	1019	2741363
SW846 8011 PREP	8011 Prep	LOF	01/31/25	1119	2741210
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	02/11/25	1200	2748339

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-U Landfill Quarterly(UG25-02)			
Client Sample ID: Sample ID:	MW370UG2-25 706092015	Project: Client ID:	FRNP00607 FRNP006	

Parameter	Qualifier	Result	DL R	L Units	S PF	DF Analyst Date	Time Batch	Meth
The following Analytic	al Methods w	vere performed:						
Method	Description				Analyst	Comments		
	SW846 8011							
2	SW846 8011							
	SW846 9060A							
Ļ	SW846 9012B							
	SW846 9020B							
	EPA 300.0							
	SW846 9056A							
	SW846 9056A							
)	SW846 7470A							
0	SW846 3005A	/6020B						
1	SW846 3005A	/6020B						
2	SW846 3005A	/6020B						
3	SW846 3535A	/8082A						
4	EPA 160.1							
5	EPA 410.4							
6	SW846 8260D	1						
Surrogate/Tracer Recover	ery Test			Result	Nomina	l Recovery%	Acceptable Lin	mits
-Chloro-2-fluorobenzene	8011 VO Receive	DA- 1,2-Dibromo-3-chloropropane ". d"	As	10.7 ug/L	6.91	155*	(56%-149%)	
ecachlorobiphenyl	8082A,	PCB Liquids "As Received"		0.161 ug/L	0.193	83	(30%-135%)	
cmx	8082A,	PCB Liquids "As Received"		0.151 ug/L	0.193	3 78	(26%-108%)	
romofluorobenzene	,	Volatiles- full suite "As Received"		46.2 ug/L	50.0	92	(85%-114%)	
,2-Dichloroethane-d4	8260D,	Volatiles- full suite "As Received"		53.4 ug/L	50.0	107	(81%-118%)	
oluene-d8	8260D,	Volatiles- full suite "As Received"		50.0 ug/L	50.0	100	(89%-112%)	

Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

Certificate of Analysis

				Cerujicaie	0յ հոսվ	ysis			Re	port Date:	Ar	oril 29, 2	2025
	Company : Address :		r Rivers Nuclear 0 Hobbs Road	Partnership, LLC							-		
		Kev	il, Kentucky 420	053									
	Contact:		Jaime Morrow										
	Project:	C-7	46-U Landfill Qu	arterly(UG25-02)								
	Client Sample II		/370UG2-25	• ·	-	Pro	oject:		FRN	P00607			
	Sample ID:		092016				ent ID	•	FRN				
	Matrix:	WG				0.1		•	1 1 1 1	000			
	Collect Date:		AN-25 08:52										
	Receive Date:		AN-25 00.52										
	Collector:	Clie											
Parameter	Qu	alifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time	Batch	Method
Metals Ana	lysis-ICP-MS												
6020, Disso	olved Metals (3 E	lements)	"As Received"										
Barium		Ν	0.226	0.000670	0.00400	mg/L	1.00		JD2	02/05/25	1831	2741839	1
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00						
Uranium		U	0.000200	0.0000670	0.000200	mg/L	1.00	1	BAJ	02/12/25	1133	2741839	2
	ing Prep Methods	1											
Method		scription			Analyst	Date		Time		rep Batch			
SW846 3005A		-MS 3005			TB2	02/04/25		1525		741836			
EPA 160	Lab	oratory Fi	ltration		SD	01/30/25		1115	2	741260			
The follow	ing Analytical M	ethods v	vere performed:										
Method	Des	cription				A	Analys	t Coi	nmen	ts			
1	SW	846 3005 <i>A</i>	A/6020B										
2	SWS	846 3005 <i>A</i>	/6020B										
Notes:													
Column he	aders are defined	as follo											

DF: Dilution FactorLc/LC: CriticDL: Detection LimitPF: Prep FacMDA: Minimum Detectable ActivityRL: ReportinMDC: Minimum Detectable ConcentrationSQL: Sample

Lc/LC: Critical Level PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit

Certificate of Analysis

			Ce	injicute	οј Απαί	ysts			Dam	ort Date:	٨٠	mil 20 0	0025
	~	-							Kep	on Date.	AL	oril 29, 2	.025
	Company :		r Rivers Nuclear Partn	ership, LLC									
	Address :	560	0 Hobbs Road										
		Kov	il, Kentucky 42053										
	Contact:		Jaime Morrow										
	Project:		46-U Landfill Quarter	$l_{\rm W}(\rm UG25~02)$									
	-			Iy(0023-02)			•						
	Client Sample ID:		'372UG2-25				oject:			00607			
	Sample ID:		092019			Cli	ient ID:		FRNP	006			
	Matrix:	WG											
	Collect Date:	28-J	AN-25 14:24										
	Receive Date:	29-J	AN-25										
	Collector:	Clie	nt										
		chie											
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
504.1/8011	Analysis of EDB/D	BCP											
	•		opane "As Received"										
	3-chloropropane	U	0.0191	0.00858	0.0191	ug/L	0.953	1	LL2	02/01/25	1047	2741211	1
Carbon Ana		U	010171	0100000	010171	46/12	01700	•	222	02/01/20	1017	27 11211	-
	al Organic Carbon "	'As Re	eceived"										
	Carbon Average	J	0.772	0.330	2.00	mg/L		1	KB3	02/05/25	0225	2743988	3
	ion Analysis	3	0.772	0.550	2.00	iiig/L		1	KD5	02/03/23	0225	2743700	5
5	•	nivad	"										
Cyanide, Total	anide, Total "As Rec	UN	0.200	0.00167	0.200	mg/L	1.00	1		01/30/25	1147	27/126/	4
Halogen Ar		UN	0.200	0.00107	0.200	mg/L	1.00	1	АЛПЭ	01/30/23	114/	2741304	4
-	•		D ' 11										
	X (Organic Halogen	i) "As		2.22	10.0			1	DI	00/05/05	0.600	0000000	-
Total Organic	-		25.1	3.33	10.0	ug/L		1	RMJ	02/25/25	0623	2755505	5
Ion Chroma													
	de in Liquid "As Reo					_							
Iodide		U	0.500	0.167	0.500	mg/L		1	CH6	01/29/25	1627	2741107	6
	56A Anions (5 eleme	ents)		0.0670	0.000	-				04/00/07	1051		-
Bromide		Ţ	0.483	0.0670	0.200 4.00	mg/L		1	CH6	01/29/25	1854	2741108	7
Fluoride Chloride		J J	0.202 37.5	0.0330 0.335	4.00 250	mg/L mg/L		1 5	CH6	01/30/25	0441	2741108	8
Nitrate-N		J	0.903	0.165	10.0	mg/L mg/L		5	CHO	01/30/23	0441	2741100	0
Sulfate		5	149	1.33	4.00	mg/L		10	CH6	01/30/25	0511	2741108	9
	nalysis-CVAA					e							
•	ury Liquid "As Reco	eived'	1										
Mercury	ary Elquid The Ree	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/12/25	1038	2748341	10
•	lysis-ICP-MS					6							
	ls (15+ elements) "A	As Rec	reived"										
Aluminum	is (15 + cicilicitis) 1	U	0.0500	0.0193	0.0500	mg/L	1.00	1	BCD1	02/05/25	2042	2741468	11
Antimony		U	0.00300	0.00100	0.00300	mg/L mg/L	1.00	1	2001	52,00,20	2012	27.11.00	
Arsenic		U	0.00500	0.00200	0.00500	mg/L	1.00	1					
Barium			0.0541	0.000670	0.00400	mg/L	1.00	1					
Cadmium		U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00	1					
Cobalt		U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Copper		J	0.00162	0.000300	0.00200	mg/L	1.00	1					
Iron		U	0.100	0.0330	0.100	mg/L	1.00	1					

Certificate of Analysis

Report Date: April 29, 2025 Company : Four Rivers Nuclear Partnership, LLC Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW372UG2-25 Project: FRNP00607 Client ID: Sample ID: 706092019 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+ elements) "As Received"												
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		24.3	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00215	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.000643	0.000600	0.00200	mg/L	1.00	1					
Potassium		2.27	0.0800	0.300	mg/L	1.00	1					
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	U	0.0200	0.00330	0.0200	mg/L		1					
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1	BCD1	02/06/25	1326	2741468	12
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Calcium		66.9	0.800	2.00	mg/L	1.00	10	BCD1	02/06/25	1736	2741468	13
Sodium		59.5	0.800	2.50	mg/L	1.00	10					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1	BAJ	02/20/25	1125	2753044	14
Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1					
Boron		1.54	0.104	0.300	mg/L	1.00	20	BAJ	02/20/25	1159	2753044	15
Semi-Volatiles-PCB												
8082A, PCB Liquids "A	s Received"											
Aroclor-1016	U	0.103	0.0344	0.103	ug/L	0.00103	1	JXM	02/18/25	2242	2751900	16
Aroclor-1221	U	0.103	0.0344	0.103		0.00103	1					
Aroclor-1232	U	0.103	0.0344	0.103	-	0.00103	1					
Aroclor-1242	U	0.103	0.0344	0.103	ug/L	0.00103	1					
Aroclor-1248	U	0.103	0.0344	0.103	ug/L	0.00103	1					
Aroclor-1254	U	0.103	0.0344	0.103	ug/L	0.00103	1					
Aroclor-1260	U	0.103	0.0344	0.103	ug/L	0.00103	1					
Aroclor-1268	U	0.103	0.0344	0.103	ug/L	0.00103	1					
Aroclor-Total	U	0.103	0.0344	0.103	ug/L	0.00103	1					
Solids Analysis					-							
160.1, Dissolved Solids	"As Receive	d"										
Total Dissolved Solids	*	446	4.76	20.0	mg/L			RR4	01/31/25	1245	2742400	17
Spectrometric Analysis					U							
410.4, Chem. Oxygen D	Demand "As I	Received"										

410.4, Chem. Oxygen Demand "As Received"
Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW372UG2-25 Project: FRNP00607 Client ID: Sample ID: 706092019 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	yst Date	Tim	e Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen De	emand "As I	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	JW2	01/29/25	1629	2741113	18
Volatile Organics					-							
8260D, Volatiles- full sui	ite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/04/25	1240	2744263	19
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
2-Butanone	U	5.00	1.67	5.00	ug/L		1					
2-Hexanone	U	5.00	1.67	5.00	ug/L		1					
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1					
Acetone	U	5.00	1.74	5.00	ug/L		1					
Acrolein	UQ	5.00	1.67	5.00	ug/L		1					
Acrylonitrile	U	5.00	1.67	5.00	ug/L		1					
Benzene	U	1.00	0.333	1.00	ug/L		1					
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromoform	U	1.00	0.333	1.00	ug/L		1					
Bromomethane	U	1.00	0.337	1.00	ug/L		1					
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1					
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1					
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1					
Chloroethane	U	1.00	0.333	1.00	ug/L		1					
Chloroform	U	1.00	0.333	1.00	ug/L		1					
Chloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromomethane	U	1.00	0.333	1.00	ug/L		1					
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1					
Iodomethane				5.00								

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : 5600 Hobbs Road Address : Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW372UG2-25 Project: FRNP00607 Sample ID: 706092019 Client ID: FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full st	uite "As Rece	eived"							
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene		2.94	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	U	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	U	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00	ug/L		1		
The following Prep Met	thode wore p	orformad							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	02/11/25	1200	2748339
SW846 3535A	SW3535A PCB SPE Extraction	DG3	02/18/25	1042	2751765
SW846 8011 PREP	8011 Prep	LOF	01/31/25	1119	2741210
SW846 9010C Distillation	SW846 9010C Prep	ES2	01/30/25	1019	2741363
SW846 3005A	ICP-MS 3005A PREP	PB1	01/30/25	1430	2741467
SW846 3005A	ICP-MS 3005A PREP	BB2	02/19/25	1105	2753043

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-U Landfill Quarterly(UG25-02)			
Client Sample ID:	MW372UG2-25	Project:	FRNP00607	
Sample ID:	706092019	Client ID:	FRNP006	

Parameter	Qualifier Result	DL	RL U	nits	PF	DF Analyst Date	Time Batch	Method
The following Analyti	ical Methods were performed:							
Method	Description				Analyst	Comments		
1	SW846 8011							
2	SW846 8011							
3	SW846 9060A							
4	SW846 9012B							
5	SW846 9020B							
6	EPA 300.0							
7	SW846 9056A							
8	SW846 9056A							
9	SW846 9056A							
10	SW846 7470A							
11	SW846 3005A/6020B							
12	SW846 3005A/6020B							
13	SW846 3005A/6020B							
14	SW846 3005A/6020B							
15	SW846 3005A/6020B							
16	SW846 3535A/8082A							
17	EPA 160.1							
18	EPA 410.4							
19	SW846 8260D							
Surrogate/Tracer Reco	very Test		Result		Nomina	l Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene	8011 VOA- 1,2-Dibromo-3-chloropropane " Received"	'As	7.42 ug/I	_	6.8	1 109	(56%-149%))
Decachlorobiphenyl	8082A, PCB Liquids "As Received"		0.182 ug/I	_	0.20	7 88	(30%-135%))
4cmx	8082A, PCB Liquids "As Received"		0.167 ug/I		0.20	7 81	(26%-108%))
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"		48.8 ug/I		50.0	98	(85%-114%))
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"		49.9 ug/I	_	50.0	0 100	(81%-118%))
Toluene-d8	8260D, Volatiles- full suite "As Received"		51.2 ug/I	_	50.	0 102	(89%-112%))
Notes:								

Certificate of Analysis

		- J	Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-U Landfill Quarterly(UG25-02)			
Client Sample ID:	MW372UG2-25	Project:	FRNP00607	
Sample ID:	706092019	Client ID:	FRNP006	

h Method	Time Batch	DF Analyst Date	PF	Units	RL	DL	Result	Qualifier	Parameter

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL: Detection Limit** PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

Certificate of Analysis

				Cerujicaie	<i>oj</i> հոս	ysis			Re	port Date:	April 29, 2	2025
	Company : Address :		ır Rivers Nuclear 00 Hobbs Road	Partnership, LLC	1						1 /	
		Kev	vil, Kentucky 420)53								
	Contact:		. Jaime Morrow									
	Project:	C-7	46-U Landfill Qu	arterly(UG25-02)							
	Client Sample ID:	MV	V372UG2-25	•	-	Pro	ject:		FRN	P00607		
	Sample ID:		092020				ent ID	•	FRN			
	Matrix:	WC				en		•	1101	. 000		
	Collect Date:		JAN-25 14:24									
	Receive Date:		JAN-25 14.24 JAN-25									
	Collector:	Clie										
Parameter	Qual	ifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time Batch	Method
Metals Ana	lysis-ICP-MS											
6020, Disso	olved Metals (3 Ele	ments) "As Received"									
Barium		Ν	0.0594	0.000670	0.00400	mg/L	1.00		JD2	02/05/25	1839 2741839	1
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00					
Uranium		U	0.000200	0.0000670	0.000200	mg/L	1.00	1	BAJ	02/12/25	1136 2741839	2
	ing Prep Methods v	-										
Method	Desc	riptio	n		Analyst	Date	1	Time	e P	rep Batch		
EPA 160			iltration		SD	01/30/25		1115		741260		
SW846 3005A	A ICP-M	4S 3005	5A PREP		TB2	02/04/25		1525	2	741836		
The follow	ring Analytical Met	hods v	were performed:									
Method	Desci	riptior	1			A	Analys	t Coi	nmen	ts		
1	SW84	6 3005/	A/6020B									
2	SW84	6 3005/	A/6020B									
Notes:												
Column he	aders are defined a	s folla	ows:	~ ~								

DF: Dilution FactorLc/LC:DL: Detection LimitPF: PreMDA: Minimum Detectable ActivityRL: ReMDC: Minimum Detectable ConcentrationSQL: S

Lc/LC: Critical Level PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit

			Ce	rtificate (of Analy	ysts							
				C C					Rep	ort Date:	Ap	oril 29, 2	2025
	Company : Address :		r Rivers Nuclear Partn) Hobbs Road	ership, LLC									
	Contact: Project:	Ms.	il, Kentucky 42053 Jaime Morrow 46-U Landfill Quarterl	v(UG25-02)									
	•		-	iy(0023 02)			• ,			00007			
	Client Sample ID:		373UG2-25				oject:		FRNP				
	Sample ID:		092021			Cli	ient ID:		FRNP	2006			
	Matrix:	WG											
	Collect Date:	28-J	AN-25 12:38										
	Receive Date:	29-J	AN-25										
	Collector:	Clie											
	Collector.	Cile	nt										
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
504.1/8011	Analysis of EDB/D	BCP											
8011 VOA- 1,2-Dibromo-3	- 1,2-Dibromo-3-chl 3-chloropropane		opane "As Received" 0.0191	0.00859	0.0191	ug/L	0.954	1	LL2	02/01/25	1121	2741211	1
Carbon Ana	•												
	al Organic Carbon "												
-	Carbon Average	J	0.953	0.330	2.00	mg/L		1	KB3	02/05/25	0257	2743988	3
Flow Inject	ion Analysis												
	anide, Total "As Rec	eived	"										
Cyanide, Tota	1	UN	0.200	0.00167	0.200	mg/L	1.00	1	AXH3	01/30/25	1148	2741364	4
Halogen Ar	nalysis												
9020B, TO	X (Organic Halogen) "As	Received"										
Total Organic	Halogens	BN1	35.7	3.33	10.0	ug/L		1	JS13	02/25/25	1345	2755260	5
Ion Chroma	atography												
300.0. Iodio	de in Liquid "As Red	ceived	["										
Iodide	1	U	0.500	0.167	0.500	mg/L		1	CH6	01/29/25	1406	2741107	6
SW846 905	56A Anions (5 eleme	ents) "	'As Received"			e							
Bromide	× ×		0.448	0.0670	0.200	mg/L		1	CH6	01/29/25	1925	2741108	7
Fluoride		J	0.204	0.0330	4.00	mg/L		1					
Chloride		J	30.5	0.335	250	mg/L		5	CH6	01/30/25	0644	2741108	8
Nitrate-N		J	0.562	0.165	10.0	mg/L		5					
Sulfate	1		211	2.66	8.00	mg/L		20	CH6	01/30/25	0715	2741108	9
•	nalysis-CVAA												
7470, Merc	ury Liquid "As Reco	eived'											
Mercury		U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/12/25	1040	2748341	10
Metals Ana	lysis-ICP-MS												
6020, Meta	ls (15+ elements) "A	As Rec	ceived"										
Aluminum		U	0.0500	0.0193	0.0500	mg/L	1.00	1	BCD1	02/05/25	2045	2741468	11
Antimony		U	0.00300	0.00100	0.00300	mg/L	1.00	1					
Arsenic		U	0.00500	0.00200	0.00500	mg/L	1.00	1					
Barium			0.0330	0.000670	0.00400	mg/L	1.00	1					
Cadmium		U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Chromium Cobalt		U J	0.0100 0.000877	0.00300 0.000300	0.0100	mg/L mg/I	1.00	1					
Copper		J	0.00326	0.000300	0.00100 0.00200	mg/L mg/L	1.00 1.00	1 1					
Iron		J	0.0562	0.0330	0.00200	mg/L mg/L	1.00						
1011		J	0.0502	0.0550	0.100	ilig/L	1.00	1					

Certificate of Analysis

Report Date: April 29, 2025 Company : Four Rivers Nuclear Partnership, LLC Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Project: Client Sample ID: MW373UG2-25 FRNP00607 Sample ID: 706092021 Client ID: FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Metals Analysis-ICP-M	S											
6020, Metals (15+ elem	ents) "As Re	ceived"										
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		33.9	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.136	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.00212	0.000600	0.00200	mg/L	1.00	1					
Potassium		3.03	0.0800	0.300	mg/L	1.00	1					
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Uranium	J	0.000126	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Zinc	J	0.00584	0.00330	0.0200	mg/L	1.00	1					
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1	BCD1	02/06/25	1326	2741468	12
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Calcium		91.0	1.60	4.00	mg/L	1.00	20	BCD1	02/06/25	1737	2741468	13
Sodium		73.2	1.60	5.00	mg/L	1.00	20					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1	BAJ	02/20/25	1127	2753044	14
Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1					
Boron		2.47	0.104	0.300	mg/L	1.00	20	BAJ	02/20/25	1200	2753044	15
Semi-Volatiles-PCB												
8082A, PCB Liquids "A	As Received"											
Aroclor-1016	U	0.0966	0.0322	0.0966	ug/L0	.000966	1	JXM	02/18/25	2254	2751900	16
Aroclor-1221	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Aroclor-1232	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Aroclor-1242	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Aroclor-1248	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Aroclor-1254	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Aroclor-1260	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Aroclor-1268	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Aroclor-Total	U	0.0966	0.0322	0.0966	ug/L0	.000966	1					
Solids Analysis												
160.1, Dissolved Solids	"As Receive	d"										
Total Dissolved Solids	*	562	4.76	20.0	mg/L			RR4	01/31/25	1245	2742400	17
Spectrometric Analysis												
410.4. Chem. Oxygen D	Demand "As I	Received"										

410.4, Chem. Oxygen Demand "As Received"

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW373UG2-25 Project: FRNP00607 Client ID: Sample ID: 706092021 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	yst Date	Time	e Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen I	Demand "As H	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	JW2	01/29/25	1629	2741113	18
Volatile Organics												
8260D, Volatiles- full s	uite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/04/25	1308	2744263	19
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1					
2-Butanone	U	5.00	1.67	5.00	ug/L		1					
2-Hexanone	U	5.00	1.67	5.00	ug/L		1					
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1					
Acetone	U	5.00	1.74	5.00	ug/L		1					
Acrolein	UQ	5.00	1.67	5.00	ug/L		1					
Acrylonitrile	U	5.00	1.67	5.00	ug/L		1					
Benzene	U	1.00	0.333	1.00	ug/L		1					
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1					
Bromoform	U	1.00	0.333	1.00	ug/L		1					
Bromomethane	U	1.00	0.337	1.00	ug/L		1					
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1					
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1					
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1					
Chloroethane	U	1.00	0.333	1.00	ug/L		1					
Chloroform	U	1.00	0.333	1.00	ug/L		1					
Chloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1					
Dibromomethane	U	1.00	0.333	1.00	ug/L		1					
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1					
Iodomethane	U	5.00	1.67	5.00	ug/L		1					

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : 5600 Hobbs Road Address : Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-U Landfill Quarterly(UG25-02) Client Sample ID: MW373UG2-25 Project: FRNP00607 Sample ID: 706092021 Client ID: FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full s	uite "As Rece	eived"							
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene		2.50	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	U	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	U	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00	ug/L		1		
The fellowing Dren Mer	the de more m	anforma di							

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	PB1	01/30/25	1430	2741467
SW846 3535A	SW3535A PCB SPE Extraction	DG3	02/18/25	1042	2751765
SW846 3005A	ICP-MS 3005A PREP	BB2	02/19/25	1105	2753043
SW846 9010C Distillation	SW846 9010C Prep	ES2	01/30/25	1019	2741363
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	JM13	02/11/25	1200	2748339
SW846 8011 PREP	8011 Prep	LOF	01/31/25	1119	2741210

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-U Landfill Quarterly(UG25-02)			
Client Sample ID:	MW373UG2-25	Project:	FRNP00607	
Sample ID:	706092021	Client ID:	FRNP006	

Parameter	Qualifier Result	DL	RL	Units	PF D	F Analyst Date	Time Batch	Metho
The following Analyti	cal Methods were performed:							
Method	Description				Analyst Co	omments		
1	SW846 8011				e			
2	SW846 8011							
3	SW846 9060A							
4	SW846 9012B							
5	SW846 9020B							
6	EPA 300.0							
7	SW846 9056A							
8	SW846 9056A							
9	SW846 9056A							
10	SW846 7470A							
11	SW846 3005A/6020B							
12	SW846 3005A/6020B							
13	SW846 3005A/6020B							
14	SW846 3005A/6020B							
15	SW846 3005A/6020B							
16	SW846 3535A/8082A							
17	EPA 160.1							
18	EPA 410.4							
19	SW846 8260D							
Surrogate/Tracer Recov	very Test		Resu	ılt	Nominal	Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene	8011 VOA- 1,2-Dibromo-3-chloroprop Received"	oane "As	7.61 u	ıg/L	6.81	112	(56%-149%))
Decachlorobiphenyl	8082A, PCB Liquids "As Received"		0.142 u	ıg/L	0.193	74	(30%-135%))
4cmx	8082A, PCB Liquids "As Received"		0.147 u		0.193	76	(26%-108%))
Bromofluorobenzene	8260D, Volatiles- full suite "As Receiv	ved"	48.8 u	ıg/L	50.0	98	(85%-114%))
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Receiv	ved"	49.5 u	ıg/L	50.0	99	(81%-118%))
Toluene-d8	8260D, Volatiles- full suite "As Receiv	ved"	51.2 u	ıg/L	50.0	102	(89%-112%))
Notes:								

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road		-	
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-U Landfill Quarterly(UG25-02)			
Client Sample ID:	MW373UG2-25	Project:	FRNP00607	
Sample ID:	706092021	Client ID:	FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch Method

Column headers are defined as follows:	
DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

Certificate of Analysis

				Cerujicaie	0յ հոս	ysis			Re	port Date:	Ap	oril 29, 2	2025
	Company : Address :		r Rivers Nuclear 0 Hobbs Road	Partnership, LLC						L	1		
		Kev	vil, Kentucky 420)53									
	Contact:		Jaime Morrow										
	Project:	C-7	46-U Landfill Qu	arterly(UG25-02)								
	Client Sample II		/373UG2-25	• •	,	Pro	ject:		FRN	P00607			
	Sample ID:		092022				ent ID	•	FRN				
	Matrix:	WG				Ch		•	1 1(1)	000			
	Collect Date:		JAN-25 12:38										
	Receive Date: Collector:	29-J Clie	JAN-25										
		ene											
Parameter	Qu	alifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time	Batch	Method
Metals Ana	lysis-ICP-MS												
6020, Disso	olved Metals (3 El	ements)	"As Received"										
Barium		N	0.0363	0.000670	0.00400	mg/L	1.00	1	JD2	02/05/25	1843	2741839	1
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00						
Uranium		J	0.000122	0.0000670	0.000200	mg/L	1.00	1	BAJ	02/12/25	1137	2741839	2
The follow	ing Prep Methods	were pe	erformed:										
Method	De	scription	1		Analyst	Date	,	Time	e P	rep Batch			
SW846 3005A		-MS 3005			TB2	02/04/25		1525	2	741836			
EPA 160	Lab	oratory Fi	ltration		SD	01/30/25		1115	2	741260			
The follow	ving Analytical Mo	ethods v	vere performed:										
Method	Des	cription				A	Analys	t Coi	nmen	ts			
1	SW8	46 3005 <i>A</i>	A/6020B										
2	SW8	346 3005 <i>A</i>	A/6020B										
Notes:													
Column he	aders are defined	as follo											

DF: Dilution FactorLc/LC: CriticDL: Detection LimitPF: Prep FactMDA: Minimum Detectable ActivityRL: ReportinMDC: Minimum Detectable ConcentrationSQL: Sample

Lc/LC: Critical Level PF: Prep Factor RL: Reporting Limit SQL: Sample Quantitation Limit

Company : Address :	Four Rivers M LLC 5600 Hobbs I		nership,										
	Kevil, Kentu	cky 42053						Rep	ort Date:	Ap	ril 29,	2025	
Contact:	Ms. Jaime M	orrow											
Project:	C-746-S&T I	Landfill Qua	rterly(SG25-	02)									
Client Sample Sample ID: Matrix: Collect Date: Receive Date Collector:	706418 WG 29-JAN	N-25					oject: ent ID:	FRNP FRNP					
Parameter	Qualifier	Result U	ncertainty	MDC	TPU	RL	Units	PF D	F Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec An AlphaSpec Ra226,		vived"											
Radium-226	U	0.771	+/-1.12	1.39	+/-1.12	5.00	pCi/L		CM4	02/20/25	0805	2751719) 1
Th-01-RC M, Th I							r						
Thorium-230	U	0.292	+/-0.999	1.91	+/-1.00	50.0	pCi/L		RM3	02/04/25	1021	2742614	2
Rad Gas Flow Prop 905.0 Mod, Sr90,							Ĩ						
Strontium-90	U	-0.307	+/-1.90	3.55	+/-1.90	8.00	pCi/L		HH3	02/13/25	0947	2742199	3
9310,Alpha/Beta A	Activity, liquid "A	s Received"											
Alpha	U	3.36	+/-3.45	5.03	+/-3.50	15.0	pCi/L		AH4	02/05/25	0844	2742202	. 4
Beta		9.86	+/-5.98	8.93	+/-6.20	50.0	pCi/L						
Rad Liquid Scintilla 906.0 Mod, Tritiun		s Received"											
Tritium	U	-43.8	+/-90.8	172	+/-90.8	300	pCi/L		KXA1	02/09/25	1724	2741848	5
Tc-02-RC-MOD, T	-												
Technetium-99	U	8.02	+/-11.2	19.0	+/-11.3	25.0	pCi/L		GS3	02/13/25	1541	2742289) 6
The following Analy	-	were perform	med										
Method I	Description												
1 E	Eichrom Industries,	AN-1418											
	DOE EML HASL-3												
	EPA 905.0 Modifie		Rev. 1 Modif	ïed									
	EPA 900.0/SW846												
	EPA 906.0 Modifie												
6 E	DOE EML HASL-3	300, Tc-02-RC	Modified										
Surrogate/Tracer I	-	Test							Recover			ble Lim	its
Barium-133 Trac	er	AlphaSpec	Ra226, Liqu	id "As Received	."			2751719	95.	7	(30%-	110%)	
Thorium-229 Tra	cer	Th-01-RC	M, Th Isotop	es, Liquid "As F	Received"			2742614	85	5	(30%-	110%)	
Strontium Carrier	r	905.0 Mod	, Sr90, liquid	"As Received"				2742199	78	3	(30%-	110%)	
Technetium-99m	Tracer	Tc-02-RC-	MOD, Tc99,	Liquid "As Rec	eived"			2742289	89.	6	(30%-	110%)	

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW220SG2-25 706418001		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers LLC 5600 Hobbs	Nuclear Partn Road	ership,									
	Kevil, Kent	ucky 42053						Repo	rt Date:	April 29,	2025	
Contact:	Ms. Jaime M	<i>I</i> orrow										
Project:	C-746-S&T	Landfill Quar	terly(SG25-	.02)								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	70641 WG 29-JA 30-JA Client	N-25 N-25					oject: ent ID:	FRNP(FRNP()06			
Parameter	Qualifier	Result Ur	ncertainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec Ana AlphaSpec Ra226,		ainad"										
Radium-226	Liquia As Keo U	0.213	+/-0.296	0.442	+/-0.297	5.00	pCi/L		CM4 02/	07/25 0839	2742615	1
Th-01-RC M, Th Is				0.112	17 0.297	5.00	pent			01125 0055	2742013	1
Thorium-230	U	0.336	+/-0.995	1.87	+/-0.999	50.0	pCi/L		RM3 02/	04/25 1021	2742614	2
Rad Gas Flow Prop 905.0 Mod, Sr90, l							Ĩ					
Strontium-90	U	-1.26	+/-1.24	2.56	+/-1.24	8.00	pCi/L		HH3 02/	13/25 0948	2742199	3
9310,Alpha/Beta A	ctivity, liquid '	'As Received"										
Alpha	U	1.12	+/-3.34	6.78	+/-3.35	15.0	pCi/L		AH4 02/	05/25 0844	2742202	4
Beta		11.4	+/-6.98	10.6	+/-7.23	50.0	pCi/L					
Rad Liquid Scintilla 906.0 Mod, Tritiun		As Received"										
Tritium	U	77.6	+/-101	172	+/-102	300	pCi/L		KXA1 02/	09/25 1806	2741848	5
Tc-02-RC-MOD, T	Cc99, Liquid "A	s Received"										
Technetium-99	U	8.82	+/-11.4	19.3	+/-11.5	25.0	pCi/L		GS3 02/	13/25 1603	2742289	6
The following Analy	tical Methods	were perform	ned									
Method D	escription											
1 E	ichrom Industrie	s, AN-1418										
2 D	OE EML HASL	-300, Th-01-RC	Modified									
3 E	PA 905.0 Modifi	ed/DOE RP501	Rev. 1 Modif	fied								
4 E	PA 900.0/SW840	5 9310										
5 E	PA 906.0 Modifi	ed										
6 D	OE EML HASL	-300, Tc-02-RC	Modified									
Surrogate/Tracer R	Recovery	Test						Batch ID	Recovery%	Accepta	ble Limi	its
Barium-133 Trace	er	AlphaSpec	Ra226, Liqu	iid "As Received"				2742615	99.6	(30%-	-110%)	
Thorium-229 Trac	cer	Th-01-RC M	M, Th Isotop	es, Liquid "As Rece	eived"			2742614	73.6	(30%-	-110%)	
Strontium Carrier		905.0 Mod,	Sr90, liquid	l "As Received"				2742199	105	(30%-	-110%)	
Technetium-99m	Tracer		-	Liquid "As Receive	ed"			2742289	88	(30%-	-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW221SG2-25 706418003		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers M LLC 5600 Hobbs I		ership,										
	Kevil, Kentu	cky 42053						Rej	port Date:	Aj	pril 29,	2025	
Contact:	Ms. Jaime M	orrow											
Project:	C-746-S&T I	Landfill Quart	erly(SG25-	.02)									
Client Sample Sample ID: Matrix: Collect Date: Receive Date Collector:	706418 WG 29-JAN	I-25					oject: ent ID:	FRN FRN	P00609 P006				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analys	t Date	Time	Batch	Mtd.
Rad Alpha Spec An AlphaSpec Ra226	-	vived"											
Radium-226	U	0.247	+/-0.431	0.646	+/-0.431	5.00	pCi/L		CM4	02/08/25	6 0917	2742615	5 1
Th-01-RC M, Th I	sotopes, Liquid "	" As Received"											
Thorium-230	U	1.14	+/-1.21	1.76	+/-1.22	50.0	pCi/L		RM3	02/04/25	5 1022	2742614	4 2
Rad Gas Flow Prop 905.0 Mod, Sr90,		0											
Strontium-90	U Activity liquid "A	0.134	+/-1.33	2.47	+/-1.33	8.00	pCi/L		HH3	02/13/25	5 0948	2742199	93
9310,Alpha/Beta A Alpha	U	1.20	+/-4.24	8.36	+/-4.24	15.0	pCi/L		AH4	02/05/25	0844	2742202) 4
Beta	U	6.41	+/-5.43	8.69	+/-5.53	50.0	pCi/L		7117	02/03/20	0044	2142202	
Rad Liquid Scintill 906.0 Mod, Tritiu		s Received"					-						
Tritium	U	10.8	+/-99.7	179	+/-99.7	300	pCi/L		KXA1	02/09/25	5 1849	2741848	3 5
Tc-02-RC-MOD,	Tc99, Liquid "As	Received"											
Technetium-99	U	7.13	+/-11.8	20.1	+/-11.8	25.0	pCi/L		GS3	02/13/25	5 1624	2742289	96
The following Anal		were perform	ied										
Method I	Description												
1 E	Eichrom Industries,	AN-1418											
	DOE EML HASL-3												
	EPA 905.0 Modifie		Rev. 1 Modif	fied									
	EPA 900.0/SW846												
	EPA 906.0 Modifie DOE EML HASL-3		Modified										
Surrogate/Tracer		Гest						Ratch I	D Recover	v% A	ccenta	ble Lim	its
Barium-133 Trac	v		29226 Lig	id "As Received"				274261		•	-	110%)	
Thorium-229 Tra		• •	•	es, Liquid "As Rec	ceived"			274261				110%)	
Strontium Carrie	r	905.0 Mod.	۔ Sr90, liquid	l "As Received"				274219	9 95.	.1		110%)	
Technetium-99m			-	Liquid "As Receiv	ved"			274228				110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053		Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample Sample ID:	ID: MW222SG2-25 706418005	Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers LLC 5600 Hobbs	Nuclear Partn Road	ership,									
	Kevil, Kent	ucky 42053						Repo	rt Date:	April 29	, 2025	
Contact:	Ms. Jaime N	Aorrow										
Project:	C-746-S&T	Landfill Quar	terly(SG25-	.02)								
Client Sample Sample ID: Matrix: Collect Date: Receive Date Collector:	70641 WG 29-JA	N-25 N-25					oject: ent ID:		006			
Parameter	Qualifier	• Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec An												
AlphaSpec Ra226, Radium-226	, <i>Liquia As Reo</i> U	0.389	+/-0.487	0.598	+/-0.488	5.00	pCi/L		CM4 02	2/08/25 0917	2742615	1
Th-01-RC M, Th I				0.598	+/-0.488	5.00	pei/L		CIVI4 02	2/08/25 0917	2742015	1
Thorium-230	U	0.162	+/-0.852	1.69	+/-0.854	50.0	pCi/L		RM3 02	2/04/25 1022	2742614	2
Rad Gas Flow Prop 905.0 Mod, Sr90,							1					
Strontium-90	U	-0.269	+/-1.57	2.98	+/-1.57	8.00	pCi/L		HH3 02	2/13/25 0947	2742199	3
9310,Alpha/Beta A	Activity, liquid '	'As Received"										
Alpha	U	0.824	+/-2.97	6.25	+/-2.98	15.0	pCi/L		AH4 02	2/05/25 0844	2742202	4
Beta		16.0	+/-7.06	9.83	+/-7.53	50.0	pCi/L					
Rad Liquid Scintilla 906.0 Mod, Tritiun		'As Received"										
Tritium	U	59.2	+/-98.4	170	+/-99.1	300	pCi/L		KXA1 02	2/09/25 1932	2741848	5
Tc-02-RC-MOD,	Tc99, Liquid "A	s Received"										
Technetium-99	U	7.48	+/-12.2	20.8	+/-12.2	25.0	pCi/L		GS3 02	2/13/25 1646	2742289	6
The following Anal	ytical Methods	were perform	ned									
Method I	Description											
1 E	Eichrom Industrie	s, AN-1418										
2 I	DOE EML HASL	-300, Th-01-RC	Modified									
3 E	EPA 905.0 Modifi	ed/DOE RP501	Rev. 1 Modif	fied								
4 E	EPA 900.0/SW84	5 9310										
-	EPA 906.0 Modifi											
6 I	DOE EML HASL	-300, Tc-02-RC	Modified									
Surrogate/Tracer l	Recovery	Test						Batch ID	Recovery	∕₀ Accepta	able Limi	ts
Barium-133 Trac	er	AlphaSpec	Ra226, Liqu	id "As Received"				2742615	100	(30%-	-110%)	
Thorium-229 Tra	cer	Th-01-RC M	A, Th Isotop	es, Liquid "As Rece	ived"			2742614	80.9	(30%-	-110%)	
Strontium Carrier	r	905.0 Mod,	Sr90, liquid	l "As Received"				2742199	80.5	(30%-	-110%)	
Technetium-99m	Tracer	Tc-02-RC-M	40D, Tc99,	Liquid "As Receive	d"			2742289	81.5	(30%	-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
-	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW223SG2-25 706418007		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four River LLC 5600 Hob	rs Nuclear Partr bs Road	nership,										
	Kevil, Ker	ntucky 42053						Re	eport Date:	A	pril 29,	2025	
Contact:	Ms. Jaime	Morrow											
Project:	C-746-S&	T Landfill Quar	rterly(SG25-	.02)									
Client Samp Sample ID: Matrix: Collect Date Receive Date Collector:	7064 WG :: 29-JJ	2248G2-25 18009 AN-25 AN-25 nt					oject: ent ID:		IP00609 IP006				
Parameter	Qualifi	er Result Ur	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	t Dat	e Time	Batch	Mtd.
Rad Alpha Spec A		a a aire d''											
AlphaSpec Ra220 Radium-226	, <i>Liquia As</i> K U	0.322	+/-0.321	0.372	+/-0.322	5.00	pCi/L		CM4	02/07/2	5 0839	2742615	5 1
Th-01-RC M, Th				0.572	17 0.322	5.00	pent		0.014	02/07/2	5 0057	2742010	, 1
Thorium-230	U	-0.0319	+/-0.740	1.62	+/-0.741	50.0	pCi/L		RM3	02/04/2	5 1022	2742614	4 2
Rad Gas Flow Pro 905.0 Mod, Sr90,													
Strontium-90	U	1.03	+/-1.86	3.23	+/-1.87	8.00	pCi/L		HH3	02/13/2	5 0951	2742199) 3
9310,Alpha/Beta	Activity, liquid	"As Received"											
Alpha	U	2.77	+/-4.25	7.45	+/-4.28	15.0	pCi/L		AH4	02/05/2	5 0844	2742202	2 4
Beta	U	3.83	+/-7.51	13.1	+/-7.54	50.0	pCi/L						
Rad Liquid Scintil 906.0 Mod, Tritii													
Tritium	U	7.73	+/-94.1	170	+/-94.1	300	pCi/L		KXA1	02/09/2	5 2015	2741848	3 5
Tc-02-RC-MOD,	Tc99, Liquid "	"As Received"											
Technetium-99	U	-4.06	+/-12.6	22.4	+/-12.6	25.0	pCi/L		GS3	02/13/2	5 1708	2742289	96
The following Ana	lytical Method	ls were perform	ned										
Method	Description												
1	Eichrom Industri	ies, AN-1418											
2	DOE EML HAS	L-300, Th-01-RC	Modified										
		ified/DOE RP501	Rev. 1 Modi	fied									
	EPA 900.0/SW8												
-	EPA 906.0 Modi		M - 1:6: - 1										
		L-300, Tc-02-RC	Modified										
Surrogate/Tracer		Test							D Recover	v		ble Lim	its
Barium-133 Tra			-	id "As Received"				274261				-110%)	
Thorium-229 Tr	acer	Th-01-RC I	M, Th Isotop	es, Liquid "As Rece	ived"			274261	4 81	.2	(30%-	-110%)	
Strontium Carrie	er	905.0 Mod,	Sr90, liquid	l "As Received"				274219	99 92	7	(30%-	-110%)	
Technetium-99n	n Tracer	Tc-02-RC-1	MOD, Tc99,	Liquid "As Receive	ed"			274228	39 75	.7	(30%-	-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053		Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample Sample ID:	ID: MW224SG2-25 706418009	Proje Clier	ect: FRNP00609 nt ID: FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU RL	Units PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Test

Company : Address :	Four River LLC 5600 Hobb	rs Nuclear Partr	ership,										
	Kevil, Ken	tucky 42053						Rep	ort Date:	A	oril 29,	2025	
Contact:	Ms. Jaime	Morrow											
Project:	C-746-S&	T Landfill Qua	rterly(SG25-	.02)									
Client Samp Sample ID: Matrix: Collect Date Receive Dat Collector:	7064 WG 29-JA						oject: lent ID:	FRNP FRNP					
Parameter	Qualifie	er Result Ur	ncertainty	MDC	TPU	RL	Units	PF D	F Analyst	d Date	Time	Batch	Mtd.
Rad Alpha Spec A AlphaSpec Ra22		acaivad"											
Radium-226	U, Liquiu As Ko U	0.00588	+/-0.270	0.594	+/-0.270	5.00	pCi/L		CM4	02/07/24	0842	2742615	5 1
Th-01-RC M, Th				0.071	., 0.270	2100	Polid		0.011	02/07/20	00.2	27 12010	•
Thorium-230	U	0.921	+/-1.07	1.67	+/-1.09	50.0	pCi/L		RM3	02/04/25	1022	2742614	2
Rad Gas Flow Pro 905.0 Mod, Sr90													
Strontium-90	U	-0.741	+/-0.868	1.94	+/-0.869	8.00	pCi/L		HH3	02/13/25	0948	2742199	3
9310,Alpha/Beta													
Alpha	U	6.06 74.1	+/-4.87 +/-12.0	6.38 10.5	+/-4.98 +/-17.1	15.0	pCi/L		AH4	02/07/25	1543	2746833	4
Beta Rad Liquid Scintil 906.0 Mod, Tritin		5	+/-12.0	10.5	+/-1/.1	50.0	pCi/L						
Tritium	U	3.57	+/-99.1	179	+/-99.1	300	pCi/L		KXA1	02/09/25	2058	2741848	5
Tc-02-RC-MOD,	Tc99, Liquid "	As Received"											
Technetium-99		88.6	+/-15.5	20.8	+/-19.0	25.0	pCi/L		GS3	02/13/25	1729	2742289	6
The following Ana	lytical Method	ls were perforr	ned										
Method	Description												
1	Eichrom Industri	es, AN-1418											
	DOE EML HAS												
	EPA 905.0 Modi		Rev. 1 Modi	fied									
	EPA 900.0/SW8												
-	EPA 906.0 Modi DOE EML HAS		Modified										
			Mounica					D. t. L. ID	D	0/ 4	aconto	ble Limi	: t a
Surrogate/Tracer		Test	D 226 L .	· 1 !! A D · 1!!					Recover	•			
Barium-133 Tra Thorium-229 Tr			-	iid "As Received" bes, Liquid "As Rece	vived"			2742615 2742614				110%) 110%)	
			-	-									
Strontium Carrie				l "As Received"				2742199				110%)	
Technetium-99r	n Tracer	Tc-02-RC-1	MOD, Tc99,	Liquid "As Receive	ed"			2742289	81.	9	(30%-	110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC			
	5600 Hobbs Road			
	Kevil, Kentucky 42053		Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample Sample ID:	ID: MW387SG2-25 706418011	Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers LLC 5600 Hobbs	s Nuclear Partn s Road	ership,									
	Kevil, Kent	tucky 42053						Repo	rt Date:	April 29,	2025	
Contact:	Ms. Jaime I	Morrow										
Project:	C-746-S&T	TLandfill Quar	terly(SG25-	.02)								
Client Sampl Sample ID: Matrix: Collect Date Receive Date Collector:	70641 WG : 29-JA	N-25 N-25					oject: ent ID:	FRNP(FRNP(
Parameter	Qualifie	r Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec An AlphaSpec Ra226		aniwad"										
Radium-226	, Liquia As Ke U	0.315	+/-0.464	0.767	+/-0.464	5.00	pCi/L		CM4 02/	07/25 0842	2742615	1
<i>Th-01-RC M, Th</i>				0.707	17 0.404	5.00	pent		CIVI+ 02/	07725 0042	2742015	1
Thorium-230	U	0.298	+/-0.810	1.50	+/-0.814	50.0	pCi/L		RM3 02/	04/25 1022	2742614	2
Rad Gas Flow Proj 905.0 Mod, Sr90,							•					
Strontium-90	U	-0.122	+/-1.51	2.90	+/-1.51	8.00	pCi/L		HH3 02/	13/25 0947	2742199	3
9310,Alpha/Beta	Activity, liquid	"As Received"										
Alpha	U	5.82	+/-5.25	7.76	+/-5.35	15.0	pCi/L		AH4 02/	05/25 0844	2742202	4
Beta Dod Liquid Scintill	lation Analysia	28.1	+/-8.40	10.1	+/-9.58	50.0	pCi/L					
Rad Liquid Scintill 906.0 Mod, Tritiu		"As Received"										
Tritium	U	2.03	+/-98.5	179	+/-98.6	300	pCi/L		KXA1 02/	09/25 2140	2741848	5
Tc-02-RC-MOD,	Tc99, Liquid "A	s Received"										
Technetium-99		35.5	+/-12.9	19.8	+/-13.6	25.0	pCi/L		GS3 02/	13/25 1751	2742289	6
The following Ana	lytical Methods	s were perforn	ned									
Method	Description											
1	Eichrom Industrie	es, AN-1418										
2	DOE EML HASL	-300, Th-01-RC	Modified									
3	EPA 905.0 Modif	ied/DOE RP501	Rev. 1 Modif	fied								
4	EPA 900.0/SW84	6 9310										
-	EPA 906.0 Modif											
6	DOE EML HASL	-300, Tc-02-RC	Modified									
Surrogate/Tracer	Recovery	Test						Batch ID	Recovery%	Accepta	ble Limi	its
Barium-133 Tra	cer	AlphaSpec	Ra226, Liqu	id "As Received"				2742615	101	(30%-	110%)	
Thorium-229 Tr	acer	Th-01-RC M	A, Th Isotop	es, Liquid "As Reco	eived"			2742614	82.6	(30%-	110%)	
Strontium Carrie	er	905.0 Mod,	Sr90, liquid	l "As Received"				2742199	73.2	(30%-	110%)	
Technetium-99n	n Tracer	Tc-02-RC-M	40D, Tc99,	Liquid "As Receive	ed"			2742289	85.5	(30%-	110%)	

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Certificate of Analysis

Company :	Four Rivers Nuclear Partnership,				
Address :	LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW388SG2-25 706418013		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers N LLC 5600 Hobbs F		ership,										
	Kevil, Kentuc	ky 42053						Re	port Date:	А	pril 29,	2025	
Contact:	Ms. Jaime Mo	orrow											
Project:	C-746-S&T L	andfill Quar	terly(SG25-	02)									
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	7064180 WG 29-JAN	015 -25					oject: ent ID:	FRN FRN	P00609 P006				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analys	t Date	e Time	Batch	Mtd.
Rad Alpha Spec An AlphaSpec Ra226,	-	ived"											
Radium-226	U	0.437	+/-0.597	0.639	+/-0.598	5.00	pCi/L		CM4	02/19/2	5 1707	2751719) 1
Th-01-RC M, Th Is													
Thorium-230	U	0.763	+/-0.891	1.31	+/-0.900	50.0	pCi/L		RM3	02/04/2	5 1022	2742614	2
Rad Gas Flow Prop 905.0 Mod, Sr90, i		0											
Strontium-90	U	2.23	+/-1.94	3.18	+/-1.97	8.00	pCi/L		HH3	02/13/2	5 0951	2742199) 3
9310,Alpha/Beta A							~ ~ ~						
Alpha Beta	U	-0.164 48.9	+/-3.28 +/-9.86	7.53 9.85	+/-3.28 +/-12.7	15.0 50.0	pCi/L pCi/L		AH4	02/05/2	5 0844	2742202	2 4
Rad Liquid Scintilla 906.0 Mod, Tritiur			17 9.00	2.00	1) 12.7	50.0	pei/L						
Tritium	U	7.67	+/-98.6	178	+/-98.6	300	pCi/L		KXA1	02/09/2	5 2223	2741848	3 5
Tc-02-RC-MOD, T	Tc99, Liquid "As	Received"											
Technetium-99	-	77.5	+/-14.2	19.3	+/-17.1	25.0	pCi/L		GS3	02/13/2	5 1813	2742289) 6
The following Analy	vtical Methods w	vere perforn	ned										
	Description	F											
1 E	Eichrom Industries,	AN-1418											
	DOE EML HASL-3		Modified										
3 E	EPA 905.0 Modified	/DOE RP501	Rev. 1 Modif	ïed									
4 E	EPA 900.0/SW846 9	9310											
5 E	EPA 906.0 Modified	l											
6 D	DOE EML HASL-3	00, Tc-02-RC	Modified										
Surrogate/Tracer F	Recovery 7	Test						Batch I	D Recover	у% А	ccepta	ble Lim	its
Barium-133 Trace	er	AlphaSpec	Ra226, Liqu	id "As Received"				275171	9 95	.6	(30%-	110%)	
Thorium-229 Tra	cer	Th-01-RC M	A, Th Isotop	es, Liquid "As Re	ceived"			274261	4 90	.7	(30%-	110%)	
Strontium Carrier	r	905.0 Mod,	Sr90, liquid	"As Received"				274219	9 90	.2	(30%-	110%)	
Technetium-99m	Tracer		-	Liquid "As Recei	ved"			274228	9 87	.9	(30%-	110%)	

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Certificate of Analysis

Company :	Four Rivers Nuclear Partnership,				
Address :	LLC				
	5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample	ID: MW390SG2-25		Project:	FRNP00609	
Sample ID:	706418015		Client ID:	FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four River LLC 5600 Hobb	s Nuclear Partn s Road	ership,									
	Kevil, Ken	tucky 42053						Repo	ort Date:	April 29,	2025	
Contact:	Ms. Jaime	Morrow										
Project:	C-746-S&T	Г Landfill Quar	terly(SG25-	.02)								
Client Sampl Sample ID: Matrix: Collect Date Receive Date Collector:	7064) WG 29-JA	AN-25 AN-25					oject: ent ID:	FRNP(FRNP(
Parameter	Qualifie	r Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec Au AlphaSpec Ra226		eceived"										
Radium-226	, <i>Liquia</i> Аз Ке U	0.351	+/-0.558	0.855	+/-0.559	5.00	pCi/L		CM4 02	/08/25 0917	2742615	1
Th-01-RC M, Th				0.000	17 0.000	5.00	per		0.011 02	.00,25 0,11	27 12013	1
Thorium-230	U	1.10	+/-1.11	1.55	+/-1.13	50.0	pCi/L		RM3 02	/04/25 1022	2742614	2
Rad Gas Flow Proj 905.0 Mod, Sr90,		-										
Strontium-90	U	-1.00	+/-1.41	2.87	+/-1.41	8.00	pCi/L		HH3 02	/13/25 0948	2742199	3
9310,Alpha/Beta	Activity, liquid	"As Received"										
Alpha	U	1.82	+/-3.13	5.72	+/-3.15	15.0	pCi/L		AH4 02	/05/25 0844	2742202	4
Beta Dod Liquid Sointill	U Lation Analysia	9.85	+/-6.49	9.97	+/-6.69	50.0	pCi/L					
Rad Liquid Scintill 906.0 Mod, Tritiu												
Tritium	U	5.10	+/-94.8	171	+/-94.8	300	pCi/L		KXA1 02	/09/25 2306	2741848	5
Tc-02-RC-MOD,	Tc99, Liquid "A	As Received"										
Technetium-99	U	3.71	+/-11.3	19.5	+/-11.3	25.0	pCi/L		GS3 02	/13/25 1834	2742289	6
The following Anal		s were perforn	ned									
Method	Description											
1	Eichrom Industrie	es, AN-1418										
2	DOE EML HASI	L-300, Th-01-RC	Modified									
3	EPA 905.0 Modif	fied/DOE RP501	Rev. 1 Modif	fied								
4	EPA 900.0/SW84	6 9310										
-	EPA 906.0 Modif											
6	DOE EML HASI	2-300, Tc-02-RC	Modified									
Surrogate/Tracer	Recovery	Test						Batch ID	Recovery%			its
Barium-133 Trac	cer	AlphaSpec I	Ra226, Liqu	id "As Received"				2742615	98.7	(30%-	110%)	
Thorium-229 Tra	acer	Th-01-RC N	A, Th Isotop	es, Liquid "As Rec	eived"			2742614	73.4	(30%-	110%)	
Strontium Carrie	er	905.0 Mod,	Sr90, liquid	l "As Received"				2742199	85.4	(30%-	110%)	
Technetium-99n	n Tracer	Tc-02-RC-N	40D, Tc99,	Liquid "As Receiv	red"			2742289	87.2	(30%-	110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC				
Address .	5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW391SG2-25 706418017		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers LLC 5600 Hobbs	Nuclear Partn Road	ership,									
	Kevil, Kentu	cky 42053						Rep	ort Date:	April 29	, 2025	
Contact:	Ms. Jaime M	lorrow										
Project:	C-746-S&T	Landfill Quar	terly(SG25-	02)								
Client Sampl Sample ID: Matrix: Collect Date: Receive Date Collector:	706418 WG 29-JAN 20-JAN Client	N-25 N-25					oject: ent ID:	FRNP FRNP				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec An		ain a d''										
AlphaSpec Ra226 Radium-226	, <i>Liquid "As Rec</i> U	0.355	+/-0.447	0.701	+/-0.448	5.00	pCi/L		CM4	02/07/25 0842	2742615	: 1
Th-01-RC M, Th				0.701	+/-0.448	5.00	pci/L		CM4	02/07/25 0842	2742012) 1
Thorium-230	U	1.21	+/-1.52	2.35	+/-1.54	50.0	pCi/L		RM3	02/04/25 1022	2742614	2
Rad Gas Flow Prop 905.0 Mod, Sr90,												
Strontium-90	U	1.42	+/-1.64	2.76	+/-1.66	8.00	pCi/L		HH3	02/13/25 0948	2742199) 3
9310,Alpha/Beta	Activity, liquid "A	As Received"										
Alpha	U	-2.67	+/-2.11	7.52	+/-2.11	15.0	pCi/L		AH4	02/05/25 0844	2742202	2 4
Beta	U ation Amelonia	0.287	+/-5.35	10.1	+/-5.35	50.0	pCi/L					
Rad Liquid Scintill 906.0 Mod, Tritiu		As Received"										
Tritium	U	-19.1	+/-96.2	178	+/-96.2	300	pCi/L		KXA1	02/09/25 2349	2741848	3 5
Tc-02-RC-MOD,	Tc99, Liquid "As	Received"										
Technetium-99	U	-5.13	+/-11.0	19.7	+/-11.0	25.0	pCi/L		GS3	02/13/25 1856	2742289) 6
The following Anal	ytical Methods	were perform	ned									
Method I	Description											
1 1	Eichrom Industries	, AN-1418										
2 1	DOE EML HASL-	300, Th-01-RC	Modified									
3 1	EPA 905.0 Modifie	d/DOE RP501	Rev. 1 Modif	ïed								
4 1	EPA 900.0/SW846	9310										
	EPA 906.0 Modifie											
6 I	DOE EML HASL-	300, Tc-02-RC	Modified									
Surrogate/Tracer	Recovery	Test						Batch ID	Recovery	w% Accepta	ble Lim	its
Barium-133 Trac	cer	AlphaSpec I	Ra226, Liqu	id "As Received"				2742615	100) (30%-	-110%)	
Thorium-229 Tra	acer	Th-01-RC M	I, Th Isotop	es, Liquid "As Rec	eived"			2742614	52.	6 (30%-	-110%)	
Strontium Carrie	r	905.0 Mod,	Sr90, liquid	"As Received"				2742199	75.	6 (30%)	-110%)	
Technetium-99m			-	Liquid "As Receiv	ved"			2742289	85.		-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW392SG2-25 706418019		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU R	L Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers M LLC 5600 Hobbs I		nership,									
	Kevil, Kentud	cky 42053						Repo	rt Date:	April 29,	2025	
Contact:	Ms. Jaime M	orrow										
Project:	C-746-S&T I	Landfill Qua	rterly(SG25-	-02)								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: MW393 706418 WG 29-JAN 30-JAN Client	J-25					oject: ent ID:	FRNP(FRNP(
Parameter	Qualifier	Result Ur	ncertainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec Ana AlphaSpec Ra226,		vived"										
Radium-226	U	0.274	+/-0.434	0.727	+/-0.434	5.00	pCi/L		CM4 0	2/07/25 0842	2742615	1
Th-01-RC M, Th Is	otopes, Liquid "	As Received	"				1					
Thorium-230	U	0.533	+/-1.02	1.77	+/-1.02	50.0	pCi/L		RM3 0	2/04/25 1022	2742614	2
Rad Gas Flow Propo 905.0 Mod, Sr90, li												
Strontium-90	U	0.186	+/-1.56	2.95	+/-1.56	8.00	pCi/L		HH3 0	2/13/25 0948	2742199	3
9310,Alpha/Beta A	ctivity, liquid "A	s Received"										
Alpha	U	0.223	+/-2.27	5.76	+/-2.28	15.0	pCi/L		AH4 0	2/05/25 1339	2742202	4
Beta		10.1	+/-6.30	9.62	+/-6.52	50.0	pCi/L					
Rad Liquid Scintillat 906.0 Mod, Tritium		s Received"										
Tritium	U	31.0	+/-100	177	+/-101	300	pCi/L		KXA1 0	2/10/25 0032	2741848	5
Tc-02-RC-MOD, T	c99, Liquid "As	Received"										
Technetium-99	U	-4.56	+/-10.9	19.4	+/-10.9	25.0	pCi/L		GS3 0	2/13/25 1918	2742289	6
The following Analy		were perform	ned									
Method De	escription											
1 Ei	chrom Industries,	AN-1418										
2 D0	OE EML HASL-3	800, Th-01-RC	Modified									
3 EI	PA 905.0 Modified	d/DOE RP501	Rev. 1 Modif	fied								
	PA 900.0/SW846											
	PA 906.0 Modified											
6 D0	OE EML HASL-3	800, Tc-02-RC	Modified									
Surrogate/Tracer R		Test							Recovery	-	ble Limi	its
Barium-133 Trace	r	AlphaSpec	Ra226, Liqu	id "As Receive	ed"			2742615	102	(30%-	-110%)	
Thorium-229 Trac	er	Th-01-RC I	M, Th Isotop	es, Liquid "As	Received"			2742614	81.4	(30%-	110%)	
Strontium Carrier		905.0 Mod,	Sr90, liquid	l "As Received				2742199	75.6	(30%-	110%)	
Technetium-99m	Fracer	Tc-02-RC-I	MOD, Tc99,	, Liquid "As Re	eceived"			2742289	87.3	(30%-	110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC				
Address .	5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW393SG2-25 706418021		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Company : Address :	Four Rivers LLC 5600 Hobbs	Nuclear Partn Road	ership,									
	Kevil, Kentu	icky 42053						Repo	rt Date:	April 29	9, 2025	
Contact:	Ms. Jaime M	Iorrow										
Project:	C-746-S&T	Landfill Quar	terly(SG25-	.02)								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	706413 WG 29-JA1	N-25					oject: ent ID:	FRNP(FRNP(
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Tim	e Batch	Mtd.
Rad Alpha Spec An AlphaSpec Ra226,		eived"										
Radium-226	U Liquid As Kec	0.586	+/-0.505	0.665	+/-0.506	5.00	pCi/L		CM4 0	2/07/25 0842	2742615	5 1
Th-01-RC M, Th Is				0.000	17 0.000	5.00	per		chill 6	2/01/23 0012	2712013	, 1
Thorium-230	U	1.06	+/-1.17	1.68	+/-1.19	50.0	pCi/L		RM3 0	2/04/25 1022	2742614	2
Rad Gas Flow Prop 905.0 Mod, Sr90, i		-					•					
Strontium-90	U	0.107	+/-0.963	1.85	+/-0.963	8.00	pCi/L		HH3 0	02/13/25 0951	2742199) 3
9310,Alpha/Beta A	Activity, liquid ".	As Received"										
Alpha	U	1.17	+/-2.86	5.70	+/-2.87	15.0	pCi/L		AH4 0	02/05/25 0844	2742202	2 4
Beta	U 	4.58	+/-5.68	9.62	+/-5.73	50.0	pCi/L					
Rad Liquid Scintilla 906.0 Mod, Tritiun		As Received"										
Tritium	U	21.7	+/-100	179	+/-100	300	pCi/L		KXA1 0	02/10/25 0115	2741848	3 5
Tc-02-RC-MOD, T	Tc99, Liquid "As	s Received"										
Technetium-99	U	9.28	+/-11.2	18.9	+/-11.3	25.0	pCi/L		GS3 0	02/13/25 1939	2742289) 6
The following Analy	ytical Methods	were perform	ned									
Method D	Description											
1 E	Eichrom Industries	, AN-1418										
2 D	OOE EML HASL-	300, Th-01-RC	Modified									
3 E	EPA 905.0 Modifie	ed/DOE RP501	Rev. 1 Modif	fied								
4 E	EPA 900.0/SW846	9310										
-	EPA 906.0 Modifie											
6 D	OOE EML HASL-	300, Tc-02-RC	Modified									
Surrogate/Tracer I	Recovery	Test						Batch ID	Recovery	% Accept	able Lim	its
Barium-133 Trace	er	AlphaSpec	Ra226, Liqu	id "As Received"				2742615	102	(30%	-110%)	
Thorium-229 Tra	cer	Th-01-RC M	M, Th Isotop	es, Liquid "As Rece	eived"			2742614	70.6	6 (30%	-110%)	
Strontium Carrier		905.0 Mod,	Sr90, liquid	l "As Received"				2742199	92.7	(30%	-110%)	
Technetium-99m	Tracer	Tc-02-RC-N	MOD, Tc99,	Liquid "As Receive	ed"			2742289	89.8	(30%	-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW394SG2-25 706418023		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).
Company : Address :	Four River LLC 5600 Hobb	s Nuclear Partn s Road	ership,									
	Kevil, Ken	tucky 42053						Repo	rt Date:	April 29,	2025	
Contact:	Ms. Jaime	Morrow										
Project:	C-746-S&T	Г Landfill Quar	terly(SG25-	02)								
Client Samp Sample ID: Matrix: Collect Date Receive Dat Collector:	7064) WG 29-JA						oject: ient ID:	FRNP(FRNP(
Parameter	Qualifie	r Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec A	-	• 11										
AlphaSpec Ra220 Radium-226	0, <i>Liquid "As Re</i> U	0.379	+/-0.477	0.748	+/-0.478	5.00	pCi/L		CM4 02	2/07/25 0842	27/2615	1
<i>Th-01-RC M, Th</i>				0.748	+/-0.478	5.00	pCI/L		CM4 0.	2/07/23 0842	2742013	1
Thorium-230	U	0.822	+/-1.20	1.98	+/-1.21	50.0	pCi/L		RM3 02	2/04/25 1022	2742614	2
Rad Gas Flow Pro 905.0 Mod, Sr90							1					
Strontium-90	U	-1.52	+/-1.28	2.82	+/-1.28	8.00	pCi/L		HH3 02	2/13/25 0948	2742199	3
9310,Alpha/Beta	Activity, liquid	"As Received"										
Alpha	U	1.71	+/-3.44	6.50	+/-3.46	15.0	pCi/L		AH4 02	2/05/25 0844	2742202	4
Beta Bod Liquid Scintil	lation Analysis	11.5	+/-6.58	9.81	+/-6.86	50.0	pCi/L					
Rad Liquid Scintil 906.0 Mod, Tritin												
Tritium	U	56.5	+/-100	173	+/-101	300	pCi/L		KXA1 02	2/10/25 0157	2741848	5
Tc-02-RC-MOD,	Tc99, Liquid "A	As Received"										
Technetium-99	U	2.80	+/-11.9	20.6	+/-11.9	25.0	pCi/L		GS3 02	2/13/25 2001	2742289	6
The following Ana	lytical Method	s were perforn	ned									
Method	Description											
1	Eichrom Industrie	es, AN-1418										
2	DOE EML HASI	L-300, Th-01-RC	Modified									
3	EPA 905.0 Modif	ried/DOE RP501	Rev. 1 Modif	fied								
4	EPA 900.0/SW84	6 9310										
	EPA 906.0 Modif											
6	DOE EML HASI	2-300, Tc-02-RC	Modified									
Surrogate/Tracer	Recovery	Test						Batch ID	Recovery	% Accepta	ble Limi	ts
Barium-133 Tra	icer	AlphaSpec	Ra226, Liqu	id "As Received"				2742615	99.4	(30%-	-110%)	
Thorium-229 Tr	racer	Th-01-RC M	A, Th Isotop	es, Liquid "As Recei	ved"			2742614	71.9	(30%-	-110%)	
Strontium Carrie	er	905.0 Mod,	Sr90, liquid	l "As Received"				2742199	80.5	(30%-	-110%)	
Technetium-99r	n Tracer	Tc-02-RC-M	MOD, Tc99,	Liquid "As Received	d"			2742289	82.4	(30%-	-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact:	Kevil, Kentucky 42053 Ms. Jaime Morrow			Report Date:	April 29, 2025
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW395SG2-25 706418025		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Company : Address :	Four Rivers LLC 5600 Hobbs	s Nuclear Partn s Road	ership,									
	Kevil, Kent	tucky 42053						Repo	rt Date:	April 29,	2025	
Contact:	Ms. Jaime I	Morrow										
Project:	C-746-S&T	TLandfill Quar	rterly(SG25-	.02)								
Client Sampl Sample ID: Matrix: Collect Date: Receive Date Collector:	70641 WG 29-JA	N-25 N-25					oject: ent ID:	FRNP(FRNP(
Parameter	Qualifie	r Result Ur	ncertainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec Ar	-	: 1''										
AlphaSpec Ra226 Radium-226	, <i>Liquia As Ke</i> U	-0.0531	+/-0.426	0.921	+/-0.426	5.00	pCi/L		CM4 0	2/07/25 0842	2742615	1
Th-01-RC M, Th				0.921	17-0.420	5.00	pei/L		02	/07/25 0042	2742015	1
Thorium-230	U	-0.173	+/-0.862	1.94	+/-0.863	50.0	pCi/L		RM3 02	2/04/25 1022	2742614	2
Rad Gas Flow Prop 905.0 Mod, Sr90,												
Strontium-90	U	-1.20	+/-1.65	3.23	+/-1.65	8.00	pCi/L		HH3 02	2/13/25 0951	2742199	3
9310,Alpha/Beta	Activity, liquid											
Alpha	U	-0.598	+/-2.91	7.37	+/-2.91	15.0	pCi/L		AH4 02	2/05/25 0844	2742202	4
Beta Rad Liquid Scintill	U ation Analysis	-1.26	+/-4.75	9.34	+/-4.75	50.0	pCi/L					
906.0 Mod, Tritiu		"As Received"										
Tritium	U	36.3	+/-101	177	+/-101	300	pCi/L		KXA1 02	2/10/25 0240	2741848	5
Tc-02-RC-MOD,	Tc99, Liquid "A	s Received"										
Technetium-99	U	-4.73	+/-11.1	19.8	+/-11.1	25.0	pCi/L		GS3 02	2/13/25 2023	2742289	6
The following Anal	ytical Methods	s were perform	ned									
Method 1	Description											
1]	Eichrom Industrie	es, AN-1418										
2 1	DOE EML HASL	-300, Th-01-RC	Modified									
3 1	EPA 905.0 Modif	ied/DOE RP501	Rev. 1 Modif	fied								
4	EPA 900.0/SW84	6 9310										
	EPA 906.0 Modif											
6	DOE EML HASL	-300, Tc-02-RC	Modified									
Surrogate/Tracer	Recovery	Test						Batch ID	Recovery?	6 Accepta	ble Limi	its
Barium-133 Trac	cer	AlphaSpec	Ra226, Liqu	id "As Received"				2742615	98.6	(30%-	110%)	
Thorium-229 Tra	acer	Th-01-RC M	M, Th Isotop	es, Liquid "As Red	ceived"			2742614	88.2	(30%-	110%)	
Strontium Carrie	r	905.0 Mod,	Sr90, liquid	l "As Received"				2742199	92.7	(30%-	110%)	
Technetium-99m	n Tracer	Tc-02-RC-N	MOD, Tc99,	Liquid "As Receiv	ved"			2742289	85.8		110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC				
Address .	5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW396SG2-25 706418027		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Company : Address :	Four Rivers M LLC 5600 Hobbs I		ership,									
	Kevil, Kentu	cky 42053						Rep	ort Date:	April 29	, 2025	
Contact:	Ms. Jaime M	orrow										
Project:	C-746-S&T I	Landfill Quar	terly(SG25-	02)								
Client Sample Sample ID: Matrix: Collect Date: Receive Date Collector:	706418 WG 29-JAN : 30-JAN Client	I-25 I-25				Cli	oject: ent ID:	FRNP FRNP	006			
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	e Batch	Mtd.
Rad Alpha Spec An AlphaSpec Ra226,		ivad"										
Radium-226	U U	0.234	+/-0.431	0.671	+/-0.431	5.00	pCi/L		CM4	02/08/25 0917	2742614	5 1
Th-01-RC M, Th I				0.071	17 0.151	5.00	pent		Chill	02/00/25 071/	27 12011	
Thorium-230	U	0.153	+/-0.847	1.71	+/-0.850	50.0	pCi/L		RM3	02/04/25 1025	2742614	4 2
Rad Gas Flow Prop 905.0 Mod, Sr90,							-					
Strontium-90	U	-1.09	+/-1.07	2.36	+/-1.07	8.00	pCi/L		HH3	02/13/25 0948	2742199	93
9310,Alpha/Beta A	Activity, liquid "A	s Received"										
Alpha	U	2.09	+/-4.02	7.45	+/-4.03	15.0	pCi/L		AH4	02/05/25 0845	2742202	2 4
Beta Rad Liquid Scintilla	ation Analysis	15.3	+/-6.43	8.59	+/-6.93	50.0	pCi/L					
906.0 Mod, Tritiu		s Received"										
Tritium	U	17.1	+/-96.0	172	+/-96.1	300	pCi/L		KXA1	02/10/25 0445	2741848	85
Tc-02-RC-MOD,	Tc99, Liquid "As	Received"										
Technetium-99	U	19.0	+/-12.1	19.7	+/-12.3	25.0	pCi/L		GS3	02/13/25 2044	2742289	96
The following Anal	ytical Methods v	were perforn	ned									
	Description	-										
1 E	Eichrom Industries,	AN-1418										
2 I	DOE EML HASL-3	00, Th-01-RC	Modified									
3 E	EPA 905.0 Modifie	d/DOE RP501	Rev. 1 Modif	ïed								
4 E	EPA 900.0/SW846	9310										
5 E	EPA 906.0 Modifie	d										
6 I	DOE EML HASL-3	00, Tc-02-RC	Modified									
Surrogate/Tracer l	Recovery	Гest						Batch ID	Recover	y% Accept	able Lim	its
Barium-133 Trac	er	AlphaSpec	Ra226, Liqu	id "As Received"				2742615	98.	6 (30%	-110%)	
Thorium-229 Tra	cer	Th-01-RC M	A, Th Isotop	es, Liquid "As Rece	eived"			2742614	87.	3 (30%	-110%)	
Strontium Carrier	r	905.0 Mod,	Sr90, liquid	"As Received"				2742199	92.	7 (30%	-110%)	
Technetium-99m	Tracer		-	Liquid "As Receive	ed"			2742289	86.		-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW397SG2-25 706418029		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Test

Company : Address :	Four Rivers M LLC 5600 Hobbs I		ership,										
	Kevil, Kentud	cky 42053						Re	eport Date:	А	pril 29,	2025	
Contact:	Ms. Jaime M	orrow											
Project:	C-746-S&T I	Landfill Quar	rterly(SG25-	.02)									
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	D: MW384 706672 WG 30-JAN 31-JAN Client	I-25					oject: ent ID:		IP00609 IP006				
Parameter	Qualifier	Result Ur	ncertainty	MDC	TPU	RL	Units	PF	DF Analys	t Date	Time	Batch	Mtd.
Rad Alpha Spec Anal AlphaSpec Ra226, L		inad"											
Radium-226	uquiu As Kece U	0.309	+/-0.487	0.795	+/-0.488	5.00	pCi/L		CM4	$02/11/2^{4}$	5 0804	2744338	2 1
Th-01-RC M, Th Iso				0.175	17 0.100	5.00	pent		Civit	02/11/2.	0001	2711330	, 1
Thorium-230	U	0.692	+/-1.13	1.85	+/-1.14	50.0	pCi/L		RM3	02/06/2	5 0944	2744339	2
Rad Gas Flow Propor 905.0 Mod, Sr90, liq							I						
Strontium-90	U	-0.605	+/-0.931	1.98	+/-0.931	8.00	pCi/L		HH3	02/13/2	5 1330	2742835	3
9310,Alpha/Beta Act	tivity, liquid "A	s Received"											
Alpha	U	-0.452	+/-3.44	8.05	+/-3.44	15.0	pCi/L		AH4	02/05/2	5 1251	2742848	3 4
Beta		34.5	+/-8.47	8.97	+/-10.2	50.0	pCi/L						
Rad Liquid Scintillati 906.0 Mod, Tritium	Dist, Liquid "A												
Tritium	U	64.5	+/-136	235	+/-136	300	pCi/L		KXA1	02/10/2:	5 0856	2746544	5
Tc-02-RC-MOD, Tc	99, Liquid "As		(10 0	15.0	(10 0		<i></i>			00/10/0			
Technetium-99		46.8	+/-12.3	17.0	+/-13.3	25.0	pCi/L		GS3	02/18/2	5 2237	2744824	6
The following Analyti Method Des		were perform	ned										
	scription												
	hrom Industries,												
	E EML HASL-3	,		~ .									
	A 905.0 Modified		Rev. I Modif	tied									
	A 900.0/SW846 A 906.0 Modified												
	E EML HASL-3		Modified										
Surrogate/Tracer Re	covery	Гest						Batch]	D Recover	•y% A	ccepta	ble Limi	its
Barium-133 Tracer		AlphaSpec	Ra226. Liqu	id "As Receiv	ved"			274433	38 98	.1	(30%-	110%)	
Thorium-229 Trace	r	1 1	· 1	es, Liquid "A				274433				110%)	
Strontium Carrier		905.0 Mod,	Sr90, liquid	l "As Received	d''			274283	35 10)7	(30%-	110%)	
Technetium-99m T	racer	Tc-02-RC-1	MOD, Tc99,	Liquid "As R	eceived"			274482	24 98	.4	(30%-	110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053		Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample I Sample ID:	ID: MW384DSG2-25 706672001	Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC 1	TPU RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Test

Company : Address :	Four Rivers M LLC 5600 Hobbs I		ership,									
	Kevil, Kentud	cky 42053						Rep	ort Date:	April 2	9, 2025	
Contact:	Ms. Jaime M	orrow										
Project:	C-746-S&T I	Landfill Quar	terly(SG25-	02)								
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	706672 WG 30-JAN 31-JAN Client	I-25 I-25				Cli	oject: ent ID:	FRNP FRNP	006			
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Tim	e Batch	Mtd.
Rad Alpha Spec Ana AlphaSpec Ra226,		ivad"										
Radium-226	U U	0.313	+/-0.357	0.524	+/-0.357	5.00	pCi/L		CM4	02/09/25 0910	274433	8 1
Th-01-RC M, Th Is				0.021	1, 0,000,	2100	Perz		0	02/07/20 0710	271100	
Thorium-230	U	0.299	+/-1.19	2.31	+/-1.19	50.0	pCi/L		RM3	02/06/25 0944	274433	92
Rad Gas Flow Prop 905.0 Mod, Sr90, 1												
Strontium-90	U	1.31	+/-1.62	2.74	+/-1.63	8.00	pCi/L		HH3	02/13/25 1330	274283	53
9310,Alpha/Beta A	ctivity, liquid "A											
Alpha	U	0.0458	+/-3.07	7.06	+/-3.08	15.0	pCi/L		AH4	02/05/25 1251	2742848	8 4
Beta Rad Liquid Scintilla 906.0 Mod, Tritium		24.0 s. Received"	+/-8.29	11.0	+/-9.20	50.0	pCi/L					
Tritium	U U	39.4	+/-133	233	+/-134	300	pCi/L		KXA1	02/10/25 0938	2746544	4 5
Tc-02-RC-MOD, T			1, 100	200	., 101	200	Perz			02/10/20 0/00	271001	
Technetium-99	, <u>1</u>	37.1	+/-12.0	17.4	+/-12.7	25.0	pCi/L		GS3	02/18/25 2253	2744824	4 6
The following Analy	tical Methods v	vere perforn	ned									
	escription											
1 E	ichrom Industries,	AN-1418										
2 D	OE EML HASL-3	00, Th-01-RC	Modified									
3 E	PA 905.0 Modified	d/DOE RP501	Rev. 1 Modif	ïed								
4 E	PA 900.0/SW846	9310										
5 E	PA 906.0 Modified	d										
6 D	OE EML HASL-3	00, Tc-02-RC	Modified									
Surrogate/Tracer F	Recovery	Гest						Batch ID	Recover	y% Accept	able Lim	its
Barium-133 Trace	er	AlphaSpec I	Ra226, Liqu	id "As Received"				2744338	10	0 (30%	5-110%)	
Thorium-229 Tra	cer	Th-01-RC M	4, Th Isotop	es, Liquid "As Rece	eived"			2744339	83.	3 (30%	5-110%)	
Strontium Carrier		905.0 Mod,	Sr90, liquid	"As Received"				2742835	10	0 (30%	5-110%)	
Technetium-99m	Tracer		-	Liquid "As Receive	ed"			2744824			5-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW384SG2-25 706672003		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Company : Address :	Four Rivers N LLC 5600 Hobbs F		ership,										
	Kevil, Kentuc	ky 42053						Re	port Date:	А	pril 29,	2025	
Contact:	Ms. Jaime Mo	orrow											
Project:	C-746-S&T L	andfill Quart	erly(SG25-	02)									
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	7066720 WG 30-JAN	-25 -25					oject: ent ID:		P00609 P006				
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analys	t Dat	e Time	Batch	Mtd.
Rad Alpha Spec Ana	-	inad"											
AlphaSpec Ra226, Radium-226	U	0.380	+/-0.404	0.604	+/-0.404	5.00	pCi/L		CM4	02/09/2	5 0910	2744338	2 1
Th-01-RC M, Th Is			17 0.404	0.004	17 0.404	5.00	pei/L		CMI4	02/07/2	5 0710	2744330	, 1
Thorium-230	U	1.14	+/-1.27	1.87	+/-1.29	50.0	pCi/L		RM3	02/06/2	5 0944	2744339) 2
Rad Gas Flow Prop 905.0 Mod, Sr90, l		0					•						
Strontium-90	U	-0.105	+/-2.12	3.98	+/-2.12	8.00	pCi/L		HH3	02/13/2	5 1330	2742835	5 3
9310,Alpha/Beta A	ctivity, liquid "A	s Received"											
Alpha	U	1.02	+/-3.60	7.36	+/-3.60	15.0	pCi/L		AH4	02/05/2	5 1251	2742848	3 4
Beta	4: A	33.0	+/-8.29	8.99	+/-9.93	50.0	pCi/L						
Rad Liquid Scintilla 906.0 Mod, Tritium		s Received"											
Tritium	U	38.8	+/-130	227	+/-130	300	pCi/L		KXA1	02/10/2	5 1020	2746544	5
Tc-02-RC-MOD, T	Cc99, Liquid "As I	Received"											
Technetium-99		43.6	+/-12.3	17.3	+/-13.2	25.0	pCi/L		GS3	02/18/2	5 2310	2744824	6
The following Analy	tical Methods w	vere perform	ed										
Method D	escription												
1 E	ichrom Industries,	AN-1418											
2 D	OE EML HASL-3	00, Th-01-RC	Modified										
3 E	PA 905.0 Modified	/DOE RP501 I	Rev. 1 Modif	ïed									
4 E	PA 900.0/SW846 9	9310											
5 E	PA 906.0 Modified	l											
6 D	OE EML HASL-3	00, Tc-02-RC I	Modified										
Surrogate/Tracer F	Recovery 7	Test						Batch 1	D Recover	у% A	Accepta	ble Lim	its
Barium-133 Trace	er	AlphaSpec F	Ra226, Liqu	id "As Received"				274433	88 10	1	(30%-	110%)	
Thorium-229 Trac	cer	Th-01-RC M	I, Th Isotop	es, Liquid "As Red	ceived"			274433	90 90	.9	(30%-	110%)	
Strontium Carrier		905.0 Mod,	Sr90, liquid	"As Received"				274283	6	1	(30%-	-110%)	
Technetium-99m			•	Liquid "As Receiv	ved"			274482		.8		-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053			Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: MW385SG2-25 706672005		Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU	RL Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Company : Address :	Four Rivers LLC 5600 Hobbs	s Nuclear Partr s Road	ership,										
	Kevil, Kent	ucky 42053						Rep	ort Date:	Aj	oril 29,	2025	
Contact:	Ms. Jaime I	Morrow											
Project:	C-746-S&T	Landfill Quar	terly(SG25-	.02)									
Client Sampl Sample ID: Matrix: Collect Date Receive Date Collector:	70667 WG 30-JA	N-25 N-25					oject: ent ID:	FRNP FRNP					
Parameter	Qualifie	r Result Ur	ncertainty	MDC	TPU	RL	Units	PF I	F Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec An		a aire a d''											
AlphaSpec Ra226 Radium-226	, Liquia As Ke U	0.536	+/-0.435	0.541	+/-0.436	5.00	pCi/L		CM4	02/09/25	0910	2744338	: 1
<i>Th-01-RC M, Th</i>				0.341	17-0.430	5.00	pei/L		0.014	02/07/25	0710	2744330	. 1
Thorium-230	U	1.42	+/-1.33	1.65	+/-1.35	50.0	pCi/L		RM3	02/06/25	1119	2744339	2
Rad Gas Flow Proj 905.0 Mod, Sr90,							-						
Strontium-90	U	0.652	+/-1.66	2.97	+/-1.66	8.00	pCi/L		HH3	02/13/25	1330	2742835	3
9310,Alpha/Beta	Activity, liquid	"As Received"											
Alpha	U	-0.317	+/-3.46	8.23	+/-3.46	15.0	pCi/L		AH4	02/05/25	1251	2742848	4
Beta Dod Liquid Sointill	U Intian Analysia	3.88	+/-5.33	9.13	+/-5.37	50.0	pCi/L						
Rad Liquid Scintill 906.0 Mod, Tritiu		"As Received"											
Tritium	U	133	+/-141	236	+/-143	300	pCi/L		KXA1	02/10/25	1102	2746544	5
Tc-02-RC-MOD,	Tc99, Liquid "A	s Received"											
Technetium-99	U	4.16	+/-9.99	17.3	+/-10.0	25.0	pCi/L		GS3	02/18/25	2327	2744824	6
The following Ana	lytical Methods	s were perform	ned										
Method	Description												
1	Eichrom Industrie	s, AN-1418											
2	DOE EML HASL	-300, Th-01-RC	Modified										
3	EPA 905.0 Modif	ied/DOE RP501	Rev. 1 Modif	fied									
4	EPA 900.0/SW84	6 9310											
	EPA 906.0 Modif												
6	DOE EML HASL	300, Tc-02-RC	Modified										
Surrogate/Tracer	Recovery	Test						Batch ID	Recover	y% A	ccepta	ble Lim	its
Barium-133 Trac	cer	AlphaSpec	Ra226, Liqu	id "As Received"				2744338	97.	5	(30%-	110%)	
Thorium-229 Tra	acer	Th-01-RC N	M, Th Isotop	es, Liquid "As Rec	eived"			2744339	60.	7	(30%-	110%)	
Strontium Carrie	er	905.0 Mod,	Sr90, liquid	l "As Received"				2742835	75.	6	(30%-	110%)	
Technetium-99n	n Tracer	Tc-02-RC-I	MOD, Tc99,	Liquid "As Receiv	ed"			2744824	96.	4	(30%-	110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC			
riddrobb .	5600 Hobbs Road			
	Kevil, Kentucky 42053		Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample Sample ID:	ID: MW386SG2-25 706672007	Project: Client II	FRNP00609 D: FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU RL Unit	s PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

Company : Address :	Four Rivers LLC 5600 Hobbs	Nuclear Partn Road	ership,									
	Kevil, Kent	ucky 42053						Repo	rt Date:	April 29,	2025	
Contact:	Ms. Jaime M	<i>I</i> orrow										
Project:	C-746-S&T	Landfill Quar	terly(SG25-	.02)								
Client Sampl Sample ID: Matrix: Collect Date: Receive Date Collector:	70667 WATI 30-JA	2009 ER N-25 N-25					oject: ent ID:	FRNP(FRNP(
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF D	F Analyst	Date Time	Batch	Mtd.
Rad Alpha Spec An AlphaSpec Ra226		ceived"										
Radium-226	U	0.0823	+/-0.283	0.542	+/-0.283	5.00	pCi/L		CM4 0	2/09/25 0910	2744338	3 1
Th-01-RC M, Th												
Thorium-230	U	0.363	+/-1.12	2.10	+/-1.12	50.0	pCi/L		RM3 0	2/06/25 1119	2744339) 2
Rad Gas Flow Prop 905.0 Mod, Sr90,	liquid "As Rece	ived"										
Strontium-90	U	0.118	+/-0.772	1.48	+/-0.773	8.00	pCi/L		HH3 0	2/13/25 1330	2742835	5 3
9310,Alpha/Beta			. / 0.45	5.40	. / 2.45	15.0	0.4		A 114 0	0/05/05 1051	0740040	
Alpha Beta	U U	0.585 2.57	+/-2.45 +/-4.99	5.40 8.82	+/-2.45 +/-5.01	15.0 50.0	pCi/L pCi/L		AH4 0	2/05/25 1251	2742848	5 4
Rad Liquid Scintill 906.0 Mod, Tritiu	ation Analysis		17 1.55	0.02	., 5.01	50.0	pent					
Tritium	U	23.7	+/-128	225	+/-128	300	pCi/L		KXA1 0	2/10/25 1143	2746544	5
Tc-02-RC-MOD,	Tc99, Liquid "A	s Received"										
Technetium-99	U	3.36	+/-9.86	17.2	+/-9.86	25.0	pCi/L		GS3 0	2/18/25 2343	2744824	6
The following Anal	ytical Methods	were perforn	ned									
Method	Description											
1	Eichrom Industrie	s, AN-1418										
2	DOE EML HASL	-300, Th-01-RC	Modified									
3	EPA 905.0 Modifi	ed/DOE RP501	Rev. 1 Modif	fied								
4	EPA 900.0/SW840	5 9310										
5	EPA 906.0 Modifi	ed										
6	DOE EML HASL	-300, Tc-02-RC	Modified									
Surrogate/Tracer	v	Test							Recovery			its
Barium-133 Trac	cer	AlphaSpec 1	Ra226, Liqu	id "As Received"				2744338	97.3	(30%-	-110%)	
Thorium-229 Tra	acer	Th-01-RC M	A, Th Isotop	es, Liquid "As Rec	eived"			2744339	67.6	(30%-	110%)	
Strontium Carrie	r	905.0 Mod,	Sr90, liquid	l "As Received"				2742835	107	(30%-	110%)	
Technetium-99m	n Tracer	Tc-02-RC-N	40D, Tc99,	Liquid "As Receiv	ed"			2744824	97.6	(30%-	110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053		Report Date:	April 29, 2025
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample Sample ID:	ID: RI1SG2-25 706672009	Project: Client ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU RL Units	PF DF Analyst	Date Time Batch Mtd.
Surrogate/Tracer Ro	ecovery Test		Batch ID Recovery	% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows: DF: Dilution Factor Mtd.: Method DL: Detection Limit PF: Prep Factor Lc/LC: Critical Level **RL:** Reporting Limit MDA: Minimum Detectable Activity TPU: Total Propagated Uncertainty MDC: Minimum Detectable Concentration

Company : Address :	Four River LLC 5600 Hobb	rs Nuclear Partn os Road	ership,										
	Kevil, Ken	tucky 42053						Re	port Date:	А	pril 29,	2025	
Contact:	Ms. Jaime	-							1		•		
Project:	C-746-S&	T Landfill Quar	terly(SG25-	02)									
Client Sampl Sample ID: Matrix: Collect Date: Receive Date Collector:	e ID: FB1S 7066 WAT 30-JA	GG2-25 72010 TER AN-25 AN-25					oject: ent ID:						
Parameter	Qualifie	er Result Ur	certainty	MDC	TPU	RL	Units	PF	DF Analys	t Date	e Time	Batch	Mtd.
Rad Alpha Spec Ar AlphaSpec Ra226	•	eceived"											
Radium-226	, <i>Eiquiu</i> 715 M U	0.198	+/-0.275	0.410	+/-0.275	5.00	pCi/L		CM4	02/09/2	5 0910	2744338	8 1
Th-01-RC M, Th	Isotopes, Liqui						I						
Thorium-230	U	0.389	+/-0.886	1.59	+/-0.891	50.0	pCi/L		RM3	02/06/2	5 1119	2744339	2
Rad Gas Flow Prop 905.0 Mod, Sr90,													
Strontium-90	U	-0.986	+/-1.22	2.64	+/-1.22	8.00	pCi/L		HH3	02/13/2	5 1330	2742835	3
9310,Alpha/Beta	Activity, liquid	"As Received"											
Alpha	U	-1.65	+/-2.71	7.54	+/-2.71	15.0	pCi/L		AH4	02/05/2	5 1251	2742848	8 4
Beta	U	-1.73	+/-4.65	9.37	+/-4.65	50.0	pCi/L						
Rad Liquid Scintill 906.0 Mod, Tritiu													
Tritium	U	75.3	+/-135	231	+/-135	300	pCi/L		KXA1	02/10/2	5 1225	2746544	5
Tc-02-RC-MOD,	Tc99, Liquid "A	As Received"											
Technetium-99	U	-0.000827	+/-9.86	17.6	+/-9.86	25.0	pCi/L		GS3	02/19/2	5 0000	2744824	6
The following Anal	ytical Method	s were perform	ned										
Method 1	Description												
1]	Eichrom Industri	es, AN-1418											
2	DOE EML HASI	L-300, Th-01-RC	Modified										
3	EPA 905.0 Modi	fied/DOE RP501	Rev. 1 Modif	fied									
4	EPA 900.0/SW84	46 9310											
	EPA 906.0 Modi												
6	DOE EML HASI	L-300, Tc-02-RC	Modified										
Surrogate/Tracer	Recovery	Test						Batch I	D Recover	y% A	ccepta	ble Lim	its
Barium-133 Trac	cer	AlphaSpec	Ra226, Liqu	id "As Received"				274433	38 99	.6	(30%-	-110%)	
Thorium-229 Tra	acer	Th-01-RC M	M, Th Isotop	es, Liquid "As Rece	ived"			274433	89 82	.4	(30%-	-110%)	
Strontium Carrie	r	905.0 Mod,	Sr90, liquid	"As Received"				274283	35 75	.6	(30%-	-110%)	
Technetium-99m	n Tracer	Tc-02-RC-N	MOD, Tc99,	Liquid "As Receive	ed"			274482	.4 95	.2	(30%-	-110%)	

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Certificate of Analysis

Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact:	Kevil, Kentucky 42053 Ms. Jaime Morrow			Report Date:	April 29, 2025
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample Sample ID:	ID: FB1SG2-25 706672010	Proj Clie	ect: ent ID:	FRNP00609 FRNP006	
Parameter	Qualifier Result Uncertainty MDC	TPU RL	Units	PF DF Analyst	Date Time Batch Mtd.

Batch ID Recovery% Acceptable Limits

Surrogate/Tracer Recovery Test

Notes:

The MDC is a sample specific MDC.

TPU and Counting Uncertainty are calculated at the 95% confidence level (1.96-sigma).

Column headers are defined as follows:DF: Dilution FactorMtd.: MethodDL: Detection LimitPF: Prep FactorLc/LC: Critical LevelRL: Reporting LimitMDA: Minimum Detectable ActivityTPU: Total Propagated UncertaintyMDC: Minimum Detectable ConcentrationFinit TPU: Total Propagated Uncertainty

	5 5 5		Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC			
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	MW384DSG2-25	Project:	FRNP00609	
Sample ID:	706672001	Client ID:	FRNP006	
Matrix:	WG			
Collect Date:	30-JAN-25 08:28			
Receive Date:	31-JAN-25			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time Bate	h Method
504.1/8011 Analysis	of EDB/DBCP										
8011, VOA Compou	nds Liquid "As]	Received"									
1,2-Dibromo-3-chloroprop		0.0191	0.00858	0.0191	ug/L	0.953	1	LOF	02/04/25	2338 27434	89 1
Carbon Analysis					, , , , , , , , , , , , , , , , , , ,						
9060A, Total Organi	c Carbon "As Re	eceived"									
Total Organic Carbon Ave		0.836	0.330	2.00	mg/L		1	KB3	02/05/25	2350 2743	92 3
Flow Injection Analy					e						
9012B, Total Cyanid		•									
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	JLD1	02/04/25	1343 27432	.57 4
Halogen Analysis	-				8						
9020B, TOX (Organ	ic Halogen) "As	Received"									
Total Organic Halogens	U	10.0	3.33	10.0	ug/L		1	JS13	02/26/25	1044 27552	.61 5
Ion Chromatography		10.0	5.55	10.0	ug/12		1	3015	02/20/23	1044 27552	.01 5
300.0, Iodide in Liqu		1"									
Iodide	III AS RECEIVED	0.500	0.167	0.500	mg/L		1	CH6	01/31/25	1158 2742	00 6
SW846 9056A Anior			0.107	0.500	mg/L		1	Спо	01/31/23	1136 2742	00 0
Bromide	(5) As Recei	0.264	0.0670	0.200	mg/L		1	CH6	01/31/25	1258 2742	515 7
Fluoride	J	0.204	0.0330	4.00	mg/L		1	CHO	01/31/23	1230 2742.	15 /
Sulfate	5	18.9	0.133	0.400	mg/L mg/L		1				
Chloride	J	21.6	0.268	250	mg/L		4	CH6	01/31/25	1837 2742	515 8
Nitrate-N	J	0.807	0.132	10.0	mg/L		4				
Mercury Analysis-C	VAA										
7470, Mercury Liqui	d "As Received'	•									
Mercury	J	0.000170	0.0000670	0.000200	mg/L	1.00	1	JP2	02/04/25	1023 27433	54 9
Metals Analysis-ICP	P-MS				e						
6020, Metals (15+) "											
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	02/20/25	1906 27453	00 10
Antimony	Ŭ	0.00300	0.00100	0.00300	mg/L	1.00	1				
Arsenic	U	0.00500	0.00200	0.00500	mg/L	1.00	1				
Barium		0.194	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1				
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1				
Calcium		23.1	0.0800	0.200	mg/L	1.00	1				
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1				
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1				

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID: Sample ID:	MW384DSG2-25 706672001	Project: Client ID:	FRNP00609 FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time B	atch	Method
Metals Analysis-ICP-M	S											
6020, Metals (15+) "As	Received"											
Copper	J	0.000686	0.000300	0.00200	mg/L	1.00	1					
Iron	U	0.100	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		9.96	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.000782	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.36	0.0800	0.300	mg/L	1.00	1					
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1					
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Sodium		44.4	0.0800	0.250	mg/L	1.00						
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Boron		0.0803	0.00520	0.0150	mg/L	1.00	1	PRB	04/02/25	2224 27	73801	11
Solids Analysis												
160.1, Dissolved Solids	"As Receive	ed"										
Total Dissolved Solids		185	2.38	10.0	mg/L			RR4	02/06/25	1317 27	45814	12
Spectrometric Analysis					-							
410.4, Chem. Oxygen D	emand "As l	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	HH2	02/03/25	1309 27	43441	13
Volatile Organics					0							
8260D, Volatiles- full su	uite "As Reco	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/06/25	1256 27	45972	14
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					

			Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample ID: Sample ID:	MW384DSG2-25 706672001	Project: Client ID:	FRNP00609 FRNP006		

Parameter Qu	alifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full suite "	"As Rece	ived"							
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
1,2-Dichloroethane	U	1.00	0.333	1.00	ug/L		1		
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1		
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
2-Butanone	U	5.00	1.67	5.00	ug/L		1		
2-Hexanone	U	5.00	1.67	5.00	ug/L		1		
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1		
Acetone	U	5.00	1.74	5.00	ug/L		1		
Acrolein	UQ	5.00	1.67	5.00	ug/L		1		
Acrylonitrile	UQ	5.00	1.67	5.00	ug/L		1		
Benzene	U	1.00	0.333	1.00	ug/L		1		
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromoform	U	1.00	0.333	1.00	ug/L		1		
Bromomethane	U	1.00	0.337	1.00	ug/L		1		
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1		
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1		
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1		
Chloroethane	U	1.00	0.333	1.00	ug/L		1		
Chloroform	U	1.00	0.333	1.00	ug/L		1		
Chloromethane	UQ	1.00	0.333	1.00	ug/L		1		
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Dibromomethane	U	1.00	0.333	1.00	ug/L		1		
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1		
Iodomethane	U	5.00	1.67	5.00	ug/L		1		
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene	J	0.870	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	UQ	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	U	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		

Certificate of Analysis

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID: Sample ID:	MW384DSG2-25 706672001	Project: Client ID:	FRNP00609 FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Volatile Organics										
8260D, Volatiles- full su	uite "As Rece	eived"								
trans-1,2-Dichloroethylene	U	1.00	0.333	1.00			1			
trans-1,3-Dichloropropylene	U		0.333	1.00	•		1			
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00	ug/L		1			
The following Prep Met	hods were pe	erformed:								
Method	Description	1		Analyst	Date		Time	e Prep Batch		
SW846 9010C Distillation	SW846 90100	C Prep		ES2	02/03/25	5	1130	2743256		
SW846 7470A Prep	EPA 7470A N	Aercury Prep Liquid		JM13	02/03/25	5	1100	2743352		
SW846 8011 PREP	8011 Prep			BM1	02/03/25		1239	2743487		
SW846 3005A	ICP-MS 3005			HS2	02/11/25		0930	2745299		
SW846 3005A	ICP-MS 3005	A PREP		HS2	04/01/25	5	1535	2773792		
The following Analytic	al Methods v	vere performed:								
Method	Description					Analys	st Cor	nments		
1	SW846 8011									
2	SW846 8011									
3	SW846 9060A									
4	SW846 9012B									
5	SW846 9020B									
6	EPA 300.0									
7	SW846 9056A	L								
8	SW846 9056A	L								
9	SW846 7470A									
10	SW846 3005A	/6020B								
11	SW846 3005A	/6020B								
12	EPA 160.1									
13	EPA 410.4									
14	SW846 8260E)								
Surrogate/Tracer Recove	ery Test				Result	Nomir	nal	Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene	8011, V	OA Compounds Liquid "As Receiv	ed"		7.43 ug/L	6.	81	109	(56%-149%))
Bromofluorobenzene		Volatiles- full suite "As Received"			51.4 ug/L	50	0.0	103	(85%-114%))
1,2-Dichloroethane-d4	8260D,	Volatiles- full suite "As Received"			57.2 ug/L	50	0.0	114	(81%-118%))
Toluene-d8	8260D,	Volatiles- full suite "As Received"			51.8 ug/L	50	0.0	104	(89%-112%)	1

Notes:

			<i>J</i>		Report Date:	April 29, 2025
Company	:	Four Rivers Nuclear Partnership, LLC				
Address :		5600 Hobbs Road				
		Kevil, Kentucky 42053				
Contact:		Ms. Jaime Morrow				
Project:		C-746-S&T Landfill Quarterly(SG25-02)				
Client San	nple ID:	MW384DSG2-25		Project:	FRNP00609	
Sample ID) :	706672001		Client ID:	FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch Method

Column headers are defined as follows:	
DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

Certificate of Analysis

				ingicale	oj maij	y 5 C 5			Rep	ort Date:	April 29, 2	2025
	Company :		Rivers Nuclear Partn	ership, LLC								
	Address :	5600) Hobbs Road									
		Kev	il, Kentucky 42053									
	Contact:	Ms.	Jaime Morrow									
	Project:	C-74	46-S&T Landfill Quar	terly(SG25-0	02)							
	Client Sample ID:	MW	384DSG2-25			Pro	ject:		FRNF	2 00609		
	Sample ID:	7066	572002			Cli	ent ID		FRNF	2 006		
	Matrix:	WG										
	Collect Date:	30-J	AN-25 08:28									
	Receive Date:	31-J	AN-25									
	Collector:	Clie	nt									
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Metals Ana	llysis-ICP-MS											
	olved Metals (3 Elen	nents)	"As Received"									
Barium	(•		0.195	0.000670	0.00400	mg/L	1.00	1	PRB	02/20/25	1909 2745300) 1
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00	1				
Uranium		U	0.000200	0.0000670	0.000200	mg/L	1.00	1				
The follow	ing Prep Methods w	ere pe	rformed:									
Method	Descr	iption	l		Analyst	Date	,	Time	e Pi	ep Batch		
EPA 160	Labora	tory Fil	tration		SD	02/05/25		1255	27	42747		
SW846 3005A	A ICP-M	S 3005.	A PREP		HS2	02/11/25	(0930	27	45299		
The follow	ving Analytical Meth	1	C 1									
The follow	ang Anarytical Meth	ods w	vere performed:									

npue SW846 3005A/6020B

Notes:

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

				A
			Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC			
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contract	•			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	MW384SG2-25	Project:	FRNP00609	
Sample ID:	706672003	Client ID:	FRNP006	
Matrix:	WG			
Collect Date:	30-JAN-25 08:28			
Receive Date:	31-JAN-25			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time	Batch	Method
504.1/8011 Analysis of	EDB/DBCP											
8011, VOA Compounds		Received"										
1,2-Dibromo-3-chloropropane	*	0.0190	0.00853	0.0190	ug/L	0.948	1	LOF	02/05/25	0012	2743489	1
Carbon Analysis					C							
9060A, Total Organic C	Carbon "As R	eceived"										
Total Organic Carbon Averag		0.826	0.330	2.00	mg/L		1	KB3	02/06/25	0022	2743992	3
Flow Injection Analysis					U							
9012B, Total Cyanide "		"										
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	JLD1	02/04/25	1344	2743257	4
Halogen Analysis	U	0.200	0100107	0.200	ing 2	1100	•	1201	02/01/20	1011	27 10207	
9020B, TOX (Organic 1	Halogan) "As	Received"										
Total Organic Halogens	rialogen) As	12.3	3.33	10.0	ug/L		1	JS13	02/26/25	1138	2755261	5
Ion Chromatography		12.5	5.55	10.0	ug/L		1	3515	02/20/25	1150	2755201	5
300.0, Iodide in Liquid		4"										
Iodide		0.500	0.167	0.500	ma/I		1	CH6	01/31/25	1211	2742700	6
SW846 9056A Anions	U (5) "As Passi		0.107	0.300	mg/L		1	Спо	01/31/23	1211	2/42/00	0
Bromide	(J) As Recei	0.277	0.0670	0.200	mg/L		1	CH6	01/31/25	1220	2742515	7
Fluoride	J	0.277 0.173	0.0330	4.00	mg/L mg/L		1	Спо	01/31/23	1329	2/42313	1
Sulfate	J	19.5	0.133	0.400	mg/L mg/L		1					
Chloride	J	21.8	0.268	250	mg/L		4	CH6	01/31/25	1908	2742515	8
Nitrate-N	J	0.792	0.132	10.0	mg/L		4					
Mercury Analysis-CVA	AA				÷							
7470, Mercury Liquid "												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/04/25	1025	2743354	9
Metals Analysis-ICP-M					0							
6020, Metals (15+) "As												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	02/20/25	1912	2745300	10
Antimony	U	0.00300	0.00100	0.00300	mg/L	1.00	1	TRD	02/20/23	1712	27 10000	10
Arsenic	Ŭ	0.00500	0.00200	0.00500	mg/L	1.00	1					
Barium		0.197	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		23.3	0.0800	0.200	mg/L	1.00	1					
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: MW384SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672003 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Metals Analysis-ICP-M	IS											
6020, Metals (15+) "As Received"												
Copper	J	0.000866	0.000300	0.00200	mg/L	1.00	1					
Iron	U	0.100	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		10.1	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.40	0.0800	0.300	mg/L	1.00	1					
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1					
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Sodium		44.9	0.0800	0.250	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Boron		0.0818	0.00520	0.0150	mg/L	1.00	1	PRB	04/02/25	2227	2773801	11
Solids Analysis												
160.1, Dissolved Solids	s "As Receive	ed"										
Total Dissolved Solids		200	2.38	10.0	mg/L			RR4	02/06/25	1317	2745814	12
Spectrometric Analysis												
410.4, Chem. Oxygen I	Demand "As I	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	HH2	02/03/25	1309	2743441	13
Volatile Organics												
8260D, Volatiles- full s	uite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/06/25	1322	2745972	14
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					

			Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample ID: Sample ID:	MW384SG2-25 706672003	Project: Client ID:	FRNP00609 FRNP006		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full s	suite "As Reco	eived"							
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
1,2-Dichloroethane	Ū	1.00	0.333	1.00	ug/L		1		
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1		
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
2-Butanone	U	5.00	1.67	5.00	ug/L		1		
2-Hexanone	U	5.00	1.67	5.00	ug/L		1		
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1		
Acetone	U	5.00	1.74	5.00	ug/L		1		
Acrolein	UQ	5.00	1.67	5.00	ug/L		1		
Acrylonitrile	UQ	5.00	1.67	5.00	ug/L		1		
Benzene	Ŭ	1.00	0.333	1.00	ug/L		1		
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromoform	U	1.00	0.333	1.00	ug/L		1		
Bromomethane	U	1.00	0.337	1.00	ug/L		1		
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1		
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1		
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1		
Chloroethane	U	1.00	0.333	1.00	ug/L		1		
Chloroform	U	1.00	0.333	1.00	ug/L		1		
Chloromethane	UQ	1.00	0.333	1.00	ug/L		1		
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Dibromomethane	U	1.00	0.333	1.00	ug/L		1		
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1		
Iodomethane	U	5.00	1.67	5.00	ug/L		1		
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene	J	0.600	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	UQ	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	Ū	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		

Certificate of Analysis

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID: Sample ID:	MW384SG2-25 706672003	Project: Client ID:	FRNP00609 FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Volatile Organics										
8260D, Volatiles- full su	uite "As Rece	eived"								
trans-1,2-Dichloroethylene	U		0.333	1.00	U		1			
trans-1,3-Dichloropropylene	U		0.333	1.00	U		1			
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00) ug/L		1			
The following Prep Met	thods were pe	erformed:								
Method	Description			Analyst	Date		Time	-		
SW846 3005A	ICP-MS 3005			HS2	02/11/25		0930	2745299		
SW846 7470A Prep		Mercury Prep Liquid		JM13	02/03/25		1100	2743352		
SW846 9010C Distillation	SW846 90100	1		ES2	02/03/25		1130	2743256		
SW846 3005A	ICP-MS 3005	JA PREP		HS2	04/01/25		1535	2773792		
SW846 8011 PREP	8011 Prep			BM1	02/03/25	5	1239	2743487		
The following Analytic	al Methods v	vere performed:								
Method	Description	L				Analys	t Cor	nments		
1	SW846 8011									
2	SW846 8011									
3	SW846 9060A	λ								
4	SW846 9012E	3								
5	SW846 9020E	3								
6	EPA 300.0									
7	SW846 9056A	A								
8	SW846 9056A	A Contraction of the second seco								
9	SW846 7470A	λ								
10	SW846 3005A	A/6020B								
11	SW846 3005A	A/6020B								
12	EPA 160.1									
13	EPA 410.4									
14	SW846 8260E)								
Surrogate/Tracer Recov	ery Test				Result	Nomin	nal	Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene	8011, V	OA Compounds Liquid "As Receive	ed"		6.55 ug/L	6.	77	97	(56%-149%))
Bromofluorobenzene		Volatiles- full suite "As Received"			50.9 ug/L	50	0.0	102	(85%-114%))
1,2-Dichloroethane-d4	8260D,	Volatiles- full suite "As Received"			58.5 ug/L	50	0.0	117	(81%-118%))
Toluene-d8	8260D,	Volatiles- full suite "As Received"			52.7 ug/L	50	0.0	105	(89%-112%))

Notes:

Certificate of Analysis

		<i>J L L L</i>	Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	MW384SG2-25	Project:	FRNP00609	
Sample ID:	706672003	Client ID:	FRNP006	
~				

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch Method	_

Column headers are defined as follows:DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Certificate of Analysis

				<i>ingicale</i>	oj mai	y 5 C 5			Rep	ort Date:	Ap	oril 29, 2	2025	
	Company :	Fou	r Rivers Nuclear Part	nership, LLC	1									
	Address :	560	0 Hobbs Road	-										
		Kev	il, Kentucky 42053											
	Contact:	Ms.	Jaime Morrow											
	Project:	C-7-	46-S&T Landfill Qua	rterly(SG25-	02)									
	Client Sample ID:	MW	/384SG2-25			Pro	ject:		FRNI	200609				
	Sample ID:	706	672004				ent ID	:	FRNI	2006				
	Matrix:	WG												
	Collect Date:	30-J	AN-25 08:28											
	Receive Date:	31-J	AN-25											
	Collector:	Clie	ent											
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time	Batch	Meth	od
Metals Ana	alysis-ICP-MS													
6020, Diss	olved Metals (3 Elen	nents)	"As Received"											
Barium			0.199	0.000670	0.00400	mg/L	1.00		PRB	02/20/25	1915	2745300)	1
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00							
Uranium		U	0.000200	0.0000670	0.000200	mg/L	1.00	1						
	ving Prep Methods w													
Method	Desci				Analyst	Date		Time		rep Batch				
EPA 160	Labora		ltration A PREP		SD	02/05/25		1255		42747				
SW846 3005					HS2	02/11/25		0930	21	45299				
	ving Analytical Meth		-											
Method	Descri	<u> </u>				A	Analyst	t Con	nment	S				
1	SW846	3005A	A/6020B											

Notes:

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit MDC: Minimum Detectable Concentration

SQL: Sample Quantitation Limit

			Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC			
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	MW385SG2-25	Project:	FRNP00609	
Sample ID:	706672005	Client ID:	FRNP006	
Matrix:	WG			
Collect Date:	30-JAN-25 09:31			
Receive Date:	31-JAN-25			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time Batch	Method
504.1/8011 Analysis o	of EDB/DBCP										
8011, VOA Compound	ds Liquid "As]	Received"									
1,2-Dibromo-3-chloropropa	une U	0.0189	0.00850	0.0189	ug/L	0.944	1	LOF	02/05/25	0046 274348	9 1
Carbon Analysis					-						
9060A, Total Organic	Carbon "As Re	eceived"									
Total Organic Carbon Avera		0.800	0.330	2.00	mg/L		1	KB3	02/06/25	0054 274399	2 3
Flow Injection Analys					-						
9012B, Total Cyanide		"									
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	JLD1	02/04/25	1345 274325	7 4
Halogen Analysis					U						
9020B, TOX (Organic	Halogen) "As	Received"									
Total Organic Halogens	(Thurogen) The	16.7	3.33	10.0	ug/L		1	JS13	02/26/25	1208 275526	1 5
Ion Chromatography											
300.0, Iodide in Liquid	d "As Received	1"									
Iodide	U III III III U	0.500	0.167	0.500	mg/L		1	CH6	01/31/25	1224 274270	0 6
SW846 9056A Anions					8/		-				
Bromide	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.256	0.0670	0.200	mg/L		1	CH6	01/31/25	1359 274251	5 7
Fluoride	J	0.145	0.0330	4.00	mg/L		1				
Sulfate		19.4	0.133	0.400	mg/L		1				
Chloride	J	21.9	0.268	250	mg/L		4	CH6	01/31/25	1939 274251	5 8
Nitrate-N	J	0.821	0.132	10.0	mg/L		4				
Mercury Analysis-CV											
7470, Mercury Liquid	"As Received"										
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/04/25	1026 274335	4 9
Metals Analysis-ICP-N	MS										
6020, Metals (15+) "A	s Received"										
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	02/20/25	1918 274530	0 10
Antimony	U	0.00300	0.00100	0.00300	mg/L	1.00	1				
Arsenic	U	0.00500	0.00200	0.00500	mg/L	1.00	1				
Barium		0.209	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1				
Cadmium Calcium	U	0.00100 23.4	0.000300 0.0800	0.00100 0.200	mg/L mg/L	1.00 1.00	1 1				
Chromium	U	0.0100	0.0800	0.200	mg/L mg/L	1.00	1				
Cobalt	0	0.00154	0.000300	0.00100	mg/L mg/L	1.00	1				
		0.00101	0.000000	0.00100		1.00	•				

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: MW385SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672005 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time	Batch	Method
Metals Analysis-ICP-M	IS											
6020, Metals (15+) "As	Received"											
Copper	J	0.000790	0.000300	0.00200	mg/L	1.00	1					
Iron	U	0.100	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		9.82	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00105	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000218	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.00108	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.56	0.0800	0.300	mg/L	1.00	1					
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1					
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Sodium		45.2	0.0800	0.250	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	J	0.00337	0.00330	0.0200	mg/L	1.00	1					
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Boron		0.0823	0.00520	0.0150	mg/L	1.00	1	PRB	04/02/25	2230	2773801	11
Solids Analysis												
160.1, Dissolved Solids	"As Receive	ed"										
Total Dissolved Solids		193	2.38	10.0	mg/L			RR4	02/06/25	1317	2745814	12
Spectrometric Analysis					-							
410.4, Chem. Oxygen I	Demand "As I	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	HH2	02/03/25	1309	2743441	13
Volatile Organics					-							
8260D, Volatiles- full s	uite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/06/25	1349	2745972	14
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					

			Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample ID: Sample ID:	MW385SG2-25 706672005	Project: Client ID:	FRNP00609 FRNP006		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full s	uite "As Rec	eived"							
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
1,2-Dichloroethane	Ū	1.00	0.333	1.00	ug/L		1		
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1		
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
2-Butanone	U	5.00	1.67	5.00	ug/L		1		
2-Hexanone	U	5.00	1.67	5.00	ug/L		1		
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1		
Acetone	U	5.00	1.74	5.00	ug/L		1		
Acrolein	UQ	5.00	1.67	5.00	ug/L		1		
Acrylonitrile	UQ	5.00	1.67	5.00	ug/L		1		
Benzene	Ū	1.00	0.333	1.00	ug/L		1		
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromoform	U	1.00	0.333	1.00	ug/L		1		
Bromomethane	U	1.00	0.337	1.00	ug/L		1		
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1		
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1		
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1		
Chloroethane	U	1.00	0.333	1.00	ug/L		1		
Chloroform	U	1.00	0.333	1.00	ug/L		1		
Chloromethane	UQ	1.00	0.333	1.00	ug/L		1		
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Dibromomethane	U	1.00	0.333	1.00	ug/L		1		
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1		
Iodomethane	U	5.00	1.67	5.00	ug/L		1		
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene	U	1.00	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	UQ	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	Ū	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		

Certificate of Analysis

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	MW385SG2-25	Project:	FRNP00609	
Sample ID:	706672005	Client ID:	FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Metho
Volatile Organics										
8260D, Volatiles- full su	uite "As Rece	eived"								
trans-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1			
trans-1,3-Dichloropropylene	U		0.333	1.00	0		1			
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00	ug/L		1			
The following Prep Met	hods were pe	erformed:								
Method	Description	1		Analyst	Date		Time	e Prep Batch		
SW846 3005A	ICP-MS 3005	A PREP		HS2	04/01/25	5	1535	2773792		
SW846 9010C Distillation	SW846 90100	C Prep		ES2	02/03/25	5	1130	2743256		
SW846 8011 PREP	8011 Prep			BM1	02/03/25		1239	2743487		
SW846 7470A Prep	EPA 7470A N	Iercury Prep Liquid		JM13	02/03/25	5	1100	2743352		
SW846 3005A	ICP-MS 3005	A PREP		HS2	02/11/25	5	0930	2745299		
The following Analytics	al Methods w	vere performed:								
Method	Description					Analys	t Cor	nments		
1	SW846 8011									
2	SW846 8011									
3	SW846 9060A									
4	SW846 9012B									
5	SW846 9020B									
6	EPA 300.0									
7	SW846 9056A									
8	SW846 9056A									
9	SW846 7470A									
10	SW846 3005A	/6020B								
11	SW846 3005A	/6020B								
12	EPA 160.1									
13	EPA 410.4									
14	SW846 8260D)								
Surrogate/Tracer Recover	ery Test				Result	Nomin	al	Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene	8011, V	OA Compounds Liquid "As Receiv	ed"		7.18 ug/L	6.	74	106	(56%-149%))
Bromofluorobenzene		Volatiles- full suite "As Received"			51.6 ug/L	50	0.0	103	(85%-114%))
1,2-Dichloroethane-d4	8260D,	Volatiles- full suite "As Received"			58.3 ug/L	50	0.0	117	(81%-118%))
Toluene-d8	92COD	Volatiles- full suite "As Received"			52.0 ug/L	50	0.0	104	(89%-112%)	

Notes:

Certificate of Analysis

		j		Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC				
Address :	5600 Hobbs Road				
	Kevil, Kentucky 42053				
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample ID:	MW385SG2-25	Proje	ct:	FRNP00609	
Sample ID:	706672005	Clien	t ID:	FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method

Column headers are defined as follows:DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

Certificate of Analysis

				ingreare	oj mai	9505			Report Date:	April 29, 2	2025
	Company :	Fou	r Rivers Nuclear Partn	ership, LLC							
	Address :	560	0 Hobbs Road								
		Kev	vil, Kentucky 42053								
	Contact: Ms. Jaime Morrow										
	Project: C-746-S&T Landfill Qu			terly(SG25-	02)						
	Client Sample ID:		/385SG2-25		FRNP00609						
	-		706672006				oject: ent ID:		FRNP006		
	Matrix: WG		ſ								
	Collect Date:		JAN-25 09:31								
	Receive Date:	31-J	IAN-25								
	Collector:	Clie									
Parameter	Quali	fier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
		fier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Metals Ana	alysis-ICP-MS			DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
Metals Ana				DL 0.000670	RL 0.00400	Units mg/L	PF 1.00		Analyst Date PRB 02/20/25	Time Batch	
Metals Ana 6020, Disse	alysis-ICP-MS		"As Received"								
Metals Ana 6020, Disse Barium	alysis-ICP-MS	nents)	"As Received" 0.205	0.000670	0.00400	mg/L	1.00	1			
Metals Ana 6020, Disso Barium Chromium Uranium	alysis-ICP-MS	nents) U U) "As Received" 0.205 0.0100 0.000200	0.000670 0.00300	0.00400 0.0100	mg/L mg/L	1.00 1.00	1			
Metals Ana 6020, Disso Barium Chromium Uranium	alysis-ICP-MS olved Metals (3 Elen	nents) U U ere pe) "As Received" 0.205 0.0100 0.000200 erformed:	0.000670 0.00300	0.00400 0.0100	mg/L mg/L	1.00 1.00 1.00	1	PRB 02/20/25	1940 2745300	
Metals Ana 6020, Disse Barium Chromium Uranium The follow	alysis-ICP-MS olved Metals (3 Elen ring Prep Methods we Descr	u U U ere pe) "As Received" 0.205 0.0100 0.000200 erformed:	0.000670 0.00300	0.00400 0.0100 0.000200	mg/L mg/L mg/L	1.00 1.00 1.00	1 1 1	PRB 02/20/25	1940 2745300	
Metals Ana 6020, Disse Barium Chromium Uranium The follow Method	alysis-ICP-MS olved Metals (3 Elen ring Prep Methods we Descr	U U U ere pe iptior S 3005) "As Received" 0.205 0.0100 0.000200 erformed: 1 XA PREP	0.000670 0.00300	0.00400 0.0100 0.000200 Analyst	mg/L mg/L mg/L Date	1.00 1.00 1.00	1 1 1	PRB 02/20/25 Prep Batch	1940 2745300	
Metals Ana 6020, Disse Barium Chromium Uranium The follow Method SW846 3005/ EPA 160	alysis-ICP-MS olved Metals (3 Elen ring Prep Methods we Descr A ICP-M	U U U ere pe iptior S 3005 tory Fi) "As Received" 0.205 0.0100 0.000200 erformed: 1 SA PREP Itration	0.000670 0.00300	0.00400 0.0100 0.000200 Analyst HS2	mg/L mg/L mg/L Date 02/11/25	1.00 1.00 1.00	1 1 1 Fime 0930	PRB 02/20/25 Prep Batch 2745299	1940 2745300	
Metals Ana 6020, Disse Barium Chromium Uranium The follow Method SW846 3005/ EPA 160	alysis-ICP-MS olved Metals (3 Elen ring Prep Methods wo Descr A ICP-M Labora	U U U iptior S 3005 tory Fi	9 "As Received" 0.205 0.0100 0.000200 erformed: 1 5A PREP Itration vere performed:	0.000670 0.00300	0.00400 0.0100 0.000200 Analyst HS2	mg/L mg/L mg/L Date 02/11/25 02/05/25	1.00 1.00 1.00	1 1 Fime 0930 1255	PRB 02/20/25 Prep Batch 2745299	1940 2745300	

Notes:

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit SQL: Sample Quantitation Limit MDC: Minimum Detectable Concentration
			Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC			
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	MW386SG2-25	Project:	FRNP00609	
Sample ID:	706672007	Client ID:	FRNP006	
Matrix:	WG			
Collect Date:	30-JAN-25 10:17			
Receive Date:	31-JAN-25			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time Batc	h Method
504.1/8011 Analysis	of EDB/DBCP										
8011, VOA Compour	nds Liquid "As]	Received"									
1,2-Dibromo-3-chloroprop	-	0.0188	0.00847	0.0188	ug/L	0.941	1	LOF	02/05/25	0228 27434	89 1
Carbon Analysis					e						
9060A, Total Organi	c Carbon "As Re	eceived"									
Total Organic Carbon Ave		6.54	0.330	2.00	mg/L		1	KB3	02/06/25	0230 27439	92 3
Flow Injection Analy					e						
9012B, Total Cyanid		,									
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	JLD1	02/04/25	1354 27432	57 4
Halogen Analysis	C				8/		-				
9020B, TOX (Organi	ic Halogen) "As	Received"									
Total Organic Halogens	ie maiogen) As	135	3.33	10.0	ug/L		1	JS13	02/26/25	1331 27552	51 5
Ion Chromatography		155	5.55	10.0	ug/12		1	5515	02/20/25	1551 27552	51 5
300.0, Iodide in Liqu											
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	01/31/25	1302 27427	00 6
SW846 9056A Anior			0.107	0.500	IIIg/L		1	CHO	01/31/23	1302 27427	0 0
Bromide	U	0.200	0.0670	0.200	mg/L		1	CH6	01/31/25	1634 27425	15 7
Chloride	J	9.52	0.0670	250	mg/L mg/L		1	CHO	01/31/23	1034 27423	15 /
Fluoride	J	0.887	0.0330	4.00	mg/L		1				
Nitrate-N	U	10.0	0.0330	10.0	mg/L		1				
Sulfate		31.0	0.266	0.800	mg/L		2	CH6	01/31/25	2112 27425	15 8
Mercury Analysis-CV	VAA										
7470, Mercury Liqui	d "As Received'	,									
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/04/25	1034 27433	54 9
Metals Analysis-ICP	-MS				-						
6020, Metals (15+) ".	As Received"										
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	02/20/25	1943 27453	00 10
Antimony	U	0.00300	0.00100	0.00300	mg/L	1.00	1				
Arsenic	J	0.00284	0.00200	0.00500	mg/L	1.00	1				
Barium		0.190	0.000670	0.00400	mg/L	1.00	1				
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1				
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1				
Calcium	••	20.2	0.0800	0.200	mg/L	1.00	1				
Chromium	U	0.0100 0.00943	0.00300 0.000300	0.0100 0.00100	mg/L	1.00	1				
Cobalt		0.00945	0.000500	0.00100	mg/L	1.00	1				

Certificate of Analysis

Report Date: April 29, 2025 Company : Four Rivers Nuclear Partnership, LLC Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: MW386SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672007 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	vst Date	Time	Batch	Method
Metals Analysis-ICP-M	IS											
6020, Metals (15+) "As	Received"											
Copper	J	0.000470	0.000300	0.00200	mg/L	1.00	1					
Iron		1.52	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		8.63	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.870	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000947	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.00260	0.000600	0.00200	mg/L	1.00	1					
Potassium	J	0.297	0.0800	0.300	mg/L	1.00	1					
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1					
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00						
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	J	0.00367	0.00330	0.0200	mg/L	1.00	1					
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Sodium		111	1.60	5.00	mg/L	1.00		PRB	02/21/25		2745300	
Boron		0.0231	0.00520	0.0150	mg/L	1.00	1	PRB	04/02/25	2251	2773801	12
Solids Analysis												
160.1, Dissolved Solids	"As Receive	ed"										
Total Dissolved Solids		341	2.38	10.0	mg/L			RR4	02/06/25	1317	2745814	13
Spectrometric Analysis												
410.4, Chem. Oxygen I	Demand "As I	Received"										
COD	U	20.0	8.95	20.0	mg/L		1	HH2	02/03/25	1309	2743441	14
Volatile Organics					C							
8260D, Volatiles- full s	uite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/06/25	1415	2745972	15
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1					

			Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)				
Client Sample ID: Sample ID:	MW386SG2-25 706672007	Project: Client ID:	FRNP00609 FRNP006		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
Volatile Organics									
8260D, Volatiles- full s	suite "As Reco	eived"							
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
1,2-Dichloroethane	U	1.00	0.333	1.00	ug/L		1		
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1		
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1		
2-Butanone	U	5.00	1.67	5.00	ug/L		1		
2-Hexanone	U	5.00	1.67	5.00	ug/L		1		
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1		
Acetone	U	5.00	1.74	5.00	ug/L		1		
Acrolein	UQ	5.00	1.67	5.00	ug/L		1		
Acrylonitrile	UQ	5.00	1.67	5.00	ug/L		1		
Benzene	U	1.00	0.333	1.00	ug/L		1		
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1		
Bromoform	U	1.00	0.333	1.00	ug/L		1		
Bromomethane	U	1.00	0.337	1.00	ug/L		1		
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1		
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1		
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1		
Chloroethane	U	1.00	0.333	1.00	ug/L		1		
Chloroform	U	1.00	0.333	1.00	ug/L		1		
Chloromethane	UQ	1.00	0.333	1.00	ug/L		1		
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1		
Dibromomethane	U	1.00	0.333	1.00	ug/L		1		
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1		
Iodomethane	U	5.00	1.67	5.00	ug/L		1		
Methylene chloride	U	5.00	0.500	5.00	ug/L		1		
Styrene	U	1.00	0.333	1.00	ug/L		1		
Tetrachloroethylene	U	1.00	0.333	1.00	ug/L		1		
Toluene	U	1.00	0.333	1.00	ug/L		1		
Trichloroethylene	U	1.00	0.333	1.00	ug/L		1		
Trichlorofluoromethane	U	1.00	0.333	1.00	ug/L		1		
Vinyl acetate	UQ	5.00	1.67	5.00	ug/L		1		
Vinyl chloride	Ū	1.00	0.333	1.00	ug/L		1		
Xylenes (total)	U	3.00	1.00	3.00	ug/L		1		
cis-1,2-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1		
cis-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L		1		

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID: Sample ID:	MW386SG2-25 706672007	Project: Client ID:	FRNP00609 FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF DI	F Analyst Date	Time Batch	Metho
Volatile Organics									
8260D, Volatiles- full st	uite "As Rece	eived"							
trans-1,2-Dichloroethylene	U		0.333	1.00	ug/L	1			
trans-1,3-Dichloropropylene	U	1.00	0.333	1.00	ug/L	1			
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.00	ug/L	1			
The following Prep Met	thods were pe	erformed:							
Method	Description	1	1	Analyst	Date	Tin	ne Prep Batch	l	
SW846 3005A	ICP-MS 3005	A PREP	I	HS2	02/11/25	0930	0 2745299		
SW846 9010C Distillation	SW846 90100	C Prep		ES2	02/03/25	1130	0 2743256		
SW846 3005A	ICP-MS 3005	A PREP		HS2	04/01/25	153			
SW846 7470A Prep		Iercury Prep Liquid		M13	02/03/25	1100			
SW846 8011 PREP	8011 Prep		1	BM1	02/03/25	123	9 2743487		
The following Analytic	al Methods w	vere performed:							
Method	Description					Analyst Co	omments		
1	SW846 8011								
2	SW846 8011								
3	SW846 9060A								
4	SW846 9012B								
5	SW846 9020B								
6	EPA 300.0								
7	SW846 9056A	L							
8	SW846 9056A								
9	SW846 7470A	L							
10	SW846 3005A	/6020B							
11	SW846 3005A	/6020B							
12	SW846 3005A	/6020B							
13	EPA 160.1								
14	EPA 410.4								
15	SW846 8260D)							
Surrogate/Tracer Recov	ery Test			I	Result	Nominal	Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene	8011. V	OA Compounds Liquid "As Receiv	ed"	6.	59 ug/L	6.72	98	(56%-149%))
		Volatiles- full suite "As Received"			1.4 ug/L	50.0	103	(85%-114%)	
Bromofluorobenzene					U			· · · · · · · · · · · · · · · · · · ·	
1,2-Dichloroethane-d4	· · · · ·	Volatiles- full suite "As Received"		58	3.6 ug/L	50.0	117	(81%-118%))

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	MW386SG2-25	Project:	FRNP00609	
Sample ID:	706672007	Client ID:	FRNP006	

Parameter	Qualifier	Result	DI	, RL	Units	PF	DF Analyst Date	Time Batch	Method
Notes:									
Column headers of DF: Dilution Fact	are defined as follo	ows:	Lc/LC: Critical Level						
DL: Detection Li			PF: Prep Factor						
	Detectable Activit Detectable Concer	•	RL: Reporting Limit SQL: Sample Quantit	ation Limit					

Certificate of Analysis

			C	er ig ieute	0j mai	y 5 C 5			Rep	oort Date:	April 29,	2025	
	Company : Address :		r Rivers Nuclear Pa) Hobbs Road	rtnership, LLC									
	Contact: Project:	Ms.	il, Kentucky 42053 Jaime Morrow 46-S&T Landfill Qu		02)								
	Client Sample ID:		386SG2-25				ject:			P00609			
	Sample ID: Matrix:	7066 WG	572008			Cli	ent ID:		FRNI	2006			
	Collect Date:		AN-25 10:17										
	Receive Date:	31-J	AN-25										
	Collector:	Clie	nt										
Parameter	Quali	Fion	Result	DL	RL	Units	PF	DE	Anal	yst Date	Time Batch	Math	
		liei	Kesuit	DL	KL	Units	L L.	DI	Anar	yst Date	Time Batch	Wieth	<u>ou</u>
	llysis-ICP-MS olved Metals (3 Elen	onte)	"As Received"										
Barium	fived Metals (5 Elen	ients)	0.128	0.000670	0.00400	mg/L	1.00	1	PRB	02/20/25	1946 274530	C	1
Chromium		U	0.0100	0.00300	0.0100	mg/L	1.00	1					
Uranium		U	0.000200	0.0000670	0.000200	mg/L	1.00	1					
The follow	ing Prep Methods w	ere pe	rformed:										
Method	Descr	iption	l		Analyst	Date]	Гime	P	rep Batch			
SW846 3005A			A PREP		HS2	02/11/25)930		45299			
EPA 160	Labora	tory Fil	tration		SD	02/05/25	1	255	27	42747			
The follow	ring Analytical Meth	ods w	vere performed:										
Method	Descri	ption				A	Analyst	Con	nment	s			_
1	SW846	3005A	/6020B										_

Notes:

Column headers are defined as follows: DF: Dilution Factor Lc/LC: Critical Level **DL:** Detection Limit PF: Prep Factor MDA: Minimum Detectable Activity RL: Reporting Limit SQL: Sample Quantitation Limit MDC: Minimum Detectable Concentration

	Contrictere of Multysis		Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC		-	-
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	RI1SG2-25	Project:	FRNP00609	
Sample ID:	706672009	Client ID:	FRNP006	
Matrix:	WATER			
Collect Date:	30-JAN-25 06:35			
Receive Date:	31-JAN-25			
Collector:	Client			

IronU0.1000.03300.100mg/L1.001LeadU0.002000.005000.00200mg/L1.001MagnesiumU0.03000.01000.0300mg/L1.001ManganeseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.002000.00100mg/L1.001NickelU0.002000.006000.00200mg/L1.001PotassiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SilverU0.001000.003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001	Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time Batch	Method
1.2-Dibromo-3-chloropropane U 0.0189 0.0189 ug/L 0.944 I LOP 02.05/25 0.301 2743489 1 JOn Chromatography 300.0, lodide in Liquid "As Received" 0.0000 0.167 0.500 mg/L 1 CH6 01/31/25 15 2742700 3 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" 1 IP2 02.04/25 1036 2743354 4 Mercury Mugers-CVAA 0.000020 0.000000 mg/L 1.00 1 IP2 02.04/25 1036 2743354 4 Mercury Mugers-CVAA 0.000000 0.00000 mg/L 1.00 1 IP2 02.04/25 1036 2743354 4 Mercury Mugers-CVAS 1 0.00000 0.00000 mg/L 1.00 1 IP2 02.04/25 1950 274330 5 Aluminum U 0.00500 0.00100 0.00300 mg/L 1.00 1 I IP2 02.02/25 1950 2745300 5 Galaima U 0.0	504.1/8011 Analysis of	f EDB/DBCP										
1.2-Dibromo-3-chloropropane U 0.0189 0.0189 ug/L 0.944 I LOP 02.05.25 0.301 2743489 1 Jon Chromatography 300.0, lodide in Liquid "As Received" 0.0000 0.167 0.500 mg/L I CH6 01/31/25 15 2742700 3 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" mg/L 1.00 I FP2 02.04/25 1036 2743354 4 Mercury Mugyis-CP-MS 0.0000070 0.000000 mg/L 1.00 1 FP2 02.04/25 1036 2743354 4 Matias Analysis-ICP-MS	8011. VOA Compound	ls Liquid "As	Received"									
Ion Chromatography 300.0, Lodid in Liquid "As Received" 300.0, Lodide in Liquid "As Received" 0.500 0.167 0.500 mg/L I CH6 01/31/25 I315 2742700 3 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" 4 Mercury Malysis-ICP-MS 0 0.00020 0.00020 mg/L 1.00 I IP2 0204/25 1036 2743354 4 Mercury Malysis-ICP-MS mg/L 1.00 I IP2 0204/25 1036 2743354 4 Auminom U 0.00300 0.01013 0.0500 mg/L 1.00 I IP2 2/20/25 IP30 274330 5 Auminom U 0.00300 0.00100 0.00500 mg/L 1.00 I IP3 2/4/300 5 Artimom U 0.00300 0.00100 0.00500 mg/L 1.00 I IP3 2/4/300 5 Artimom U 0.00400 0.00200 0.00500 mg/L 1.0	· 1	1		0.00850	0.0189	ug/L	0.944	1	LOF	02/05/25	0301 2743489	1
300.0, Iodide in Liquid "As Received" Iodid U 0.500 0.167 0.500 mg/L I CH6 01/31/25 I 2742700 3 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" 3 Mercury U 0.000200 0.0000670 0.000200 mg/L 1.00 I JP2 02/04/25 10/36 2743354 4 Metals Analysis-ICP-MS 10/07 1 PRB 02/04/25 10/36 2743354 4 Metals Analysis-ICP-MS 10/07 1 PRB 02/04/25 10/36 2743304 5 Autimony U 0.00500 0.00100 0mg/L 1.00 1 5 745300 5 Arsenic U 0.00500 0.00200 0.000500 mg/L 1.00 1 5 5 5 5 5 <td< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		-										
Iodide U 0.500 0.167 0.500 mg/L I CH6 0/13/25 Isis 274200 3 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received"	• • • •	l "As Received	4"									
Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" Mercury Liquid "As Received" Metals Analysis-ICP-MS 6020, Metals (15+) "As Received" Aluminum U 0.00500 0.0193 0.0500 mg/L 1.00 1 PRB 02/20/25 1950 2743354 4 Auminomy U 0.05500 0.0193 0.0500 mg/L 1.00 1 PRB 02/20/25 1950 2745300 5 Antimony U 0.05500 0.00100 0.00300 mg/L 1.00 1 FRB 02/20/25 1950 2745300 5 Antimony U 0.00500 0.00200 0.00500 mg/L 1.00 1 FRB 02/20/25 1950 2745300 5 Barium U 0.00500 0.00200 0.00500 mg/L 1.00 1 FRB 02/20/25 1950 2745300 5 Cadmium U 0.00100 0.000200 0.000100 mg/L 1.00 1 FRB 02/20/25 10/30 1/2/20/25 10/30 </td <td>-</td> <td></td> <td></td> <td>0.167</td> <td>0.500</td> <td>mg/L</td> <td></td> <td>1</td> <td>CH6</td> <td>01/31/25</td> <td>1315 2742700</td> <td>3</td>	-			0.167	0.500	mg/L		1	CH6	01/31/25	1315 2742700	3
7470, Mercury Liquid "As Received" Mercury U 0.000000 0.0000670 0.000200 mg/L 1.00 1 JP2 02/04/25 1036 2743354 4 Metals Analysis-ICP-MS 6020, Metals (15+) "As Received" 4 Aluminum U 0.0500 0.0193 0.0500 mg/L 1.00 1 PRB 02/20/25 1950 2745300 5 Antimony U 0.00500 0.00100 0.00300 mg/L 1.00 1 PRB 02/20/25 1950 2745300 5 Antimony U 0.00300 0.00100 0.00300 mg/L 1.00 1 1 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>8/</td><td></td><td>-</td><td></td><td></td><td></td><td>-</td></td<>						8/		-				-
Mercury U 0.000200 0.000200 mg/L 1.00 1 JP2 02/04/25 1036 2743354 4 Metals Analysis-ICP-MS 5	• •		"									
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6020, Metals (15+) "As Received" Aluminum U 0.0500 0.0193 0.0500 mg/L 1.00 1 PRB 02/20/25 1950 2745300 5 Antimony U 0.00500 0.00200 0.00500 mg/L 1.00 1 Arsenic U 0.00500 0.00200 0.00500 mg/L 1.00 1 Barylinm U 0.000500 0.000200 0.000500 mg/L 1.00 1 Cadmium U 0.00100 0.000300 0.0010 mg/L 1.00 1 Calcium U 0.0200 0.000300 0.0100 mg/L 1.00 1 Cobalt U 0.0100 0.00330 0.0100 mg/L 1.00 1 Iron U 0.00200 0.000300 0.0010 mg/L 1.00 1 1 Iron U 0.00200 0.000300 0.0200 mg/L 1.00 1 1 Iron U 0.00200 0.00100 0.0330 0.0200 mg/L 1.00<			0.000200	0.000070	0.000200	IIIg/L	1.00	1	JI 2	02/04/23	1030 2743334	4
AluminumU0.05000.01930.0500mg/L1.001PRB0.2/20/25195027453005AntimonyU0.003000.001000.00300mg/L1.00111<	•											
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Arsenic U 0.00500 0.00200 0.00500 mg/L 1.00 1 Barium U 0.00400 0.000670 0.00400 mg/L 1.00 1 Beryllium U 0.000500 0.000200 0.000500 mg/L 1.00 1 Cadmium U 0.00100 0.000300 0.00100 mg/L 1.00 1 Calcium U 0.0100 0.00300 0.0100 mg/L 1.00 1 Cobalt U 0.0100 0.00300 0.00100 mg/L 1.00 1 Copper U 0.00200 0.000300 0.00200 mg/L 1.00 1 Lead U 0.0300 0.00200 mg/L 1.00 1 Magnesium U 0.0300 0.00100 0.0300 mg/L 1.00 1 Magneses U 0.00200 0.00100 0.00200 mg/L 1.00 1 Nickel U									PRB	02/20/25	1950 2745300	5
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Chromium U 0.0100 0.00300 0.0100 mg/L 1.00 1 Cobalt U 0.00100 0.000300 0.00100 mg/L 1.00 1 Copper U 0.00200 0.00330 0.00200 mg/L 1.00 1 Iron U 0.100 0.0330 0.100 mg/L 1.00 1 Lead U 0.00200 0.000500 0.00200 mg/L 1.00 1 Magnesium U 0.0300 0.0100 0.0300 mg/L 1.00 1 Magnese U 0.00500 0.00100 0.00500 mg/L 1.00 1 Nickel U 0.00200 0.00100 0.00200 mg/L 1.00 1 Nickel U 0.00500 0.00160 0.00200 mg/L 1.00 1 Rhodium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1												
CobaltU 0.00100 0.000300 0.00100 mg/L 1.00 1 CopperU 0.00200 0.00300 0.00200 mg/L 1.00 1 IronU 0.100 0.0330 0.100 mg/L 1.00 1 LeadU 0.00200 0.000500 0.00200 mg/L 1.00 1 MagnesiumU 0.0300 0.0100 0.0300 mg/L 1.00 1 MagneseU 0.00500 0.00100 0.00500 mg/L 1.00 1 MolybdenumU 0.00100 0.000200 mg/L 1.00 1 NickelU 0.00200 0.00160 0.00200 mg/L 1.00 1 PotassiumU 0.00500 0.00160 0.00500 mg/L 1.00 1 StilverU 0.00500 0.00160 0.00500 mg/L 1.00 1 SilverU 0.00100 0.000300 0.00100 mg/L 1.00 1 SodiumU 0.250 0.0800 0.250 mg/L 1.00 1 TantalumU 0.00500 0.00100 0.00200 mg/L 1.00 1 TualumU 0.00200 0.000600 0.00200 mg/L 1.00 1 TualumU 0.00200 0.000600 0.00200 mg/L 1.00 1 TualumU 0.00200 0.000600 0.00200 mg/L <td< td=""><td>Calcium</td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Calcium					-						
CopperU0.002000.003000.00200mg/L1.001IronU0.1000.03300.100mg/L1.001LeadU0.002000.0005000.00200mg/L1.001MagnesiumU0.03000.01000.0300mg/L1.001MagneseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.002000.00100mg/L1.001NickelU0.002000.00100mg/L1.001PotassiumU0.03000.001600.00200mg/L1.001RhodiumU0.005000.001600.00500mg/L1.001SilverU0.005000.001500.00500mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.00100mg/L1.001TualumU0.005000.00100mg/L1.001U0.005000.001000.00500mg/L1.001TualumU0.002000.001000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L <t< td=""><td>Chromium</td><td>U</td><td>0.0100</td><td>0.00300</td><td></td><td>mg/L</td><td></td><td>1</td><td></td><td></td><td></td><td></td></t<>	Chromium	U	0.0100	0.00300		mg/L		1				
Indition U 0.100 0.0330 0.100 mg/L 1.00 1 Lead U 0.00200 0.000500 0.00200 mg/L 1.00 1 Magnesium U 0.0300 0.0100 0.0300 mg/L 1.00 1 Magnesium U 0.00500 0.00100 0.00500 mg/L 1.00 1 Magnese U 0.00200 0.00100 mg/L 1.00 1 Molybdenum U 0.00200 0.00100 mg/L 1.00 1 Nickel U 0.00200 0.000600 0.00200 mg/L 1.00 1 Potassium U 0.300 0.00160 0.00500 mg/L 1.00 1 Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Soliver U 0.00100 0.00150 0.00500 mg/L 1.00 1 Tantalum U 0.00200	Cobalt	U				mg/L						
LeadU0.002000.0005000.00200mg/L1.001MagnesiumU0.03000.01000.0300mg/L1.001ManganeseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.0002000.00100mg/L1.001NickelU0.002000.001600.00200mg/L1.001PotassiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SilverU0.001000.0003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.001000.00500mg/L1.001U0.002000.001000.00500mg/L1.001U0.005000.001000.00500mg/L1.001TantalumU0.002000.001000.00500mg/L1.001U0.002000.001000.00200mg/L1.001U0.002000.0006000.00200mg/L1.001U0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001	Copper	U	0.00200	0.000300	0.00200	mg/L	1.00	1				
MagnesiumU0.03000.01000.0300mg/L1.001ManganeseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.0002000.00100mg/L1.001NickelU0.002000.006000.00200mg/L1.001PotassiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SilverU0.001000.003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.00100mg/L1.001U0.002000.001000.00500mg/L1.001U0.002000.001000.00500mg/L1.001U0.002000.001000.00500mg/L1.001U0.002000.001000.00200mg/L1.001U0.002000.001000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001	Iron	U	0.100		0.100	mg/L	1.00	1				
ManganeseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.0002000.00100mg/L1.001NickelU0.002000.006000.00200mg/L1.001PotassiumU0.3000.08000.300mg/L1.001RhodiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SilverU0.001000.003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.001000.00500mg/L1.001UnanumU0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001	Lead	U	0.00200	0.000500	0.00200		1.00	1				
MolybdenumU 0.00100 0.000200 0.00100 mg/L 1.00 1 NickelU 0.00200 0.00600 0.00200 mg/L 1.00 1 PotassiumU 0.300 0.0800 0.300 mg/L 1.00 1 RhodiumU 0.00500 0.00160 0.00500 mg/L 1.00 1 SeleniumU 0.00500 0.00150 0.00500 mg/L 1.00 1 SilverU 0.00100 0.00300 0.00100 mg/L 1.00 1 SodiumU 0.250 0.0800 0.250 mg/L 1.00 1 TantalumU 0.00500 0.00100 0.00500 mg/L 1.00 1 UraniumU 0.00200 0.000600 0.00200 mg/L 1.00 1	Magnesium	U	0.0300	0.0100	0.0300	mg/L	1.00	1				
Nickel U 0.00200 0.000600 0.00200 mg/L 1.00 1 Potassium U 0.300 0.0800 0.300 mg/L 1.00 1 Rhodium U 0.00500 0.00160 0.00500 mg/L 1.00 1 Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 mg/L 1.00 1 Uranium U 0.00200 0.00100 0.00500 mg/L 1.00 1	Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1				
Potassium U 0.300 0.0800 0.300 mg/L 1.00 1 Rhodium U 0.00500 0.00160 0.00500 mg/L 1.00 1 Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000600 0.00200 mg/L 1.00 1	Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1				
Rhodium U 0.00500 0.00160 0.00500 mg/L 1.00 1 Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00200 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000600 0.00200 mg/L 1.00 1	Nickel	U	0.00200	0.000600	0.00200	mg/L	1.00	1				
Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000600 0.00200 mg/L 1.00 1	Potassium	U	0.300	0.0800	0.300	mg/L	1.00	1				
Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000670 0.00200 mg/L 1.00 1	Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1				
Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000670 0.000200 mg/L 1.00 1	Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1				
Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000670 0.000200 mg/L 1.00 1	Silver	U	0.00100	0.000300	0.00100		1.00	1				
Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.000200 0.0000670 0.000200 mg/L 1.00 1	Sodium	U	0.250	0.0800	0.250	mg/L	1.00	1				
Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.000200 0.0000670 0.000200 mg/L 1.00 1	Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1				
Uranium U 0.000200 0.0000670 0.000200 mg/L 1.00 1	Thallium	U	0.00200	0.000600	0.00200	-	1.00	1				
•	Uranium	U	0.000200	0.0000670	0.000200	-	1.00	1				
	Vanadium	J		0.00330	0.0200	-	1.00	1				

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: RI1SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672009 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Metals Analysis-ICP-M	IS										
6020, Metals (15+) "As	Received"										
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1				
Boron	U	0.0150	0.00520	0.0150	mg/L	1.00	1	PRB	04/02/25	2254 2773801	6
Volatile Organics											
8260D, Volatiles- full s	uite "As Rece	eived"									
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/06/25	1441 2745972	7
1,1,1-Trichloroethane	U	1.00	0.333	1.00	ug/L		1				
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1				
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1				
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1				
1,1-Dichloroethylene	U	1.00	0.333	1.00	ug/L		1				
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1				
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1				
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1				
1,2-Dichloroethane	U	1.00	0.333	1.00	ug/L		1				
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1				
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1				
2-Butanone	U	5.00	1.67	5.00	ug/L		1				
2-Hexanone	U	5.00	1.67	5.00	ug/L		1				
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1				
Acetone	J	2.66	1.74	5.00	ug/L		1				
Acrolein	UQ	5.00	1.67	5.00	ug/L		1				
Acrylonitrile	UQ	5.00	1.67	5.00	ug/L		1				
Benzene	U	1.00	0.333	1.00	ug/L		1				
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1				
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1				
Bromoform	U	1.00	0.333	1.00	ug/L		1				
Bromomethane	U	1.00	0.337	1.00	ug/L		1				
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1				
Carbon tetrachloride	U	1.00	0.333	1.00	ug/L		1				
Chlorobenzene	J	0.390	0.333	1.00	ug/L		1				
Chloroethane	U	1.00	0.333	1.00	ug/L		1				
Chloroform	U	1.00	0.333	1.00	ug/L		1				
Chloromethane	UQ	1.00	0.333	1.00	ug/L		1				
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1				
Dibromomethane	U	1.00	0.333	1.00	ug/L		1				
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1				

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: RI1SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672009 FRNP006

Parameter	Qualifier	Result	DL	RL	Unit	s PF	DF .	Analyst Date	Time Batch	Method
Volatile Organics										
8260D, Volatiles- full su	uite "As Rece	ived"								
Iodomethane	U	5.00	1.67	5.0	0 ug	/L	1			
Methylene chloride	U	5.00	0.500	5.0	0 ug	/L	1			
Styrene	U	1.00	0.333	1.0			1			
Tetrachloroethylene	U	1.00	0.333	1.0			1			
Toluene	U	1.00	0.333	1.0		/L	1			
Trichloroethylene	U	1.00	0.333	1.0	0 ug	/L	1			
Trichlorofluoromethane	U	1.00	0.333	1.0	0 ug	/L	1			
Vinyl acetate	UQ	5.00	1.67	5.0			1			
Vinyl chloride	U	1.00	0.333	1.0	0 ug	/L	1			
Xylenes (total)	U	3.00	1.00	3.0	0	/L	1			
cis-1,2-Dichloroethylene	U	1.00	0.333	1.0	0 ug	/L	1			
cis-1,3-Dichloropropylene	U	1.00	0.333	1.0	U		1			
trans-1,2-Dichloroethylene	U	1.00	0.333	1.0	0		1			
trans-1,3-Dichloropropylene	U	1.00	0.333	1.0	0	/L	1			
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.0	0 ug	/L	1			
The following Prep Met	hods were pe	rformed:								
Method	Description	l		Analyst	Date	,	Time	Prep Batch	1	
SW846 8011 PREP	8011 Prep			BM1	02/03	/25	1239	2743487		
SW846 3005A	ICP-MS 3005	A PREP		HS2	04/01	/25	1535	2773792		
SW846 7470A Prep	EPA 7470A N	Iercury Prep Liquid		JM13	02/03	/25	1100	2743352		
SW846 3005A	ICP-MS 3005	A PREP		HS2	02/11	/25	0930	2745299		
The following Analytic	al Methods w	vere performed:								
Method	Description					Analys	t Com	ments		
1	SW846 8011									
2	SW846 8011									
3	EPA 300.0									
4	SW846 7470A									
5	SW846 3005A	/6020B								
6	SW846 3005A									
7	SW846 8260D									
Surrogate/Tracer Recov					Result	Nomin	al	Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene	2	OA Compounds Liquid	"As Received"		6.84 ug/L	6.7		101	(56%-149%)	
Bromofluorobenzene		Volatiles- full suite "As			52.5 ug/L	50		101	(85%-114%)	

Certificate of Analysis

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	RI1SG2-25	Project:	FRNP00609	
Sample ID:	706672009	Client ID:	FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
1,2-Dichloroethane-d4	8260D,	Volatiles- full suite "As	Received"	58	3.0 ug/L	50	0.0	116	(81%-118%)	
Toluene-d8	8260D,	Volatiles- full suite "As	Received"	51	.0 ug/L	50	0.0	102	(89%-112%)	

Notes:

Column headers are defined as follows:

DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

			Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC			
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	FB1SG2-25	Project:	FRNP00609	
Sample ID:	706672010	Client ID:	FRNP006	
Matrix:	WATER			
Collect Date:	30-JAN-25 08:30			
Receive Date:	31-JAN-25			
Collector:	Client			

Ion Chromatography 300.0, Iodide in Liquid "As Received" Iodide U 0.500 0.167 0.500 mg/L 1 CH6 01/31/25 1328 2742700 33 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" 0.0000670 0.0000670 0.000200 mg/L 1.00 1 JP2 02/04/25 1038 2743354 4 Metals Analysis-ICP-MS 6020, Metals (15+) "As Received" 6020 6020 1.00 1 JP2 02/04/25 1038 2743354 4	Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Anal	yst Date	Time Batch	Method
8011, VOA Compounds Liquid "As Received" 0.0189 0.00853 0.0189 ug/L 0.947 1 LOF 0.205/25 0.33 2743489 :: 1.0-Chromatography 0.050 0.167 0.500 mg/L 1 LOF 0.205/25 0.33 2743489 :: 300.0, Iodide in Liquid "As Received" 0.050 0.167 0.500 mg/L 1 CH6 01/31/25 I238 2742760 :: 7470, Mercury Liquid "As Received" 0.000200 0.000070 0.00200 mg/L 1.00 1 JP2 02/04/25 1038 2743354 -: Attrinium U 0.000200 0.000070 0.000200 mg/L 1.00 1 JP2 02/04/25 J93 2743350 : Antimony U 0.000300 0.00100 0.00300 mg/L 1.00 1 JP2 02/04/25 J93 2745300 : S 5 Antimony U 0.00300 0.00100 0.00300 mg/L 1.00 1 S S S 5 S S	504.1/8011 Analysis of I	EDB/DBCP										
1.2-Dibromo-3-chloropropane U 0.0189 0.00853 0.0189 ug/L 0.97 1 LOP 0.20525 0.33 2743489 1 300.0, Iodide in Liquid "As Received" 0.0000 0.167 0.500 mg/L 1 CH6 0.131/25 128 2742700 2 Mercury Analysis-CVAA												
Ion Chromatography 300.0, Lodide in Liquid "As Received" Jodide U 0.500 0.167 0.500 mg/L 1 CH6 01/31/25 1328 2742700 1 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" 1 PP2 02/04/25 1038 2743354 4 Mercury U 0.00200 0.000670 0.000200 mg/L 1.00 1 PP2 02/04/25 1038 2743354 4 Metals Analysis-ICP-MS 0 0.0193 0.0500 mg/L 1.00 1 PRB 02/20/25 1953 2745300 2 Antimony U 0.00500 0.00100 0.00300 mg/L 1.00 1 Reseived 1 </td <td>·</td> <td>-</td> <td></td> <td>0.00853</td> <td>0.0189</td> <td>ug/L</td> <td>0.947</td> <td>1</td> <td>LOF</td> <td>02/05/25</td> <td>0335 2743489</td> <td>) 1</td>	·	-		0.00853	0.0189	ug/L	0.947	1	LOF	02/05/25	0335 2743489) 1
300.0, Iodide in Liquid "As Received" Iodide U 0.500 0.167 0.500 ng/L 1 CH6 01/31/25 13.28 2742700 27 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" 27430.05 100 1 JP2 0.204/25 1038 2743354 4700, Mercury Liquid "As Received" 27430.0500 ng/L 1.00 1 JP2 0.204/25 J038 2743354 6020, Metals (15+) "As Received" 2743300 2 3.38 2743300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.38 2745300 2 3.37 3.35 3.35 <t< td=""><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		-										
lodide U 0.500 0.167 0.500 mg/L 1 CH6 01/31/25 13.28 2742700 3.3 Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" 3.8 2743700 3.8 2743354 4 Mercury U 0.000200 0.0000670 0.000200 mg/L 1.00 1 JPB 0.2/20/25 1953 2743354 4 Auminom U 0.0500 0.0193 0.0500 mg/L 1.00 1 PB 0.2/20/25 1953 2745300 3 Antimom U 0.00500 0.00100 0.00300 mg/L 1.00 1 -	• • •	As Received	d"									
Mercury Analysis-CVAA 7470, Mercury Liquid "As Received" Mercury U 0 0.0000070 0.000000 mg/L 1.00 1 JP2 02.04/25 1038 2743354 4 Metals Analysis-ICP-MS 6020, Metals (15+) "As Received" 5 5 1.00 1 PRB 02.20/25 1953 2745300 5 Animony U 0.00500 0.0193 0.0500 mg/L 1.00 1 PRB 02.20/25 1953 2745300 5 Animony U 0.00500 0.00100 0.00300 mg/L 1.00 1 PRB 02.20/25 1953 2745300 5 Ansenic U 0.00500 0.00200 0.00500 mg/L 1.00 1	_			0.167	0.500	mg/I		1	CH6	01/31/25	1328 2742700) 3
7470, Mercury Liquid "As Received" Mercury U 0.000200 0.0000670 0.000200 mg/L 1.00 1 JP2 02/04/25 1038 2743354 Metals Analysis-ICP-MS 6020, Metals (15+) "As Received" <			0.500	0.107	0.500	iiig/L		1	CHO	01/31/23	1526 2742700	, ,
Mercury U 0.000200 0.0000670 0.000200 mg/L 1.00 1 JP2 0.204/25 1038 2743354 4 Metals Analysis-ICP-MS	• •											
Mata's Analysis-ICP-MS 6020, Metals (15+) "As Received" Aluminum U 0.0500 0.0193 0.0500 mg/L 1.00 1 Antimony U 0.00300 0.00100 0.00300 mg/L 1.00 1 Arsenic U 0.00300 0.00200 0.00400 mg/L 1.00 1 Barium U 0.000500 0.000200 0.000500 mg/L 1.00 1 Barium U 0.000500 0.000200 0.000500 mg/L 1.00 1 Cadmium U 0.00100 0.000300 0.0010 mg/L 1.00 1 Calcium U 0.00100 0.00300 0.0010 mg/L 1.00 1 Cobalt U 0.00100 0.00300 0.0010 mg/L 1.00 1 Iron U 0.0100 0.00330 0.0100 mg/L 1.00 1 Maganese U 0.00500 0.00100 mg/L 1.00 1 1 Maganese U 0.00500 <td>· · · ·</td> <td></td> <td></td> <td>0.0000 (=0</td> <td>0.000000</td> <td>~</td> <td>1 00</td> <td></td> <td></td> <td>00104105</td> <td>1000 051005</td> <td></td>	· · · ·			0.0000 (=0	0.000000	~	1 00			00104105	1000 051005	
6020, Metals (15+) "As Received" Aluminum U 0.0500 0.0193 0.0500 mg/L 1.00 I PRB 02/20/25 1953 2745300	•		0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	02/04/25	1038 2743354	4 4
AluminumU0.05000.01930.0500mg/L1.001PRB02/20/251953274530027AntimonyU0.003000.001000.00300mg/L1.0011ArsenicU0.005000.002000.00500mg/L1.001BariumU0.004000.0006700.00400mg/L1.001BerylliumU0.0005000.000500mg/L1.001CadmiumU0.001000.003000.00100mg/L1.001CalciumU0.01000.003000.0100mg/L1.001CobaltU0.01000.003000.0100mg/L1.001CopperU0.002000.003000.00200mg/L1.001IronU0.01000.003300.0100mg/L1.001MagnesiumU0.001000.003000.00200mg/L1.001MagnesiumU0.001000.001000.0300mg/L1.001MolybdenumU0.001000.001000.0300mg/L1.001NickelU0.005000.001600.00500mg/L1.001NickelU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001600.00500	Metals Analysis-ICP-MS	5										
Antimony U 0.00300 0.00100 0.00300 mg/L 1.00 1 Arsenic U 0.00400 0.000670 0.00400 mg/L 1.00 1 Barium U 0.00400 0.000200 0.000500 mg/L 1.00 1 Beryllium U 0.00100 0.000200 0.00100 mg/L 1.00 1 Cadmium U 0.00100 0.000300 0.00100 mg/L 1.00 1 Cadrium U 0.00100 0.00300 0.0100 mg/L 1.00 1 Cadrium U 0.00100 0.00300 0.0100 mg/L 1.00 1 Cadrium U 0.00100 0.00300 0.00100 mg/L 1.00 1 Cobalt U 0.00200 0.00300 0.00200 mg/L 1.00 1 Iron U 0.00200 0.00100 0.00200 mg/L 1.00 1 Magnesium U 0.00300 0.0100 0.00200 mg/L 1.00 1 <td>6020, Metals (15+) "As]</td> <td>Received"</td> <td></td>	6020, Metals (15+) "As]	Received"										
ArsenicU0.005000.002000.00500 $mg'L$ 1.001BariumU0.004000.0006700.00400 $mg'L$ 1.001BerylliumU0.0005000.0002000.000500 $mg'L$ 1.001CadmiumU0.001000.0003000.00100 $mg'L$ 1.001CalciumU0.01000.003000.0100 $mg'L$ 1.001ChromiumU0.001000.003000.0100 $mg'L$ 1.001CobaltU0.001000.003300.0100 $mg'L$ 1.001CopperU0.002000.0003000.00200 $mg'L$ 1.001IronU0.1000.003300.100 $mg'L$ 1.001MagnesiumU0.005000.001000.0330 $mg'L$ 1.001MagneseU0.005000.001000.00200 $mg'L$ 1.001NickelU0.002000.001000.00200 $mg'L$ 1.001NickelU0.002000.001600.00200 $mg'L$ 1.001SeleniumU0.005000.00150 $mg'L$ 1.001SoliumU0.005000.00150 $mg'L$ 1.001SoliumU0.005000.00150 $mg'L$ 1.001SoliumU0.005000.00150 $mg'L$ 1.001SoliumU0.005000.0	Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	02/20/25	1953 2745300) 5
Barium U 0.00400 0.000670 0.00400 mg/L 1.00 1 Beryllium U 0.000500 0.000500 mg/L 1.00 1 Cadmium U 0.00100 0.000300 0.00100 mg/L 1.00 1 Calcium U 0.200 0.0800 0.200 mg/L 1.00 1 Chronium U 0.0100 0.00300 0.0100 mg/L 1.00 1 Cobalt U 0.00100 0.00300 0.00100 mg/L 1.00 1 Iron U 0.00200 0.000300 0.0100 mg/L 1.00 1 Magnesium U 0.00200 0.000500 mg/L 1.00 1 Magnese U 0.0300 0.0100 0.0300 mg/L 1.00 1 Nickel U 0.00200 0.000600 0.00200 mg/L 1.00 1 Selenium U 0.00500 <t< td=""><td>Antimony</td><td>U</td><td>0.00300</td><td>0.00100</td><td>0.00300</td><td>mg/L</td><td>1.00</td><td>1</td><td></td><td></td><td></td><td></td></t<>	Antimony	U	0.00300	0.00100	0.00300	mg/L	1.00	1				
Beryllium U 0.000500 0.000200 0.000500 mg/L 1.00 1 Cadmium U 0.00100 0.000300 0.00100 mg/L 1.00 1 Calcium U 0.00100 0.00300 0.00100 mg/L 1.00 1 Chromium U 0.00100 0.00300 0.00100 mg/L 1.00 1 Cobalt U 0.00100 0.00300 0.00100 mg/L 1.00 1 Copper U 0.00200 0.00300 0.00200 mg/L 1.00 1 Lead U 0.00200 0.00300 0.00200 mg/L 1.00 1 Magnesium U 0.00200 0.00100 0.0300 mg/L 1.00 1 Magnese U 0.00500 0.00100 0.00200 mg/L 1.00 1 Nickel U 0.00200 0.00100 0.00200 mg/L 1.00 1 Selenium U 0.00500 0.00160 0.00500 mg/L 1.00 1 </td <td>Arsenic</td> <td>U</td> <td>0.00500</td> <td>0.00200</td> <td>0.00500</td> <td>mg/L</td> <td>1.00</td> <td>1</td> <td></td> <td></td> <td></td> <td></td>	Arsenic	U	0.00500	0.00200	0.00500	mg/L	1.00	1				
CamiumU0.001000.0003000.00100mg/L1.001CalciumU0.2000.08000.200mg/L1.001ChromiumU0.01000.003000.0100mg/L1.001CobaltU0.001000.0003000.00100mg/L1.001CopperU0.002000.0003000.00200mg/L1.001IronU0.002000.0005000.00200mg/L1.001LeadU0.002000.001000.0330mg/L1.001MagnesiumU0.005000.001000.0300mg/L1.001MolybdenumU0.005000.001000.00200mg/L1.001NickelU0.002000.0006000.00200mg/L1.001PotassiumU0.005000.001600.00200mg/L1.001SeleniumU0.005000.001600.00500mg/L1.001SilverU0.001000.001500.00500mg/L1.001SoliumU0.2500.00100mg/L1.001SoliumU0.02500.001000.00500mg/L1.001SoliumU0.005000.001000.00500mg/L1.001SoliumU0.005000.001000.00500mg/L1.001SoliumU0.00500 <td>Barium</td> <td>U</td> <td>0.00400</td> <td>0.000670</td> <td>0.00400</td> <td>mg/L</td> <td>1.00</td> <td>1</td> <td></td> <td></td> <td></td> <td></td>	Barium	U	0.00400	0.000670	0.00400	mg/L	1.00	1				
Calcium U 0.200 0.0800 0.200 mg/L 1.00 1 Chromium U 0.0100 0.00300 0.0100 mg/L 1.00 1 Cobalt U 0.00100 0.00300 0.00100 mg/L 1.00 1 Copper U 0.00100 0.00300 0.00200 mg/L 1.00 1 Iron U 0.00200 0.00300 0.00200 mg/L 1.00 1 Lead U 0.00200 0.00500 0.00200 mg/L 1.00 1 Magnesium U 0.00500 0.00100 0.0300 mg/L 1.00 1 Molybdenum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Nickel U 0.00200 0.000600 0.00200 mg/L 1.00 1 Selenium U 0.00500 0.00160 0.00500 mg/L 1.00 1 Silver U 0.00100 0.00300 0.00100 mg/L 1.00 1 1	Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1				
Chromium U 0.0100 0.00300 0.0100 mg/L 1.00 1 Cobalt U 0.00100 0.000300 0.00100 mg/L 1.00 1 Copper U 0.00200 0.00330 0.00200 mg/L 1.00 1 Iron U 0.100 0.0330 0.100 mg/L 1.00 1 Lead U 0.00200 0.000500 0.00200 mg/L 1.00 1 Magnesium U 0.0300 0.0100 0.0300 mg/L 1.00 1 Manganese U 0.00500 0.00100 0.00500 mg/L 1.00 1 Nickel U 0.00200 0.00100 0.00200 mg/L 1.00 1 Nickel U 0.00500 0.00160 0.00200 mg/L 1.00 1 Rhodium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1	Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1				
CobaltU 0.00100 0.000300 0.00100 mg/L 1.00 1 CopperU 0.00200 0.00300 0.00200 mg/L 1.00 1 IronU 0.100 0.0330 0.100 mg/L 1.00 1 LeadU 0.00200 0.000500 0.00200 mg/L 1.00 1 MagnesiumU 0.0300 0.0100 0.0300 mg/L 1.00 1 MagneseU 0.00500 0.00100 0.00500 mg/L 1.00 1 MolybdenumU 0.00100 0.000200 mg/L 1.00 1 NickelU 0.00200 0.00160 0.00200 mg/L 1.00 1 PotassiumU 0.00500 0.00160 0.00500 mg/L 1.00 1 SteerU 0.00500 0.00160 0.00500 mg/L 1.00 1 SilverU 0.00100 0.000300 0.00100 mg/L 1.00 1 SodiumU 0.250 0.0800 0.250 mg/L 1.00 1 TantalumU 0.00500 0.00100 0.00200 mg/L 1.00 1 UraniumU 0.00200 0.000600 0.00200 mg/L 1.00 1 UraniumU 0.00200 0.000600 0.00200 mg/L 1.00 1 UraniumU 0.00200 0.000600 0.00200 mg/L <t< td=""><td>Calcium</td><td>U</td><td>0.200</td><td>0.0800</td><td>0.200</td><td>mg/L</td><td>1.00</td><td>1</td><td></td><td></td><td></td><td></td></t<>	Calcium	U	0.200	0.0800	0.200	mg/L	1.00	1				
CopperU0.002000.0003000.00200mg/L1.001IronU0.1000.03300.100mg/L1.001LeadU0.002000.0005000.00200mg/L1.001MagnesiumU0.03000.01000.0300mg/L1.001MagneseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.0002000.00100mg/L1.001NickelU0.002000.00100mg/L1.001PotassiumU0.03000.001000.00500mg/L1.001RhodiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SodiumU0.005000.00100mg/L1.001TantalumU0.005000.00100mg/L1.001TuatumU0.002000.001000.00500mg/L1.00U0.002000.001000.00500mg/L1.001TuatumU0.002000.001000.00200mg/L1.00U0.002000.001000.00200mg/L1.001U0.002000.001000.00200mg/L1.001U0.002000.0006000.00200mg/L1.001U0.002000	Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1				
InU0.1000.03300.100mg/L1.001LeadU0.002000.0005000.00200mg/L1.001MagnesiumU0.03000.01000.0300mg/L1.001MagneseU0.005000.001000.00500mg/L1.001NickelU0.002000.0006000.00200mg/L1.001PotassiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001600.00500mg/L1.001SilverU0.001000.0003000.00100mg/L1.001SodiumU0.2500.00100mg/L1.001TantalumU0.005000.00100mg/L1.001U0.002000.001000.00500mg/L1.001U0.005000.001000.00500mg/L1.001JintalumU0.005000.00100mg/L1.001U0.002000.001000.00500mg/L1.001JintalumU0.002000.0006000.00200mg/L1.001U0.002000.0006000.00200mg/L1.001JintalumU0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001 <td>Cobalt</td> <td>U</td> <td>0.00100</td> <td>0.000300</td> <td>0.00100</td> <td>mg/L</td> <td>1.00</td> <td>1</td> <td></td> <td></td> <td></td> <td></td>	Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1				
LeadU0.002000.0005000.00200mg/L1.001MagnesiumU0.03000.01000.0300mg/L1.001ManganeseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.0002000.00100mg/L1.001NickelU0.002000.001600.00200mg/L1.001PotassiumU0.3000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SilverU0.001000.0003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.001000.00500mg/L1.001U0.002000.001000.00500mg/L1.001U0.005000.001000.00500mg/L1.001U0.005000.001000.00500mg/L1.001U0.002000.001000.00200mg/L1.001U0.002000.0006000.00200mg/L1.001U0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001	Copper	U	0.00200	0.000300	0.00200	mg/L	1.00	1				
MagnesiumU0.03000.01000.0300mg/L1.001ManganeseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.0002000.00100mg/L1.001NickelU0.002000.006000.00200mg/L1.001PotassiumU0.3000.08000.300mg/L1.001SeleniumU0.005000.001600.00500mg/L1.001SilverU0.001000.003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.001000.00500mg/L1.001UnintU0.002000.001000.00500mg/L1.001UnintU0.002000.001000.00500mg/L1.001UnintU0.002000.001000.00200mg/L1.001UnintU0.002000.001000.00200mg/L1.001UnintU0.002000.0006000.00200mg/L1.001UnintU0.002000.0006000.00200mg/L1.001UnintU0.002000.0006000.00200mg/L1.001UnintU0.002000.0006000.00200mg/L1.001	Iron	U	0.100	0.0330	0.100	mg/L	1.00	1				
MarganeseU0.005000.001000.00500mg/L1.001MolybdenumU0.001000.0002000.00100mg/L1.001NickelU0.002000.0006000.00200mg/L1.001PotassiumU0.3000.08000.300mg/L1.001RhodiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SilverU0.001000.003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.001000.00500mg/L1.001UnanumU0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001	Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1				
MolybdenumU 0.00100 0.000200 0.00100 mg/L 1.00 1 NickelU 0.00200 0.00600 0.00200 mg/L 1.00 1 PotassiumU 0.300 0.0800 0.300 mg/L 1.00 1 RhodiumU 0.00500 0.00160 0.00500 mg/L 1.00 1 SeleniumU 0.00500 0.00150 0.00500 mg/L 1.00 1 SilverU 0.00100 0.00300 0.00100 mg/L 1.00 1 SodiumU 0.250 0.0800 0.250 mg/L 1.00 1 TantalumU 0.00500 0.00100 0.00500 mg/L 1.00 1 UraniumU 0.00200 0.000600 0.00200 mg/L 1.00 1	Magnesium	U	0.0300	0.0100	0.0300	mg/L	1.00	1				
NickelU0.002000.0006000.00200mg/L1.001PotassiumU0.3000.08000.300mg/L1.001RhodiumU0.005000.001600.00500mg/L1.001SeleniumU0.005000.001500.00500mg/L1.001SilverU0.001000.0003000.00100mg/L1.001SodiumU0.2500.08000.250mg/L1.001TantalumU0.005000.001000.00500mg/L1.001UraniumU0.002000.0006000.00200mg/L1.001	Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1				
Potassium U 0.300 0.0800 0.300 mg/L 1.00 1 Rhodium U 0.00500 0.00160 0.00500 mg/L 1.00 1 Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.00100 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000600 0.00200 mg/L 1.00 1	Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1				
Rhodium U 0.00500 0.00160 0.00500 mg/L 1.00 1 Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.00300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000600 0.00200 mg/L 1.00 1	Nickel	U	0.00200	0.000600	0.00200	mg/L	1.00	1				
Selenium U 0.00500 0.00150 0.00500 mg/L 1.00 1 Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00200 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000600 0.00200 mg/L 1.00 1	Potassium	U	0.300	0.0800	0.300	mg/L	1.00	1				
Silver U 0.00100 0.000300 0.00100 mg/L 1.00 1 Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.000200 0.000600 0.00200 mg/L 1.00 1	Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1				
Sodium U 0.250 0.0800 0.250 mg/L 1.00 1 Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.00200 0.000670 0.000200 mg/L 1.00 1	Selenium	U	0.00500	0.00150	0.00500	mg/L	1.00	1				
Tantalum U 0.00500 0.00100 0.00500 mg/L 1.00 1 Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.000200 0.000670 0.000200 mg/L 1.00 1	Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1				
Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.000200 0.000670 0.000200 mg/L 1.00 1			0.250					1				
Thallium U 0.00200 0.000600 0.00200 mg/L 1.00 1 Uranium U 0.000200 0.0000670 0.000200 mg/L 1.00 1	Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1				
		U	0.00200					1				
Vanadium J 0.00407 0.00330 0.0200 mg/L 1.00 1	Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1				
	Vanadium	J	0.00407	0.00330	0.0200	mg/L	1.00	1				

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: FB1SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672010 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	yst Date	Time Batch	Method
Metals Analysis-ICP-M	IS										
6020, Metals (15+) "As	Received"										
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1				
Boron	U	0.0150	0.00520	0.0150	mg/L	1.00	1	PRB	04/10/25	1640 2779460	6
Volatile Organics					-						
8260D, Volatiles- full s	uite "As Rece	eived"									
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	02/06/25	1508 2745972	7
1,1,1-Trichloroethane	US	1.00	0.333	1.00	ug/L		1				
1,1,2,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1				
1,1,2-Trichloroethane	U	1.00	0.333	1.00	ug/L		1				
1,1-Dichloroethane	U	1.00	0.333	1.00	ug/L		1				
1,1-Dichloroethylene	US	1.00	0.333	1.00	ug/L		1				
1,2,3-Trichloropropane	U	1.00	0.333	1.00	ug/L		1				
1,2-Dibromoethane	U	1.00	0.333	1.00	ug/L		1				
1,2-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1				
1,2-Dichloroethane	US	1.00	0.333	1.00	ug/L		1				
1,2-Dichloropropane	U	1.00	0.333	1.00	ug/L		1				
1,4-Dichlorobenzene	U	1.00	0.333	1.00	ug/L		1				
2-Butanone	US	5.00	1.67	5.00	ug/L		1				
2-Hexanone	U	5.00	1.67	5.00	ug/L		1				
4-Methyl-2-pentanone	U	5.00	1.67	5.00	ug/L		1				
Acetone	U	5.00	1.74	5.00	ug/L		1				
Acrolein	UQ	5.00	1.67	5.00	ug/L		1				
Acrylonitrile	UQ	5.00	1.67	5.00	ug/L		1				
Benzene	US	1.00	0.333	1.00	ug/L		1				
Bromochloromethane	U	1.00	0.333	1.00	ug/L		1				
Bromodichloromethane	U	1.00	0.333	1.00	ug/L		1				
Bromoform	U	1.00	0.333	1.00	ug/L		1				
Bromomethane	U	1.00	0.337	1.00	ug/L		1				
Carbon disulfide	U	5.00	1.67	5.00	ug/L		1				
Carbon tetrachloride	US	1.00	0.333	1.00	ug/L		1				
Chlorobenzene	U	1.00	0.333	1.00	ug/L		1				
Chloroethane	U	1.00	0.333	1.00	ug/L		1				
Chloroform	US	1.00	0.333	1.00	ug/L		1				
Chloromethane	UQ	1.00	0.333	1.00	ug/L		1				
Dibromochloromethane	U	1.00	0.333	1.00	ug/L		1				
Dibromomethane	U	1.00	0.333	1.00	ug/L		1				
Ethylbenzene	U	1.00	0.333	1.00	ug/L		1				

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: FB1SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672010 FRNP006

Parameter	Qualifier	Result	DL	RL		Units	PF D	DF Ana	lyst Date	Time Batch	Metho
Volatile Organics											
8260D, Volatiles- full s	uite "As Rece	eived"									
Iodomethane	U	5.00	1.67	5.	00	ug/L		1			
Methylene chloride	U	5.00	0.500	5.	00	ug/L		1			
Styrene	U	1.00	0.333	1.	00	ug/L		1			
Tetrachloroethylene	U	1.00	0.333	1.	00	ug/L		1			
Toluene	U	1.00	0.333		00	ug/L		1			
Trichloroethylene	US	1.00	0.333	1.	00	ug/L		1			
Trichlorofluoromethane	U	1.00	0.333		00	ug/L		1			
Vinyl acetate	UQ	5.00	1.67	5.	00	ug/L		1			
Vinyl chloride	US	1.00	0.333		00	ug/L		1			
Xylenes (total)	U	3.00	1.00		00	ug/L		1			
cis-1,2-Dichloroethylene	U	1.00	0.333	1.	00	ug/L		1			
cis-1,3-Dichloropropylene	U	1.00	0.333	1.	00	ug/L		1			
trans-1,2-Dichloroethylene	U	1.00	0.333		00	ug/L		1			
trans-1,3-Dichloropropylene	U	1.00	0.333		00	ug/L		1			
trans-1,4-Dichloro-2-butene	U	5.00	1.67	5.	00	ug/L		1			
The following Prep Met	thods were pe	erformed:									
Method	Description	1		Analys	t	Date	Ti	me l	Prep Batch	1	
SW846 3005A	ICP-MS 3005	A PREP		HS2		02/11/25	093	30 2	2745299		
SW846 8011 PREP	8011 Prep			BM1		02/03/25	12.	39 2	2743487		
SW846 3005A	ICP-MS 3005	A PREP		TB2		04/10/25	09:	55 2	2779459		
SW846 7470A Prep	EPA 7470A N	Iercury Prep Liquid		JM13		02/03/25	110	00 2	2743352		
The following Analytic	al Methods w	vere performed:									
Method	Description						Analyst C	Commei	nts		
1	SW846 8011										
2	SW846 8011										
3	EPA 300.0										
4	SW846 7470A										
5	SW846 3005A										
6	SW846 3005A										
7	SW846 8260D										
Surrogate/Tracer Recov					Res	1+	Nominal	Daa	01100010/	Acceptable L	imite
	2	<u></u>						Rec	overy%	*	
1-Chloro-2-fluorobenzene Bromofluorobenzene		OA Compounds Liquid ' Volatiles- full suite "As I			6.92 52.5		6.77 50.0		102 105	(56%-149%) (85%-114%)	

Certificate of Analysis

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	FB1SG2-25	Project:	FRNP00609	
Sample ID:	706672010	Client ID:	FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst Date	Time Batch	Method
1,2-Dichloroethane-d4	8260D,	Volatiles- full suite "As Recei	ved"	60	.1 ug/L	50	0.0	120*	(81%-118%)	
Toluene-d8	8260D,	Volatiles- full suite "As Recei	ved"	52	.3 ug/L	50	0.0	105	(89%-112%)	

Notes:

Column headers are defined as follows:

DF: Dilution FactorLc/LC: Critical LevelDL: Detection LimitPF: Prep FactorMDA: Minimum Detectable ActivityRL: Reporting LimitMDC: Minimum Detectable ConcentrationSQL: Sample Quantitation Limit

	Continue of manysis			
			Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC			
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	TB3SG2-25	Project:	FRNP00609	
Sample ID:	706672011	Client ID:	FRNP006	
Matrix:	WATER			
Collect Date:	30-JAN-25 06:30			
Receive Date:	31-JAN-25			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	yst Date	Time	Batch	Method
504.1/8011 Analysis of	EDB/DBCP											
8011, VOA Compounds	s Liquid "As	Received"										
1,2-Dibromo-3-chloropropane		0.0189	0.00850	0.0189	ug/L	0.944	1	LOF	02/05/25	0409	2743489	1
Volatile Organics					U							
8260D, Volatiles- full su	uite "As Rece	eived"										
1,1,1,2-Tetrachloroethane	HU	1.00	0.333	1.00	ug/L		1	PXY1	02/07/25	1156	2745972	3
1,1,1-Trichloroethane	HU	1.00	0.333	1.00	ug/L		1		02/01/20	1100	27.02772	5
1,1,2,2-Tetrachloroethane	HU	1.00	0.333	1.00	ug/L		1					
1,1,2-Trichloroethane	HU	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethane	HU	1.00	0.333	1.00	ug/L		1					
1,1-Dichloroethylene	HU	1.00	0.333	1.00	ug/L		1					
1,2,3-Trichloropropane	HU	1.00	0.333	1.00	ug/L		1					
1,2-Dibromoethane	HU	1.00	0.333	1.00	ug/L		1					
1,2-Dichlorobenzene	HU	1.00	0.333	1.00	ug/L		1					
1,2-Dichloroethane	HU	1.00	0.333	1.00	ug/L		1					
1,2-Dichloropropane	HU	1.00	0.333	1.00	ug/L		1					
1,4-Dichlorobenzene	HJ	0.350	0.333	1.00	ug/L		1					
2-Butanone	HU	5.00	1.67	5.00	ug/L		1					
2-Hexanone	HU	5.00	1.67	5.00	ug/L		1					
4-Methyl-2-pentanone	HU	5.00	1.67	5.00	ug/L		1					
Acetone	BHJ	3.66	1.74	5.00	ug/L		1					
Acrolein	HUQ	5.00	1.67	5.00	ug/L		1					
Acrylonitrile	HUQ	5.00	1.67	5.00	ug/L		1					
Benzene	HU	1.00	0.333	1.00	ug/L		1					
Bromochloromethane	HU	1.00	0.333	1.00	ug/L		1					
Bromodichloromethane	HU	1.00	0.333	1.00	ug/L		1					
Bromoform	HU	1.00	0.333	1.00	ug/L		1					
Bromomethane	HU	1.00	0.337	1.00	ug/L		1					
Carbon disulfide	HU	5.00	1.67	5.00	ug/L		1					
Carbon tetrachloride	HU	1.00	0.333	1.00	ug/L		1					
Chlorobenzene	HJ	0.440	0.333	1.00	ug/L		1					
Chloroethane	HU	1.00	0.333	1.00	ug/L		1					
Chloroform	HU	1.00	0.333	1.00	ug/L		1					
Chloromethane	HUQ	1.00	0.333	1.00	ug/L		1					
Dibromochloromethane	HU	1.00	0.333	1.00	ug/L		1					
Dibromomethane	HU	1.00	0.333	1.00	ug/L		1					
Ethylbenzene	HU	1.00	0.333	1.00	ug/L		1					
Iodomethane	HU	5.00	1.67	5.00	ug/L		1					

Certificate of Analysis

Report Date: April 29, 2025 Four Rivers Nuclear Partnership, LLC Company : Address : 5600 Hobbs Road Kevil, Kentucky 42053 Contact: Ms. Jaime Morrow Project: C-746-S&T Landfill Quarterly(SG25-02) Client Sample ID: TB3SG2-25 Project: FRNP00609 Client ID: Sample ID: 706672011 FRNP006

Parameter	Qualifier	Result	DL	RL	Units	PF DF	Analyst Date	Time Batch	Metho
Volatile Organics									
8260D, Volatiles- full su	uite "As Rece	ived"							
Methylene chloride	HU	5.00	0.500	5.00) ug/L	1			
Styrene	HU	1.00	0.333	1.00) ug/L	1			
Tetrachloroethylene	HU	1.00	0.333	1.00) ug/L	1			
Foluene	HU	1.00	0.333	1.00	ug/L	1			
Trichloroethylene	HU	1.00	0.333	1.00) ug/L	1			
Trichlorofluoromethane	HU	1.00	0.333	1.00) ug/L	1			
Vinyl acetate	HUQ	5.00	1.67	5.00	U	1			
Vinyl chloride	HU	1.00	0.333	1.00	U				
Xylenes (total)	HU	3.00	1.00	3.00	ug/L	1			
cis-1,2-Dichloroethylene	HU	1.00	0.333	1.00	0	1			
cis-1,3-Dichloropropylene	HU	1.00	0.333	1.00	ug/L	1			
rans-1,2-Dichloroethylene	HU	1.00	0.333	1.00	ug/L	1			
rans-1,3-Dichloropropylene	HU	1.00	0.333	1.00	ug/L	1			
rans-1,4-Dichloro-2-butene	HU	5.00	1.67	5.00	ug/L	1			
The following Prep Met	thods were pe	rformed:							
Method	Description	l		Analyst	Date	Tim	e Prep Batch	1	
SW846 8011 PREP	8011 Prep			BM1	02/03/2	5 1239	2743487		
The following Analytic	al Methods w	ere performe	ed:						
Method	Description					Analyst Co	mments		
1	SW846 8011								
2	SW846 8011								
3	SW846 8260D								
Surrogate/Tracer Recov	ery Test				Result	Nominal	Recovery%	Acceptable L	imits
1-Chloro-2-fluorobenzene		OA Compounds	Liquid "As Received"		7.31 ug/L	6.74	108	(56%-149%)	
.2-Dichloroethane-d4		-	ite "As Received"		55.8 ug/L	50.0	112	(81%-118%)	
Bromofluorobenzene	· · · · · · · · · · · · · · · · · · ·		ite "As Received"		51.5 ug/L	50.0	103	(85%-114%)	
Toluene-d8	· · · · · · · · · · · · · · · · · · ·		ite "As Received"		52.1 ug/L	50.0	104	(89%-112%)	
Notes:									

Notes:

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Quarterly(SG25-02)			
Client Sample ID:	TB3SG2-25	Project:	FRNP00609	
Sample ID:	706672011	Client ID:	FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch Met	thod
Column headers	are defined as follo	ows:							

Column neaders are defined as jollows.	
DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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APPENDIX D

STATISTICAL ANALYSES AND QUALIFICATION STATEMENT

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RESIDENTIAL/INERT—QUARTERLY, 1st CY 2025 Facility: U.S. DOE—Paducah Gaseous Diffusion Plant Permit Number: SW07300014, SW07300015, SW07300045

GROUNDWATER STATISTICAL COMMENTS

Introduction

The statistical analyses conducted on the first quarter 2025 groundwater data collected from the C-746-S&T Landfills monitoring wells (MWs) were performed in accordance with Permit GSTR0003, Standard Requirement 3, using the U.S. Environmental Protection Agency (EPA) guidance document, *EPA Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance* (1989).

The statistical evaluation was conducted separately for the three groundwater systems: the Upper Continental Recharge System (UCRS), the Upper Regional Gravel Aquifer (URGA), and the Lower Regional Gravel Aquifer (LRGA). For each groundwater system, data from wells considered to represent background conditions were compared with test wells (downgradient or sidegradient wells) (Exhibit D.1). The first quarter 2025 data used to conduct the statistical analyses were collected in January 2025. The statistical analyses for this report first used data from the initial eight quarters that had been sampled for each parameter to develop the historical background value, beginning with the first two baseline sampling events in 2002, when available. Then a second set of statistical analyses, using the last eight quarters, was run on analytes that had at least one compliance well that exceeded the historical background. The sampling dates associated with both the historical and the current background data are listed next to the result in the statistical analysis sheets of this appendix.

Statistical Analysis Process

Constituents of concern that have Kentucky maximum contaminant levels (MCLs) and results that do not exceed their respective MCL are not included in the statistical evaluation. Parameters that have MCLs can be found in 401 *KAR* 47:030 § 6. For parameters with no established MCL and for those parameters that exceed their MCLs, the most recent results are compared to historical background concentrations, as follows: the data are divided into censored and uncensored observations. The one-sided tolerance interval statistical test is conducted only on parameters that have at least one uncensored (detected) observation. The current result is compared to the results of the one-sided tolerance interval statistical test to determine if the current data exceed the historical background concentration calculated using the first eight quarters of data. The tolerance interval statistical analysis is conducted separately for each parameter in each well (no pooling of downgradient data).

For the statistical analysis of pH, a two-sided tolerance interval statistical test is conducted for pH. The test well results are compared to both an upper tolerance limit (UTL) and lower tolerance limit (LTL) to determine if statistically significant deviations in concentrations exist with respect to upgradient (background) well data from the first eight quarters.

Statistical analyses are performed on the first eight quarters of historical background data, not on the data for the current quarter. Once a statistical result is obtained using the background data, the result for the current quarter is compared to that value. If the value is exceeded, the well is considered to have an exceedance of the statistically derived historical background concentration.

Station	Туре	Groundwater Unit
MW220	BG	URGA
MW221	SG	URGA
MW222	SG	URGA
MW223	SG	URGA
MW224	SG	URGA
MW369	TW	URGA
MW370	TW	LRGA
MW372	TW	URGA
MW373	TW	LRGA
MW384	SG	URGA
MW385	SG	LRGA
MW386 ^a	SG	UCRS
MW387	TW	URGA
MW388	TW	LRGA
MW389 ^{a,b}	TW	UCRS
MW390 ^a	TW	UCRS
MW391	TW	URGA
MW392	TW	LRGA
MW393 ^a	TW	UCRS
MW394	BG	URGA
MW395	BG	LRGA
MW396 ^a	BG	UCRS
MW397	BG	LRGA

Exhibit D.1. Station Identification for Monitoring Wells Analyzed

^a The gradients in UCRS wells are downward. The UCRS wells identified as up-, side-, or downgradient are those wells located in the same general direction as the Regional Gravel Aquifer wells considered to be up-, side-, or downgradient. ^b Well was dry this quarter and a groundwater sample could not be collected. BG: upgradient or background wells TW: compliance or test wells

SG: sidegradient wells

For those parameters that are determined to exceed the historical background concentration, a second one-sided tolerance interval statistical test, or a two-sided tolerance interval statistical test in the case of pH, is conducted. The second one-sided tolerance interval statistical test is conducted to determine whether the current concentration in downgradient wells exceeds the current background, as determined by a comparison against the statistically derived UTL using the most recent eight quarters of data for the relevant background wells. The tolerance interval statistical analysis is conducted separately for each parameter in each well (no pooling of downgradient data).

For the statistical analysis of pH, a two-sided tolerance interval statistical test is conducted, if required. The test well pH results are compared to both UTL and LTL to determine if the current pH is different from the current background level to a statistically significant level. Statistical analyses are performed on the last eight quarters of background data, not on the data for the current quarter. Once a statistical result is obtained using the background data, the result for the current quarter is compared to that value. If the value is exceeded (or is below the LTL for pH), the well has a statistically significant difference in concentration compared to the current background concentration.

A stepwise list of the one-sided tolerance interval statistical procedure applied to the data is summarized below.¹

- 1. The tolerance limit is calculated for the background data (first using the first eight quarters, then using the last eight quarters).
 - For each parameter, the background data are used to establish a baseline. On this data set, the mean (X) and the standard deviation (S) are computed.
 - The data set is checked for normality using coefficient of variation (CV). If $CV \le 1.0$, then the data are assumed to be normally distributed. Data sets with CV > 1.0 are assumed to be log-normally distributed; for data sets with CV > 1.0, the data are log-transformed and analyzed.
 - The factor (K) for one-sided UTL with 95% minimum coverage is determined (Table 5, Appendix B; *EPA Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance*, 1989) based on the number of background data points.
 - The one-sided UTL is calculated using the following equation:

 $TL = X + (K \times S)$

2. Each observation from downgradient wells is compared to the calculated one-sided UTL in Step 1. If an observation value exceeds the tolerance limit (or is below the LTL for pH), then there is statistically significant evidence that the well concentration exceeds the historical background.

Type of Data Used

Exhibit D.1 presents the background wells (identified as "BG"), the compliance or test wells (identified as "TW"), and the sidegradient wells (identified as "SG") for the C-746-S&T Residential and Inert Landfills. Exhibit D.2 presents the parameters from the available data set for which a statistical test was performed using the one-sided tolerance interval.

Exhibits D.3, D.4, and D.5 list the number of analyses (observations), nondetects (censored observations), and detects (uncensored observations) by parameter in the UCRS, the URGA, and the LRGA, respectively. Those parameters displayed with bold-face type indicate the one-sided tolerance interval statistical test was performed. The data presented in Exhibits D.3, D.4, and D.5 were collected during the current quarter, first quarter 2025. The observations are representative of the current quarter data. Historical background data are presented in Attachment D1. The sampling dates associated with background data are listed next to the result in Attachment D1. When field duplicate data are available, the higher of the two readings is retained for further evaluation. When a data point has been rejected following data validation or data assessment, this result is not used, and the next available data point is used for the background or current quarter data. A result has been considered a nondetect if it has a "U" validation code.

¹ For pH, two-sided tolerance limits (upper and lower) were calculated with an adjusted K factor using the following equations. $UTL = X + (K \times S)$ $LTL = X - (K \times S)$

Parameters	
Aluminum	
Beta Activity	
Boron	
Bromide	
Calcium	
Chloride	
Cobalt	
Conductivity	
Copper	
Dissolved Oxygen	
Dissolved Solids	
Iodide	
Iron	
Magnesium	
Manganese	
Molybdenum	
Nickel	
Oxidation-Reduction Potential ^a	
$ m pH^b$	
Potassium	
Sodium	
Sulfate	
Technetium-99	
Total Organic Carbon (TOC)	
Total Organic Halides (TOX)	
Vanadium	
Zinc	

Exhibit D.2. List of Parameters Tested Using the One-Sided Upper Tolerance Level Test with Historical Background

^a Oxidation-reduction potential calibrated as Eh. ^b For pH, the test well results were compared to both UTL and LTL to determine if the current result differs to a statistically significant degree from the historical background values.

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
1,1,1,2-Tetrachloroethane	4	4	0	No
1,1,2,2-Tetrachloroethane	4	4	0	No
1,1,2-Trichloroethane	4	4	0	No
1,1-Dichloroethane	4	4	0	No
1,2,3-Trichloropropane	4	4	0	No
1,2-Dibromo-3-chloropropane	4	4	0	No
1,2-Dibromoethane	4	4	0	No
1,2-Dichlorobenzene	4	4	0	No
1,2-Dichloropropane	4	4	0	No
2-Butanone	4	4	0	No
2-Hexanone	4	4	0	No
4-Methyl-2-pentanone	4	4	0	No
Acetone	4	4	0	No
Acrolein	4	4	0	No
Acrylonitrile	4	4	0	No
Aluminum	4	1	3	Yes
Antimony	4	4	0	No
Beryllium	4	4	0	No
Boron	4	0	4	Yes
Bromide	4	2	2	Yes
Bromochloromethane	4	4	0	No
Bromodichloromethane	4	4	0	No
Bromoform	4	4	0	No
Bromomethane	4	4	0	No
Calcium	4	0	4	Yes
Carbon disulfide	4	4	0	No
Chemical Oxygen Demand (COD)	4	4	0	No
Chloride	4	0	4	Yes
Chlorobenzene	4	4	0	No
Chloroethane	4	4	0	No
Chloroform	4	4	0	No
Chloromethane	4	4	0	No
cis-1,2-Dichloroethene	4	4	0	No
cis-1,3-Dichloropropene	4	4	0	No
Cobalt	4	3	1	Yes
Conductivity	4	0	4	Yes
Copper	4	0	4	Yes
Cyanide	4	4	0	No
Dibromochloromethane	4	4	0	No
Dibromomethane	4	4	0	No
Dimethylbenzene, Total	4	4	0	No
Dissolved Oxygen	4	0	4	Yes
Dissolved Solids	4	0	4	Yes
Ethylbenzene	4	4	0	No
Iodide	4	3	1	Yes

Exhibit D.3. Summary of Censored and Uncensored Data—UCRS

Parameters	Observations	Censored	Uncensored	Statistical
		Observation	Observation	Analysis?
Iodomethane	4	4	0	No
Iron	4	0	4	Yes
Magnesium	4	0	4	Yes
Manganese	4	1	3	Yes
Methylene chloride	4	4	0	No
Molybdenum	4	0	4	Yes
Nickel	4	1	3	Yes
Oxidation-Reduction Potential	4	0	4	Yes
рН	4	0	4	Yes
Potassium	4	0	4	Yes
Radium-226	4	4	0	No
Rhodium	4	4	0	No
Sodium	4	0	4	Yes
Styrene	4	4	0	No
Sulfate	4	0	4	Yes
Tantalum	4	4	0	No
Technetium-99	4	3	1	Yes
Tetrachloroethene	4	4	0	No
Thallium	4	4	0	No
Thorium-230	4	4	0	No
Toluene	4	4	0	No
ТОС	4	0	4	Yes
ТОХ	4	0	4	Yes
trans-1,2-Dichloroethene	4	4	0	No
trans-1,3-Dichloropropene	4	4	0	No
trans-1,4-Dichloro-2-Butene	4	4	0	No
Trichlorofluoromethane	4	4	0	No
Vanadium	4	3	1	Yes
Vinyl Acetate	4	4	0	No
Zinc	4	4	0	No

Exhibit D.3. Summary of Censored and Uncensored Data—UCRS (Continued)

Bold denotes parameters with at least one uncensored observation.

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
1,1,1,2-Tetrachloroethane	11	11	0	No
1,1,2,2-Tetrachloroethane	11	11	0	No
1,1,2-Trichloroethane	11	11	0	No
1,1-Dichloroethane	11	11	0	No
1,2,3-Trichloropropane	11	11	0	No
1,2-Dibromo-3-chloropropane	11	11	0	No
1,2-Dibromoethane	11	11	0	No
1,2-Dichlorobenzene	11	11	0	No
1,2-Dichloropropane	11	11	0	No
2-Butanone	11	11	0	No
2-Hexanone	11	11	0	No
4-Methyl-2-pentanone	11	11	0	No
Acetone	11	11	0	No
Acrolein	11	11	0	No
Acrylonitrile	11	11	0	No
Aluminum	11	9	2	Yes
Antimony	11	11	0	No
Beryllium	11	11	0	No
Beta activity	11	4	7	Yes
Boron	11	0	11	Yes
Bromide	11	0	11	Yes
Bromochloromethane	11	11	0	No
Bromodichloromethane	11	11	0	No
Bromoform	11	11	0	No
Bromomethane	11	11	0	No
Calcium	11	0	11	Yes
Carbon disulfide	11	11	0	No
COD	11	11	0	No
Chloride	11	0	11	Yes
Chlorobenzene	11	11	0	No
Chloroethane	11	11	0	No
Chloroform	11	11	0	No
Chloromethane	11	11	0	No
cis-1,2-Dichloroethene	11	11	0	No
cis-1,3-Dichloropropene	11	11	0	No
Cobalt	11	7	4	Yes
Conductivity	11	0	11	Yes
Copper	11	0	11	Yes
Cyanide	11	11	0	No
Dibromochloromethane	11	11	0	No
Dibromoethane	11	11	0	No
Dimethylbenzene, Total	11	11	0	No
Dissolved Oxygen	11	0	11	Yes
Dissolved Solids	11	1	10	Yes
Ethylbenzene	11	11 11	0	No

Exhibit D.4. Summary of Censored and Uncensored Data—URGA

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
Iodide	11	11	0	No
Iodomethane	11	11	0	No
Iron	11	5	6	Yes
Magnesium	11	0	11	Yes
Manganese	11	4	7	Yes
Methylene chloride	11	11	0	No
Molybdenum	11	6	5	Yes
Nickel	11	2	9	Yes
Oxidation-Reduction Potential	11	0	11	Yes
рН	11	0	11	Yes
Potassium	11	0	11	Yes
Radium-226	11	11	0	No
Rhodium	11	11	0	No
Sodium	11	0	11	Yes
Styrene	11	11	0	No
Sulfate	11	0	11	Yes
Tantalum	11	11	0	No
Technetium-99	11	8	3	Yes
Tetrachloroethene	11	11	0	No
Thallium	11	11	0	No
Thorium-230	11	11	0	No
Toluene	11	11	0	No
тос	11	0	11	Yes
тох	11	5	6	Yes
trans-1,2-Dichloroethene	11	11	0	No
trans-1,3-Dichloropropene	11	11	0	No
trans-1,4-Dichloro-2-Butene	11	11	0	No
Trichlorofluoromethane	11	11	0	No
Vanadium	11	11	0	No
Vinyl Acetate	11	11	0	No
Zinc	11	5	6	Yes

Exhibit D.4. Summary of Censored and Uncensored Data—URGA (Continued)

Bold denotes parameters with at least one uncensored observation.

7 7 7 7 7	Observation 7 7 7 7	Observation 0 0	Analysis? No
7 7		0	
7	7		No
		0	No
	7	0	No
7	7	0	No
7	7	0	No
7	7	0	No
7	7		No
			No
		0	No
			No
	7		No
		1	Yes
		0	No
			No
			Yes
			Yes
			No
-			Yes
			No
			No
			Yes
	-		No
			No
		-	No
			No
			No
-		-	No
			Yes
			Yes
			Yes
			No
			Yes
			Yes
			No
			No
			No
			Yes
			Yes
		7 <	7 7 0 7 7 0

Exhibit D.5. Summary of Censored and Uncensored Data—LRGA

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
Manganese	7	2	5	Yes
Methylene chloride	7	7	0	No
Molybdenum	7	5	2	Yes
Nickel	7	2	5	Yes
Oxidation-Reduction Potential	7	0	7	Yes
рН	7	0	7	Yes
Potassium	7	0	7	Yes
Radium-226	7	7	0	No
Rhodium	7	7	0	No
Sodium	7	0	7	Yes
Styrene	7	7	0	No
Sulfate	7	0	7	Yes
Tantalum	7	7	0	No
Technetium-99	7	5	2	Yes
Tetrachloroethene	7	7	0	No
Thallium	7	7	0	No
Thorium-230	7	7	0	No
Toluene	7	7	0	No
ТОС	7	0	7	Yes
ТОХ	7	2	5	Yes
trans-1,2-Dichloroethene	7	7	0	No
trans-1,3-Dichloropropene	7	7	0	No
trans-1,4-Dichloro-2-Butene	7	7	0	No
Trichlorofluoromethane	7	7	0	No
Vanadium	7	6	1	Yes
Vinyl Acetate	7	7	0	No
Zinc	7	4	3	Yes

Exhibit D.5. Summary of Censored and Uncensored Data—LRGA (Continued)

Bold denotes parameters with at least one uncensored observation.

Discussion of Results from Historical Background Comparison

For the UCRS, URGA, and LRGA, the concentrations of this quarter were compared to the results of the one-sided tolerance interval tests that were calculated using historical background and presented in Attachment D1. For the UCRS, URGA, and LRGA, the test was applied to 25, 25, and 25 parameters, respectively, including those listed in bold print in Exhibits D.3, D.4, and D.5. A summary of exceedances when compared to statistically derived historical background by well number is shown in Exhibit D.6.

UCRS

This quarter's results identified exceedances of historical background UTL for oxidation-reduction potential and technetium-99.

<u>URGA</u>

This quarter's results identified exceedances of historical background UTL for beta activity, calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential, sodium, sulfate, and technetium-99.

LRGA

This quarter's results identified exceedances of historical background UTL for calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential, sodium, sulfate, and technetium-99.

Statistical Summary

Summaries of the results of the statistical tests conducted on data obtained from wells in the UCRS, the URGA, and in the LRGA are presented in Exhibit D.7, Exhibit D.8, and Exhibit D.9, respectively.

UCRS	URGA	LRGA
MW386: Oxidation-reduction potential*	MW220: Oxidation-reduction potential* and sulfate	MW370: Oxidation-reduction potential* and sulfate
MW390: Oxidation-reduction potential* and technetium-99	MW221: Oxidation-reduction potential*	MW373: Calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential,*
MW393: Oxidation-reduction potential*	MW222: Oxidation-reduction potential*	sodium, and sulfate
MW396: Oxidation-reduction potential*	MW223: Oxidation-reduction potential*	MW385: Oxidation-reduction potential,* sulfate, and technetium-99
	MW224: Oxidation-reduction potential,* sodium, and sulfate	MW388: Conductivity, oxidation-reduction potential,* sulfate and technetium-99
	MW369: Oxidation-reduction potential* and technetium-99	MW392: Oxidation-reduction potential*
	F	MW395: Oxidation-reduction potential*
	MW372: Calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential,* sodium, and sulfate	MW397: Oxidation-reduction potential* and sodium
	MW384: Oxidation-reduction potential,* sulfate, and technetium-99	
	MW387: Beta activity, magnesium, oxidation-reduction potential,* sulfate, and technetium-99	

Exhibit D.6. Summary of Exceedances of Statistically Derived Historical Background Concentrations

*Oxidation-reduction potential calibrated as Eh.

Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Aluminum	Tolerance Interval	0.57	No exceedance of statistically derived historical background concentration.
Boron	Tolerance Interval	1.28	No exceedance of statistically derived historical background concentration.
Bromide	Tolerance Interval	0.24	No exceedance of statistically derived historical background concentration.
Calcium	Tolerance Interval	0.20	No exceedance of statistically derived historical background concentration.
Chloride	Tolerance Interval	0.05	No exceedance of statistically derived historical background concentration.
Cobalt	Tolerance Interval	1.34	No exceedance of statistically derived historical background concentration.
Conductivity	Tolerance Interval	0.12	No exceedance of statistically derived historical background concentration.
Copper	Tolerance Interval	0.48	No exceedance of statistically derived historical background concentration.
Dissolved Oxygen	Tolerance Interval	1.20	No exceedance of statistically derived historical background concentration.
Dissolved Solids	Tolerance Interval	0.19	No exceedance of statistically derived historical background concentration.
Iodide	Tolerance Interval	0.13	No exceedance of statistically derived historical background concentration.
Iron	Tolerance Interval	0.48	No exceedance of statistically derived historical background concentration.
Magnesium	Tolerance Interval	0.20	No exceedance of statistically derived historical background concentration.
Manganese	Tolerance Interval	0.46	No exceedance of statistically derived historical background concentration.
Molybdenum	Tolerance Interval	1.51	No exceedance of statistically derived historical background concentration.
Nickel	Tolerance Interval	1.27	No exceedance of statistically derived historical background concentration.
Oxidation-Reduction Potential ^b	Tolerance Interval	4.77	Current results exceed statistically derived historical background concentration in MW386, MW390, MW393, and MW396.
рН	Tolerance Interval	0.05	No exceedance of statistically derived historical background concentration.
Potassium	Tolerance Interval	0.28	No exceedance of statistically derived historical background concentration.
Sodium	Tolerance Interval	0.30	No exceedance of statistically derived historical background concentration.

Exhibit D.7. Test Summaries for Qualified Parameters for Historical Background—UCRS

Exhibit D.7. Test Summaries for Qualified Parameters for Historical Background—UCRS (Continued)

Parameter	Performed Test	CV Normality Testª	Results of Tolerance Interval Test Conducted
Sulfate	Tolerance Interval	0.40	No exceedance of statistically derived historical background concentration.
Technetium-99	Tolerance Interval	0.86	Current results exceed statistically derived historical background concentration in MW390.
ТОС	Tolerance Interval	0.47	No exceedance of statistically derived historical background concentration.
тох	Tolerance Interval	0.38	No exceedance of statistically derived historical background concentration.
Vanadium	Tolerance Interval	0.11	No exceedance of statistically derived historical background concentration.

CV: coefficient of variation ^a If CV > 1.0, used log-transformed data. ^b Oxidation-reduction potential calibrated as Eh.

Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Aluminum	Tolerance Interval	0.28	No exceedance of statistically derived historical background concentration.
Beta Activity	Tolerance Interval	0.97	Current results exceed statistically derived historical background concentration in MW387.
Boron	Tolerance Interval	1.45	No exceedance of statistically derived historical background concentration.
Bromide	Tolerance Interval	0.00	No exceedance of statistically derived historical background concentration.
Calcium	Tolerance Interval	0.17	Current results exceed statistically derived historical background concentrations in MW372.
Chloride	Tolerance Interval	0.23	No exceedance of statistically derived historical background concentration.
Cobalt	Tolerance Interval	2.44	No exceedance of statistically derived historical background concentration.
Conductivity	Tolerance Interval	0.28	Current results exceed statistically derived historical background concentration in MW372.
Copper	Tolerance Interval	0.43	No exceedance of statistically derived historical background concentration.
Dissolved Oxygen	Tolerance Interval	0.50	No exceedance of statistically derived historical background concentration.
Dissolved Solids	Tolerance Interval	0.12	Current results exceed statistically derived historical background concentration in MW372.
Iron	Tolerance Interval	1.17	No exceedance of statistically derived historical background concentration.
Magnesium	Tolerance Interval	0.16	Current results exceed statistically derived historical background concentration in MW372 and MW387.
Manganese	Tolerance Interval	2.16	No exceedance of statistically derived historical background concentration.
Molybdenum	Tolerance Interval	1.26	No exceedance of statistically derived historical background concentration.
Nickel	Tolerance Interval	1.79	No exceedance of statistically derived historical background concentration.
Oxidation-Reduction Potential ^b	Tolerance Interval	0.48	Current results exceed statistically derived historical background concentration in MW220, MW221, MW222, MW223, MW224, MW369, MW372, MW384, and MW387.
рН	Tolerance Interval	0.05	No exceedance of statistically derived historical background concentration.
Potassium	Tolerance Interval	1.40	No exceedance of statistically derived historical background concentration.
Sodium	Tolerance Interval	0.24	Current results exceed statistically derived historical background concentration in MW224 and MW372.

Exhibit D.8. Test Summaries for Qualified Parameters for Historical Background—URGA

Exhibit D.8. Test Summaries for Qualified Parameters for Historical Background—URGA (Continued)

Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Sulfate	Tolerance Interval	0.25	Current results exceed statistically derived historical background concentration in MW220, MW224, MW372, MW384, and MW387.
Technetium-99	Tolerance Interval	0.99	Current results exceed statistically derived historical background concentration in MW369, MW384, and MW387.
ТОС	Tolerance Interval	0.49	No exceedance of statistically derived historical background concentration.
ТОХ	Tolerance Interval	2.57	No exceedance of statistically derived historical background concentration.
Zinc	Tolerance Interval	0.72	No exceedance of statistically derived historical background concentration.

CV: coefficient of variation ^a If CV > 1.0, used log-transformed data. ^b Oxidation-reduction potential calibrated as Eh. ^c Tolerance interval was calculated based on an MCL exceedance.
Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Aluminum	Tolerance Interval	0.86	No exceedance of statistically derived historical background concentration.
Boron	Tolerance Interval	1.24	No exceedance of statistically derived historical background concentration.
Bromide	Tolerance Interval	0.00	No exceedance of statistically derived historical background concentration.
Calcium	Tolerance Interval	0.50	Current results exceed statistically derived historical background concentration in MW373.
Chloride	Tolerance Interval	0.22	No exceedance of statistically derived historical background concentration.
Cobalt	Tolerance Interval	1.51	No exceedance of statistically derived historical background concentration.
Conductivity	Tolerance Interval	0.14	Current results exceed statistically derived historical background concentration in MW373 and MW388.
Copper	Tolerance Interval	0.47	No exceedance of statistically derived historical background concentration.
Dissolved Oxygen	Tolerance Interval	0.52	No exceedance of statistically derived historical background concentration.
Dissolved Solids	Tolerance Interval	0.16	Current results exceed statistically derived historical background concentration in MW373.
Iron	Tolerance Interval	1.29	No exceedance of statistically derived historical background concentration.
Magnesium	Tolerance Interval	0.51	Current results exceed statistically derived historical background concentration in MW373.
Manganese	Tolerance Interval	1.49	No exceedance of statistically derived historical background concentration.
Molybdenum	Tolerance Interval	1.45	No exceedance of statistically derived historical background concentration.
Nickel	Tolerance Interval	1.09	No exceedance of statistically derived historical background concentration.
Oxidation-Reduction Potential ^b	Tolerance Interval	0.33	Current results exceed statistically derived historical background concentration in MW370, MW373, MW385, MW388, MW392, MW395, and MW397.
pН	Tolerance Interval	0.04	No exceedance of statistically derived historical background concentration.
Potassium	Tolerance Interval	0.40	No exceedance of statistically derived historical background concentration.

Exhibit D.9. Test Summaries for Qualified Parameters for Historical Background—LRGA

Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Sodium	Tolerance Interval	0.47	Current results exceed statistically derived historical background concentration in MW373 and MW397.
Sulfate	Tolerance Interval	0.20	Current results exceed statistically derived historical background concentration in MW370, MW373, MW385, and MW388.
Technetium-99	Tolerance Interval	0.80	Current results exceed statistically derived historical background concentration in MW385 and MW388.
ТОС	Tolerance Interval	0.55	No exceedance of statistically derived historical background concentration.
тох	Tolerance Interval	0.59	No exceedance of statistically derived historical background concentration.
Vanadium	Tolerance Interval	0.11	No exceedance of statistically derived historical background concentration.
Zinc	Tolerance Interval	0.76	No exceedance of statistically derived historical background concentration.

Exhibit D.9. Test Summaries for Qualified Parameters for Historical Background—LRGA (Continued)

CV: coefficient of variation ^a If CV > 1.0, used log-transformed data. ^b Oxidation-reduction potential calibrated as Eh.

Discussion of Results from Current Background Comparison

For concentrations in wells in the UCRS, URGA, and LRGA that exceeded the tolerance limit test using historical background, the concentrations were compared to the one-sided tolerance limit calculated using the most recent eight quarters of data and are presented in Attachment D2. For the UCRS, URGA, and LRGA, the test was applied to 2, 9, and 8 parameters, respectively, because these parameter concentrations exceeded the historical background tolerance limit.

For downgradient wells only, a summary of instances where concentrations exceeded the tolerance limit calculated using current background data is shown in Exhibit D.10.

UCRS

Because gradients in the UCRS are downward (vertical), there are no hydrogeologically downgradient UCRS wells. It should be noted, however, that this quarter's results identified current background exceedances in downgradient UCRS well MW390 for technetium-99.

<u>URGA</u>

This quarter's results identified current background exceedances in downgradient wells for beta activity, calcium, conductivity, dissolved solids, magnesium, sodium, sulfate, and technetium-99.

<u>LRGA</u>

This quarter's results identified current background exceedances in downgradient wells for calcium, conductivity, dissolved solids, magnesium, sodium, sulfate, and technetium-99.

Statistical Summary

Summaries of the statistical tests conducted on data obtained from wells in the UCRS, the URGA, and the LRGA are presented in Exhibit D.11, Exhibit D.12, and Exhibit D.13, respectively.

Exhibit D.10. Summary of Exceedances (Downgradient Wells) of the Tolerance Limit Calculated Using Current Background Concentrations

URGA	LRGA
MW369: Technetium-99	MW370: Sulfate
MW372: Calcium, conductivity, dissolved solids, magnesium, sodium, and sulfate	MW373: Calcium, conductivity, dissolved solids, magnesium, sodium, and sulfate
MW387: Beta activity, magnesium, sulfate, and technetium-99	MW388: Conductivity, sulfate, and technetium-99

Exhibit D.11. Test Summaries for Qualified Parameters for Current Background—UCRS

Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Oxidation-Reduction Potential ^b	Tolerance Interval	0.22	None of the test wells exceeded the UTL, which is evidence that concentrations in these wells are not different from current background concentrations to a statistically significant level.
Technetium-99	Tolerance Interval	-6.93	MW390 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.

^a If CV > 1.0, used log-transformed data. ^b Oxidation-reduction potential calibrated as Eh.

Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Beta Activity	Tolerance Interval	0.89	MW387 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Calcium	Tolerance Interval	0.12	MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Conductivity	Tolerance Interval	0.09	MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Dissolved Solids	Tolerance Interval	0.11	MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Magnesium	Tolerance Interval	0.13	MW372 and MW387 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Oxidation-Reduction Potential ^b	Tolerance Interval	0.12	None of the test wells exceeded the UTL, which is evidence that concentrations in these wells are not different from current background concentrations to a statistically significant level.
Sodium	Tolerance Interval	0.16	MW224 and MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Sulfate	Tolerance Interval	0.23	MW372 and MW387 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.

0.68

MW369, MW384, and MW387 exceeded the UTL,

which is evidence of elevated concentration with

respect to current background data.

Exhibit D.12. Test Summaries for Qualified Parameters for Current Background—URGA

CV: coefficient of variation

Technetium-99

^a If CV > 1.0, used log-transformed data. ^b Oxidation-reduction potential calibrated as Eh.

Tolerance Interval

Parameter	Performed Test	CV Normality Test ^a	Results of Tolerance Interval Test Conducted
Calcium	Tolerance Interval	0.20	MW373 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Conductivity	Tolerance Interval	0.11	MW373 and MW388 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Dissolved Solids	Tolerance Interval	0.14	MW373 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Magnesium	Tolerance Interval	0.20	MW373 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Oxidation-Reduction Potential ^b	Tolerance Interval	0.21	None of the test wells exceeded the UTL, which is evidence that concentrations in these wells are not different from current background concentrations to a statistically significant level.
Sodium	Tolerance Interval	0.05	MW373 and MW397 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Sulfate	Tolerance Interval	0.03	MW370, MW373, MW385, and MW388 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Technetium-99	Tolerance Interval	0.69	MW385 and MW388 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.

Exhibit D.13. Test Summaries for Qualified Parameters for Current Background—LRGA

^a If CV > 1.0, used log-transformed data. ^b Oxidation-reduction potential calibrated as Eh.

ATTACHMENT D1

COMPARISON OF CURRENT DATA TO ONE-SIDED UPPER TOLERANCE INTERVAL TEST CALCULATED USING HISTORICAL BACKGROUND DATA

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C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Aluminum UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 0.320 S= 0.182 CV(1)=0.567 K factor**= 3.188 TL(1)= 9.00E-01 LL(1)=N/A

Statistics-Transformed X=-1.259 S= Background Data

S=	0.503	C

Г

V(2)=-0.400 K

K factor=** 3.188 **TL(2)=** 3.45E-01 **LL(2)=**N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW396				
Data Collected	Decult	I N(Pecult)			

Date Collected	Result	LN(Result)
8/13/2002	3.93E-01	-9.34E-01
9/16/2002	2.00E-01	-1.61E+00
10/16/2002	2.00E-01	-1.61E+00
1/13/2003	5.01E-01	-6.91E-01
4/8/2003	2.00E-01	-1.61E+00
7/16/2003	2.00E-01	-1.61E+00
10/14/2003	2.00E-01	-1.61E+00
1/14/2004	6.68E-01	-4.03E-01

Dry/Partially Dry Wells					
Well No.	Gradient				
MW389	Downgradient				

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW390	Downgradien	t Yes	9.80E-02	NO	-2.32E+00	N/A
MW393	Downgradien	t Yes	3.63E-02	NO	-3.32E+00	N/A
MW396	Upgradient	Yes	6.47E-02	NO	-2.74E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Boron UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.650	S= 0.833	CV(1)= 1.282	K factor**= 3.188	TL(1)= 3.31E+00 LL(1)=N/A
Statistics-Transformed	X= -1.034	S= 1.066	CV(2) =-1.031	K factor**= 3.188	TL(2)= 2.36E+00 LL(2)=N/A

Background Data

X = -1.034 S = 1.066

CV(2)=-1.031

Historical Background Data from Upgradient Wells with Transformed Result			
Well Number	MW396		

wen number.	101 00 390	
Date Collected	Result	LN(Result)
8/13/2002	2.00E+00	6.93E-01
9/16/2002	2.00E+00	6.93E-01
10/16/2002	2.00E-01	-1.61E+00
1/13/2003	2.00E-01	-1.61E+00
4/8/2003	2.00E-01	-1.61E+00
7/16/2003	2.00E-01	-1.61E+00
10/14/2003	2.00E-01	-1.61E+00
1/14/2004	2.00E-01	-1.61E+00

Dry/Partially Dry Wells				
Well No.	Gradient			
MW389	Downgradient			

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	2.31E-02	N/A	-3.77E+00	NO
MW390	Downgradien	t Yes	2.35E-02	N/A	-3.75E+00	NO
MW393	Downgradien	t Yes	1.76E-02	N/A	-4.04E+00	NO
MW396	Upgradient	Yes	7.15E-03	N/A	-4.94E+00	NO

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison Bromide** UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 1.388	S= 0.327	CV(1)= 0.236	K factor**= 3.188	TL(1)= 2.43E+00 LL(1)=N/A
Statistics-Transformed	X= 0.301	S= 0.252	CV(2)= 0.838	K factor**= 3.188	TL(2)= 1.10E+00 LL(2)=N/A

Background Data

S= 0.252

CV(2)=0.838

Historical Background Data from Upgradient Wells with Transformed Result

1 111200

Well Number:	MW396	
Date Collected	Result	LN(Result)
8/13/2002	1.50E+00	4.05E-01
9/16/2002	1.60E+00	4.70E-01
10/16/2002	1.60E+00	4.70E-01
1/13/2003	1.00E+00	0.00E+00
4/8/2003	1.00E+00	0.00E+00
7/16/2003	1.00E+00	0.00E+00
10/14/2003	1.70E+00	5.31E-01
1/14/2004	1.70E+00	5.31E-01

Dry/Partially Dry Wells				
Well No.	Gradient			
MW389	Downgradient			

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW390	Downgradien	t Yes	2.63E-01	NO	-1.34E+00	N/A
MW393	Downgradien	t No	2.00E-01	N/A	-1.61E+00	N/A
MW396	Upgradient	Yes	8.82E-01	NO	-1.26E-01	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Calcium UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 41.825 S = 8.445	CV(1)=0.202	K factor**= 3.188	TL(1)= 6.87E+01 LL(1)=N/A	

Statistics-Transformed X=3.711 S= (Background Data

S = 0.241 CV(2)

Г

(2)= 0.065	K fa

nctor**= 3.188 TL(2)= 4.48E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW396			
$\mathbf{D} \leftarrow \mathbf{C} \parallel 1 \leftarrow 1$	D 1/	L NI/D 1()		

Date Collected	Result	LN(Result)
8/13/2002	3.84E+01	3.65E+00
9/16/2002	4.29E+01	3.76E+00
10/16/2002	4.02E+01	3.69E+00
1/13/2003	4.67E+01	3.84E+00
4/8/2003	4.98E+01	3.91E+00
7/16/2003	4.33E+01	3.77E+00
10/14/2003	4.97E+01	3.91E+00
1/14/2004	2.36E+01	3.16E+00

Dry/Partially Dry Wells			
Well No.	Gradient		
MW389	Downgradient		

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	2.02E+01	NO	3.01E+00	N/A
MW390	Downgradien	t Yes	2.80E+01	NO	3.33E+00	N/A
MW393	Downgradien	t Yes	1.84E+01	NO	2.91E+00	N/A
MW396	Upgradient	Yes	1.86E+01	NO	2.92E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Chloride UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

 Statistics-Background Data
 X= 101.725 S= 5.245
 CV(1)=0.052
 K factor**= 3.188
 TL(1)= 1.18E+02
 LL(1)=N/A

Statistics-Transformed X=4.621 S= 0.053 CV(2)=0.011 Background Data

LN(Result)

4.52E+00

4.59E+00

4.62E+00

4.68E+00

4.61E+00

4.63E+00

4.67E+00

4.65E+00

Historical Background Data from

Well Number:

Date Collected

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/8/2003

7/16/2003

10/14/2003

1/14/2004

Upgradient Wells with Transformed Result

MW396

9.16E+01

9.83E+01

1.01E+02

1.08E+02

1.01E+02

1.03E+02

1.07E+02

1.04E+02

Result

Dry/Parti	. 11	D	W-11.
	` '		

Dry/Partially Dry Wells				
Well No.	Gradient			
MW389	Downgradient			

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

K factor**= 3.188 TL(2)= 4.79E+00 LL(2)=N/A

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	9.52E+00) NO	2.25E+00	N/A
MW390	Downgradien	t Yes	1.89E+01	NO	2.94E+00	N/A
MW393	Downgradien	t Yes	7.85E+00) NO	2.06E+00	N/A
MW396	Upgradient	Yes	5.74E+01	NO	4.05E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Cobalt UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.008	S= 0.011	CV(1)= 1.340	K factor**= 3.188	TL(1)= 4.18E-02 LL(1)=N/A
Statistics-Transformed	X= -5.645	S= 1.339	CV(2) =-0.237	K factor**= 3.188	TL(2)=-1.38E+00 LL(2)=N/A

Background Data

X = -5.645 S = 1.339

CV(2)=-0.237

Historical Background Data from Upgradient Wells with Transformed Result

Well Number:	MW396	
Date Collected	Result	LN(Result)
8/13/2002	2.50E-02	-3.69E+00
9/16/2002	2.50E-02	-3.69E+00
10/16/2002	1.00E-03	-6.91E+00
1/13/2003	3.24E-03	-5.73E+00
4/8/2003	4.36E-03	-5.44E+00
7/16/2003	2.76E-03	-5.89E+00
10/14/2003	1.00E-03	-6.91E+00
1/14/2004	1.00E-03	-6.91E+00

Dry/Partially Dry Wells		
Well No.	Gradient	
MW389	Downgradient	

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	9.43E-03	N/A	-4.66E+00	NO
MW390	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A
MW393	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A
MW396	Upgradient	No	1.00E-03	N/A	-6.91E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Conductivity **UNITS: umho/cm** UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

X=922.500 **S**= 107.616 **CV(1)**=0.117 **K factor**=** 3.188 TL(1)= 1.27E+03 LL(1)=N/A **Statistics-Background Data**

Statistics-Transformed X = 6.822 S = 0.111 CV(2) = 0.016**Background Data**

K factor**= 3.188 TL(2)= 7.17E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result			
Well Number:	MW396		

Date Collected	Result	LN(Result)
8/13/2002	7.84E+02	6.66E+00
9/30/2002	8.71E+02	6.77E+00
10/16/2002	8.68E+02	6.77E+00
1/13/2003	9.12E+02	6.82E+00
4/8/2003	9.42E+02	6.85E+00
7/16/2003	9.10E+02	6.81E+00
10/14/2003	9.35E+02	6.84E+00
1/14/2004	1.16E+03	7.05E+00

Dry/Partially Dry Wells						
Well No.	Gradient					
MW389 Downgradient						

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)	
MW386	Sidegradient	Yes	6.94E+02	2 NO	6.54E+00	N/A	
MW390	Downgradien	t Yes	6.65E+02	NO NO	6.50E+00	N/A	
MW393	Downgradien	t Yes	4.27E+02	NO NO	6.06E+00	N/A	
MW396	Upgradient	Yes	6.86E+02	2 NO	6.53E+00	N/A	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Copper UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.028	S= 0.014	CV(1)= 0.481	K factor**= 3.188	TL(1)= 7.16E-02 LL(1)=N/A
Statistics-Transformed	X = -3.650	S = 0.414	CV(2) =-0.113	K factor**= 3.188	TL(2)= -2.33E+00 LL(2)=N/A

Historical Background Data from
Upgradient Wells with Transformed

Background Data

Well Number:	MW396	
Date Collected	Result	LN(Result)
8/13/2002	5.00E-02	-3.00E+00
9/16/2002	5.00E-02	-3.00E+00
10/16/2002	2.60E-02	-3.65E+00
1/13/2003	2.00E-02	-3.91E+00
4/8/2003	2.00E-02	-3.91E+00
7/16/2003	2.00E-02	-3.91E+00
10/14/2003	2.00E-02	-3.91E+00
1/14/2004	2.00E-02	-3.91E+00

Dry/Partially Dry Wells				
Well No.	Gradient			
MW389	Downgradient			

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)	
MW386	Sidegradient	Yes	4.70E-04	NO	-7.66E+00	N/A	
MW390	Downgradien	t Yes	1.05E-03	NO	-6.86E+00	N/A	
MW393	Downgradien	t Yes	1.07E-03	NO	-6.84E+00	N/A	
MW396	Upgradient	Yes	1.42E-03	NO	-6.56E+00	N/A	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

Result

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Dissolved Oxygen UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

 Statistics-Background Data
 X=1.395 S=1.677 CV(1)=1.202 K factor**= 3.188 TL(1)=6.74E+00 LL(1)=N/A

 Statistics Transformed
 S=1.677 CV(1)=1.202 K factor**= 3.188 TL(1)=6.74E+00 LL(1)=N/A

Statistics-Transformed X = -0.043 S = 0.814 CV(2) = -18.867 K factor**= 3.188 TL(2) = 2.55E+00 LL(2) = N/ABackground Data

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW396			

Date Collected	Result	LN(Result)
8/13/2002	5.45E+00	1.70E+00
9/16/2002	4.00E-01	-9.16E-01
10/16/2002	5.40E-01	-6.16E-01
1/13/2003	7.20E-01	-3.29E-01
4/8/2003	6.90E-01	-3.71E-01
7/16/2003	1.10E+00	9.53E-02
10/14/2003	7.10E-01	-3.42E-01
1/14/2004	1.55E+00	4.38E-01

Dry/Partially Dry Wells					
Well No.	Gradient				
MW389 Downgradient					

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	9.90E-01	N/A	-1.01E-02	NO
MW390	Downgradien	t Yes	3.34E+00	N/A	1.21E+00	NO
MW393	Downgradien	t Yes	1.80E+00	N/A	5.88E-01	NO
MW396	Upgradient	Yes	1.06E+00	N/A	5.83E-02	NO

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison Dissolved Solids** UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

X=550.375 S= 104.330 CV(1)=0.190 **K factor**=** 3.188 TL(1)= 8.83E+02 LL(1)=N/A **Statistics-Background Data**

Statistics-Transformed Background Data

X= 6.298 **S**= 0.162 **CV(2)**=0.026

K factor**= 3.188 TL(2)= 6.82E+00 LL(2)=N/A

	kground Data from ells with Transformed Result
Well Number:	MW396

Date Collected	Result	LN(Result)
8/13/2002	5.02E+02	6.22E+00
9/16/2002	5.06E+02	6.23E+00
10/16/2002	5.43E+02	6.30E+00
1/13/2003	5.21E+02	6.26E+00
4/8/2003	5.04E+02	6.22E+00
7/16/2003	5.32E+02	6.28E+00
10/14/2003	4.90E+02	6.19E+00
1/14/2004	8.05E+02	6.69E+00

Dry/Partially Dry Wells			
Well No.	Gradient		
MW389	Downgradient		

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	3.41E+02	2 NO	5.83E+00	N/A
MW390	Downgradien	t Yes	3.19E+02	NO NO	5.77E+00	N/A
MW393	Downgradien	t Yes	2.65E+02	NO NO	5.58E+00	N/A
MW396	Upgradient	Yes	3.76E+02	NO NO	5.93E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** UCRS Iodide UNITS: mg/L

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 2.150	S= 0.283	CV(1)= 0.132	K factor**= 3.188	TL(1)= 3.05E+00 LL(1)=N/A
Statistics-Transformed	X = 0.759	S= 0.123	CV(2)= 0.162	K factor**= 3.188	TL(2)= 1.15E+00 LL(2)=N/A

Background Data

S= 0.123

2)= 0.162	K fa

	Historical Background Data from Upgradient Wells with Transformed Result			
Well Number:	MW396			

wen number:	IVI W 590	
Date Collected	Result	LN(Result)
8/13/2002	2.00E+00	6.93E-01
9/16/2002	2.00E+00	6.93E-01
10/16/2002	2.00E+00	6.93E-01
1/13/2003	2.00E+00	6.93E-01
4/8/2003	2.00E+00	6.93E-01
7/16/2003	2.70E+00	9.93E-01
10/14/2003	2.50E+00	9.16E-01
1/14/2004	2.00E+00	6.93E-01

Dry/Partially Dry Wells				
Well No.	Gradient			
MW389	Downgradient			

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	No	5.00E-01	N/A	-6.93E-01	N/A
MW390	Downgradien	t No	5.00E-01	N/A	-6.93E-01	N/A
MW393	Downgradien	t No	5.00E-01	N/A	-6.93E-01	N/A
MW396	Upgradient	Yes	4.65E-01	NO	-7.66E-01	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

Historical Background Comparison C-746-S/T First Quarter 2025 Statistical Analysis UNITS: mg/L UCRS Iron

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 7.796	S= 3.723	CV(1)= 0.478	K factor**= 3.188	TL(1)= 1.97E+01 LL(1)=N/A	
Statistics-Transformed	X = 1 880	S = 0.723	CV(2) = 0.384	K factor**= 3 188	TL(2) = 4.18F+00 $LL(2) = N/A$	

Background Data

X= 1.880 **S**= 0.723

Г

CV(2)=0.384

K factor=** 3.188 TL(2)= 4.18E+00 LL(2)=N/A

Historical Bac	kground Data from
Upgradient W	fells with Transformed Result
Well Number	MW396

wen number.	101 00 570	
Date Collected	Result	LN(Result)
8/13/2002	1.80E+00	5.88E-01
9/16/2002	9.53E+00	2.25E+00
10/16/2002	7.43E+00	2.01E+00
1/13/2003	9.93E+00	2.30E+00
4/8/2003	1.02E+01	2.32E+00
7/16/2003	9.16E+00	2.21E+00
10/14/2003	1.19E+01	2.48E+00
1/14/2004	2.42E+00	8.84E-01

Dry/Partially Dry Wells						
Well No.	Gradient					
MW389	Downgradient					

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	1.52E+00) NO	4.19E-01	N/A
MW390	Downgradien	t Yes	8.13E-02	NO	-2.51E+00	N/A
MW393	Downgradien	t Yes	2.77E+00) NO	1.02E+00	N/A
MW396	Upgradient	Yes	1.57E-01	NO	-1.85E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Magnesium UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

 Statistics-Background Data
 X= 16.876
 S= 3.313
 CV(1)=0.196
 K factor**= 3.188
 TL(1)= 2.74E+01
 LL(1)=N/A

Statistics-Transformed X=2.804 S= 0.240 CV(2)=0.086Background Data

LN(Result)

2.74E+00

2.85E+00

2.88E+00

2.95E+00

2.88E+00

2.88E+00

3.01E+00

2.24E+00

Historical Background Data from

Well Number:

Date Collected

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/8/2003

7/16/2003

10/14/2003

1/14/2004

Upgradient Wells with Transformed Result

MW396

1.55E+01

1.73E+01

1.78E+01

1.92E+01

1.78E+01

1.78E+01

2.02E+01

9.41E+00

Result

Dry/Partially Dry Wells

Well No.	Gradient
MW389	Downgradient

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

K factor**= 3.188 TL(2)= 3.57E+00 LL(2)=N/A

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	8.63E+00	NO	2.16E+00	N/A
MW390	Downgradien	t Yes	1.18E+01	NO	2.47E+00	N/A
MW393	Downgradien	t Yes	4.56E+00	NO	1.52E+00	N/A
MW396	Upgradient	Yes	7.84E+00	NO	2.06E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Manganese UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

X= 0.774 **S**= 0.353 **CV(1)=**0.456 K factor**= 3.188 TL(1)= 1.90E+00 LL(1)=N/A **Statistics-Background Data Statistics-Transformed X**=-0.566 **S**= 1.192 **CV(2)**=-2.105 K factor**= 3

Background Data

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3.188	TL(2)= 3.23E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW396				
Date Collected	Result	LN(Result)			
8/13/2002	5.70E-01	-5.62E-01			

8/13/2002	5.70E-01	-5.62E-01
9/16/2002	6.47E-01	-4.35E-01
10/16/2002	8.80E-01	-1.28E-01
1/13/2003	1.13E+00	1.24E-01
4/8/2003	9.65E-01	-3.56E-02
7/16/2003	9.83E-01	-1.71E-02
10/14/2003	9.84E-01	-1.61E-02
1/14/2004	3.14E-02	-3.46E+00

Dry/Partially Dry Wells						
Well No.	Gradient					
MW389	Downgradient					

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	8.70E-01	NO	-1.39E-01	N/A
MW390	Downgradien	t No	5.00E-03	N/A	-5.30E+00	N/A
MW393	Downgradien	t Yes	7.45E-02	NO	-2.60E+00	N/A
MW396	Upgradient	Yes	3.63E-03	NO	-5.62E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Molybdenum UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.007	S= 0.011	CV(1)= 1.507	K factor**= 3.188	TL(1)= 4.22E-02 LL(1)=N/A
Statistics-Transformed	X= -5.928	S= 1.420	CV(2) =-0.240	K factor**= 3.188	TL(2)= -1.40E+00 LL(2)=N/A

Background Data

X = -5.928 S = 1.420

CV(2) = -0.240

	Historical Background Data from Upgradient Wells with Transformed Result						
XX7 11 XT	1						

Well Number:	MW396	
Date Collected	Result	LN(Result)
8/13/2002	2.50E-02	-3.69E+00
9/16/2002	2.50E-02	-3.69E+00
10/16/2002	1.00E-03	-6.91E+00
1/13/2003	1.28E-03	-6.66E+00
4/8/2003	2.71E-03	-5.91E+00
7/16/2003	1.17E-03	-6.75E+00
10/14/2003	1.00E-03	-6.91E+00
1/14/2004	1.00E-03	-6.91E+00

Dry/Partially Dry Wells						
Well No.	Gradient					
MW389	Downgradient					

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)	
MW386	Sidegradient	Yes	9.47E-04	N/A	-6.96E+00	NO	
MW390	Downgradien	t Yes	2.13E-04	N/A	-8.45E+00	NO	
MW393	Downgradien	t Yes	5.83E-04	N/A	-7.45E+00	NO	
MW396	Upgradient	Yes	2.14E-04	N/A	-8.45E+00	NO	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Nickel UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.016	S= 0.021	CV(1)=1.272	K factor**= 3.188	TL(1)= 8.26E-02 LL(1)=N/A
Statistics-Transformed	X= -4.706	S= 1.057	CV(2)=-0.225	K factor**= 3.188	TL(2)= -1.34E+00 LL(2)=N/A

Background Data

X = -4.706 S = 1.057

CV(2)=-0.225

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	MW396					

well Number:	M W 390	
Date Collected	Result	LN(Result)
8/13/2002	5.00E-02	-3.00E+00
9/16/2002	5.00E-02	-3.00E+00
10/16/2002	5.00E-03	-5.30E+00
1/13/2003	5.00E-03	-5.30E+00
4/8/2003	5.71E-03	-5.17E+00
7/16/2003	5.00E-03	-5.30E+00
10/14/2003	5.00E-03	-5.30E+00
1/14/2004	5.00E-03	-5.30E+00

Dry/Partially Dry Wells						
Well No.	Gradient					
MW389	Downgradient					

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)		
MW386	Sidegradient	Yes	2.60E-03	N/A	-5.95E+00	NO		
MW390	Downgradien	t Yes	1.06E-03	N/A	-6.85E+00	NO		
MW393	Downgradien	t No	2.00E-03	N/A	-6.21E+00	N/A		
MW396	Upgradient	Yes	1.96E-03	N/A	-6.23E+00	NO		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Oxidation-Reduction Potential UNITS: mV UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 13.000 S= 61.952 CV(1)=4.766 K factor**= 3.188 TL(1)= 2.11E+02 LL(1)=N/A

Statistics-Transformed X=4.364 S= 0.333 CV(2)=0.076 Background Data

LN(Result)

4.09E+00

4.26E+00

#Func!

#Func!

#Func!

#Func!

#Func!

4.74E+00

Historical Background Data from

Well Number:

Date Collected

8/13/2002

4/8/2003

7/16/2003

10/14/2003

1/14/2004 4/12/2004

7/20/2004

10/12/2004

Upgradient Wells with Transformed Result

MW396

6.00E+01

7.10E+01

-5.60E+01

-5.40E+01

-2.20E+01

-6.00E+00

-3.00E+00

1.14E+02

Result

Dry/Par	tially Dry Wells
Well No.	Gradient

MW389 Downgradient

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

K factor**= 3.188 TL(2)= 4.74E+00 LL(2)=N/A

#Because the natural log was not possible for all background values, the TL was considered equal to the maximum background value.

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)		
MW386	Sidegradient	Yes	1.68E+02	2 N/A	5.13E+00	YES		
MW390	Downgradien	t Yes	4.36E+02	2 N/A	6.08E+00	YES		
MW393	Downgradien	t Yes	2.29E+02	2 N/A	5.43E+00	YES		
MW396	Upgradient	Yes	3.69E+02	2 N/A	5.91E+00	YES		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW386 MW390 MW393 MW396

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** pН **UNITS: Std Unit** UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 6.460	S= 0.350	CV(1)= 0.054	K factor**= 3.736	TL(1)= 7.77E+00 I	L L(1)= 5.15E+00
Statistics-Transformed	X= 1.864	S = 0.054	CV(2)=0.029	K factor**= 3.736	TL(2)= 2.07E+00 I	L L(2)= 1.66E+00

Background Data

5= 0.054

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CV(2) = 0.029

Historical Background Data from Upgradient Wells with Transformed Result			
W-11 March	MW206		

Well Number:	MW396	
Date Collected	Result	LN(Result)
8/13/2002	6.17E+00	1.82E+00
9/16/2002	6.40E+00	1.86E+00
10/16/2002	5.90E+00	1.77E+00
1/13/2003	6.40E+00	1.86E+00
4/8/2003	6.65E+00	1.89E+00
7/16/2003	6.40E+00	1.86E+00
10/14/2003	6.71E+00	1.90E+00
1/14/2004	7.05E+00	1.95E+00

Dry/Partially Dry Wells					
Well No.	Gradient				
MW389	Downgradient				

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL(1)? Result <ll(1)?< th=""><th></th><th>LN(Result) >TL(2)? LN(Result) <ll(2)?< th=""></ll(2)?<></th></ll(1)?<>		LN(Result) >TL(2)? LN(Result) <ll(2)?< th=""></ll(2)?<>	
MW386	Sidegradient	Yes	6.55E+00) NO	1.88E+00	N/A	
MW390	Downgradien	t Yes	6.21E+00) NO	1.83E+00	N/A	
MW393	Downgradien	t Yes	6.16E+00) NO	1.82E+00	N/A	
MW396	Upgradient	Yes	6.43E+00) NO	1.86E+00	N/A	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Potassium UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 1.411	S= 0.399	CV(1)= 0.282	K factor**= 3.188	TL(1)= 2.68E+00 LL(1)=N/A
Statistics-Transformed	X= 0.311	S= 0.271	CV(2)=0.870	K factor**= 3.188	TL(2)= 1.18E+00 LL(2)=N/A

Background Data

S= 0.271

V(2)	=0.870	K

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW396				

Date Collected	Result	LN(Result)
8/13/2002	2.00E+00	6.93E-01
9/16/2002	2.00E+00	6.93E-01
10/16/2002	9.78E-01	-2.22E-02
1/13/2003	1.08E+00	7.70E-02
4/8/2003	1.12E+00	1.13E-01
7/16/2003	1.38E+00	3.22E-01
10/14/2003	1.24E+00	2.15E-01
1/14/2004	1.49E+00	3.99E-01

Dry/Partially Dry Wells					
Well No.	Gradient				
MW389	Downgradient				

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)	
MW386	Sidegradient	Yes	2.97E-01	NO	-1.21E+00	N/A	
MW390	Downgradien	t Yes	3.48E-01	NO	-1.06E+00	N/A	
MW393	Downgradien	t Yes	5.80E-01	NO	-5.45E-01	N/A	
MW396	Upgradient	Yes	1.82E+00) NO	5.99E-01	N/A	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Sodium UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

X=106.825 S= 32.041 CV(1)=0.300 **K factor**=** 3.188 TL(1)= 2.09E+02 LL(1)=N/A **Statistics-Background Data Statistics-Transformed** K factor**= 3.188 TL(2)= 6.16E+00 LL(2)=N/A

X=4.595 S= 0.492 CV(2)=0.107

LN(Result)

4.74E+00

4.75E+00

4.76E+00

4.80E+00

4.66E+00

4.76E+00

4.88E+00

3.39E+00

Background Data

Well Number:

Date Collected

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/8/2003

7/16/2003

10/14/2003

1/14/2004

Historical Background Data from

Upgradient Wells with Transformed Result

MW396

1.15E+02

1.16E+02

1.17E+02

1.22E+02

1.06E+02

1.17E+02

1.32E+02

2.96E+01

Result

Dry/Partially Dry Wells					
Well No.	Gradient				
MW389	Downgradient				

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)	
MW386	Sidegradient	Yes	1.11E+02	2 NO	4.71E+00	N/A	
MW390	Downgradien	t Yes	9.98E+01	NO	4.60E+00	N/A	
MW393	Downgradien	t Yes	9.10E+01	NO	4.51E+00	N/A	
MW396	Upgradient	Yes	3.26E+01	NO	3.48E+00	N/A	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

Historical Background Comparison C-746-S/T First Quarter 2025 Statistical Analysis Sulfate UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =22.463 S = 8.876	CV(1)= 0.395	K factor**= 3.188	TL(1)= 5.08E+01 LL(1)=N/A
Statistics-Transformed	X = 3.054 S = 0.351	CV(2)= 0.115	K factor**= 3.188	TL(2)= 4.17E+00 LL(2)=N/A

Background Data

S= 0.351

CV(2)=0.115

Historical Background Data from Upgradient Wells with Transformed Result			
Well Number:	MW396		

Date Collected	Result	LN(Result)
8/13/2002	4.19E+01	3.74E+00
9/16/2002	2.63E+01	3.27E+00
10/16/2002	2.06E+01	3.03E+00
1/13/2003	1.66E+01	2.81E+00
4/8/2003	2.39E+01	3.17E+00
7/16/2003	1.88E+01	2.93E+00
10/14/2003	1.29E+01	2.56E+00
1/14/2004	1.87E+01	2.93E+00

Dry/Par	tially Dry Wells
Well No.	Gradient
MW389	Downgradient

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	3.10E+01	NO	3.43E+00	N/A
MW390	Downgradien	t Yes	3.30E+01	NO	3.50E+00	N/A
MW393	Downgradien	t Yes	2.70E+01	NO	3.30E+00	N/A
MW396	Upgradient	Yes	2.76E+01	NO	3.32E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison Technetium-99 UNITS: pCi/L** UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 7.624	S= 6.558	CV(1)= 0.860	K factor**= 3.188	TL(1)= 2.85E+01 LL(1)=N/A
Statistics-Transformed	X= 1.498	S= 1.321	CV(2)= 0.882	K factor**= 3.188	TL(2)= 5.71E+00 LL(2)=N/A

Background Data

S= 1.321

(2) =0.882	K fa

Historical Background Data from Upgradient Wells with Transformed Result			
Well Number:	MW396		

Date Collected	Result	LN(Result)
8/13/2002	1.67E+01	2.82E+00
9/16/2002	6.39E+00	1.85E+00
10/16/2002	4.55E+00	1.52E+00
1/13/2003	1.65E+01	2.80E+00
4/8/2003	3.04E+00	1.11E+00
7/16/2003	3.54E-01	-1.04E+00
10/14/2003	1.19E+01	2.48E+00
1/14/2004	1.56E+00	4.45E-01

Dry/Partially Dry Wells		
Well No.	Gradient	
MW389	Downgradient	

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	No	4.16E+00) N/A	1.43E+00	N/A
MW390	Downgradien	t Yes	7.75E+01	YES	4.35E+00	N/A
MW393	Downgradien	t No	-4.56E+0	0 N/A	#Error	N/A
MW396	Upgradient	No	-4.73E+0	0 N/A	#Error	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW390

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison Total Organic Carbon (TOC)** UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

S= 4.696 CV(1)=0.470 **K factor**=** 3.188 TL(1)= 2.50E+01 LL(1)=N/A **Statistics-Background Data X**= 9.988 **Statistics-Transformed X**= 2.210 **S**= 0.454 **CV(2)**= 0.205

Background Data

Г

K factor**= 3.188 TL(2)= 3.66E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result			
Well Number:	MW396		

wen rumber.	101 00 500	
Date Collected	Result	LN(Result)
8/13/2002	1.90E+01	2.94E+00
9/16/2002	1.46E+01	2.68E+00
10/16/2002	1.04E+01	2.34E+00
1/13/2003	4.40E+00	1.48E+00
4/8/2003	7.00E+00	1.95E+00
7/16/2003	7.30E+00	1.99E+00
10/14/2003	9.10E+00	2.21E+00
1/14/2004	8.10E+00	2.09E+00

Dry/Partially Dry Wells			
Well No.	Gradient		
MW389	Downgradient		

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	6.54E+00) NO	1.88E+00	N/A
MW390	Downgradien	t Yes	2.07E+00) NO	7.28E-01	N/A
MW393	Downgradien	t Yes	2.27E+00) NO	8.20E-01	N/A
MW396	Upgradient	Yes	3.59E+00) NO	1.28E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison Total Organic Halides (TOX)** UNITS: ug/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

X=142.650 S= 53.533 CV(1)=0.375 **K factor**=** 3.188 TL(1)= 3.13E+02 LL(1)=N/A **Statistics-Background Data Statistics-Transformed**

Background Data

X= 4.896 **S**= 0.390 **CV(2)**=0.080

K factor**= 3.188 TL(2)= 6.14E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW396			

Result	LN(Result)
1.93E+02	5.26E+00
1.90E+02	5.25E+00
2.21E+02	5.40E+00
1.06E+02	4.66E+00
7.78E+01	4.35E+00
1.22E+02	4.80E+00
8.64E+01	4.46E+00
1.45E+02	4.98E+00
	1.93E+02 1.90E+02 2.21E+02 1.06E+02 7.78E+01 1.22E+02 8.64E+01

Dry/Partially Dry Wells			
Well No.	Gradient		
MW389	Downgradient		

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	1.35E+02	2 NO	4.91E+00	N/A
MW390	Downgradien	t Yes	7.74E+00) NO	2.05E+00	N/A
MW393	Downgradien	t Yes	9.20E+00) NO	2.22E+00	N/A
MW396	Upgradient	Yes	3.37E+01	NO	3.52E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Vanadium UNITS: mg/L UCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.021	S= 0.002	CV(1)= 0.109	K factor**= 3.188	TL(1)= 2.86E-02 LL(1)=N/A
Statistics-Transformed	X= -3.856	S = 0.103	CV(2)=-0.027	K factor**= 3.188	TL(2)= -3.53E+00 LL(2)=N/A

D	ackgr	Jun	u	Da	ua		
- 1				-	_	_	

Background Data

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW396			

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Date Collected	Result	LN(Result)
8/13/2002	2.50E-02	-3.69E+00
9/16/2002	2.50E-02	-3.69E+00
10/16/2002	2.00E-02	-3.91E+00
1/13/2003	2.00E-02	-3.91E+00
4/8/2003	2.00E-02	-3.91E+00
7/16/2003	2.00E-02	-3.91E+00
10/14/2003	2.00E-02	-3.91E+00
1/14/2004	2.00E-02	-3.91E+00

Dry/Partially Dry Wells			
Well No.	Gradient		
MW389	Downgradient		

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data									
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)			
MW386	Sidegradient	Yes	3.67E-03	NO	-5.61E+00	N/A			
MW390	Downgradien	t No	2.00E-02	N/A	-3.91E+00	N/A			
MW393	Downgradien	t No	2.00E-02	N/A	-3.91E+00	N/A			
MW396	Upgradient	No	2.00E-02	N/A	-3.91E+00	N/A			

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Aluminum UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.221	S= 0.061	CV(1)= 0.277	K factor**= 2.523	TL(1)= 3.76E-01	LL(1)=N/A
Statistics-Transformed Background Data	X= -1.534	S= 0.212	CV(2) =-0.138	K factor**= 2.523	TL(2)= -9.99E-01	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	MW220					
Date Collected	Result	LN(Result)				
10/14/2002	2.00E-01	-1.61E+00				
1/15/2003	2.00E-01	-1.61E+00				
4/10/2003	2.00E-01	-1.61E+00				
7/14/2003	2.00E-01	-1.61E+00				
10/13/2003	4.27E-01	-8.51E-01				
1/13/2004	3.09E-01	-1.17E+00				
4/13/2004	2.00E-01	-1.61E+00				
7/21/2004	2.02E-01	-1.60E+00				
Well Number:	MW394					
Date Collected	Result	LN(Result)				

Date Concelled	Result	LIN(Result)
8/13/2002	2.00E-01	-1.61E+00
9/16/2002	2.00E-01	-1.61E+00
10/16/2002	2.00E-01	-1.61E+00
1/13/2003	2.00E-01	-1.61E+00
4/10/2003	2.00E-01	-1.61E+00
7/16/2003	2.00E-01	-1.61E+00
10/14/2003	2.00E-01	-1.61E+00
1/13/2004	2.00E-01	-1.61E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data									
Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)				
Upgradient	No	5.00E-02	N/A	-3.00E+00	N/A				
Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A				
Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A				
Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A				
Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A				
Downgradien	t Yes	5.55E-02	NO	-2.89E+00	N/A				
Downgradien	t No	5.00E-02	N/A	-3.00E+00	N/A				
Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A				
Downgradien	t Yes	2.18E-02	NO	-3.83E+00	N/A				
Downgradien	t No	5.00E-02	N/A	-3.00E+00	N/A				
Upgradient	No	5.00E-02	N/A	-3.00E+00	N/A				
	Gradient Upgradient Sidegradient Sidegradient Sidegradient Downgradien Downgradient Downgradien Downgradien	GradientDetected?UpgradientNoSidegradientNoSidegradientNoSidegradientNoSidegradientNoDowngradientYesDowngradientNoSidegradientNoSidegradientNoDowngradientYesDowngradientYesDowngradientYesDowngradientNo	GradientDetected?ResultUpgradientNo5.00E-02SidegradientNo5.00E-02SidegradientNo5.00E-02SidegradientNo5.00E-02SidegradientNo5.00E-02DowngradientYes5.55E-02DowngradientNo5.00E-02SidegradientNo5.00E-02DowngradientYes5.55E-02DowngradientNo5.00E-02SidegradientNo5.00E-02DowngradientNo5.00E-02DowngradientYes2.18E-02DowngradientNo5.00E-02	GradientDetected?ResultResult >TLUpgradientNo5.00E-02N/ASidegradientNo5.00E-02N/ASidegradientNo5.00E-02N/ASidegradientNo5.00E-02N/ASidegradientNo5.00E-02N/ASidegradientNo5.00E-02N/ADowngradientYes5.55E-02NODowngradientNo5.00E-02N/ASidegradientNo5.00E-02N/ADowngradientYes2.18E-02NODowngradientNo5.00E-02N/A	Gradient Detected? Result Result >TL(1)? LN(Result) Upgradient No 5.00E-02 N/A -3.00E+00 Sidegradient No 5.00E-02 N/A -3.00E+00 Downgradient Yes 5.55E-02 NO -2.89E+00 Downgradient No 5.00E-02 N/A -3.00E+00 Sidegradient No 5.00E-02 N/A -3.00E+00 Downgradient No 5.00E-02 N/A -3.00E+00 Downgradient Yes 2.18E-02 NO -3.83E+00 Downgradient No 5.00E-02 N/A -3.00E+00				

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Beta activity UNITS: pCi/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 14.273	S=	13.883	CV(1)= 0.973	K factor**= 2.523	TL(1)= 4.93E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.213	S=	1.033	CV(2)= 0.467	K factor**= 2.523	TL(2)= 4.82E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW220			

Date Collected	Result	LN(Result)
10/14/2002	1.52E+01	2.72E+00
1/15/2003	4.25E+01	3.75E+00
4/10/2003	4.54E+01	3.82E+00
7/14/2003	8.53E+00	2.14E+00
10/13/2003	1.17E+01	2.46E+00
1/13/2004	1.35E+01	2.60E+00
4/13/2004	3.35E+01	3.51E+00
7/21/2004	1.37E+01	2.62E+00
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 1.62E+00
Date Collected	Result	. ,
Date Collected 8/13/2002	Result 5.03E+00	1.62E+00
Date Collected 8/13/2002 9/16/2002	Result 5.03E+00 5.57E+00	1.62E+00 1.72E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 5.03E+00 5.57E+00 1.28E+01	1.62E+00 1.72E+00 2.55E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 5.03E+00 5.57E+00 1.28E+01 4.30E+00	1.62E+00 1.72E+00 2.55E+00 1.46E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 5.03E+00 5.57E+00 1.28E+01 4.30E+00 9.52E+00	1.62E+00 1.72E+00 2.55E+00 1.46E+00 2.25E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003 7/16/2003	Result 5.03E+00 5.57E+00 1.28E+01 4.30E+00 9.52E+00 3.92E+00	1.62E+00 1.72E+00 2.55E+00 1.46E+00 2.25E+00 1.37E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data									
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)			
MW220	Upgradient	Yes	9.86E+00	N/A	2.29E+00	N/A			
MW221	Sidegradient	Yes	1.14E+01	N/A	2.43E+00	N/A			
MW222	Sidegradient	No	6.41E+00	N/A	1.86E+00	N/A			
MW223	Sidegradient	Yes	1.60E+01	N/A	2.77E+00	N/A			
MW224	Sidegradient	No	3.83E+00	N/A	1.34E+00	N/A			
MW369	Downgradien	t Yes	4.79E+01	N/A	3.87E+00	N/A			
MW372	Downgradien	t Yes	2.47E+01	N/A	3.21E+00	N/A			
MW384	Sidegradient	Yes	3.45E+01	N/A	3.54E+00	N/A			
MW387	Downgradien	t Yes	7.41E+01	YES	4.31E+00	N/A			
MW391	Downgradien	t No	9.85E+00	N/A	2.29E+00	N/A			
MW394	Upgradient	No	4.58E+00	N/A	1.52E+00	N/A			
N/A - Resul	lts identified as N	Ion-Detects	during labo	oratory analys	sis or data validation	n and were not			

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW387

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Boron UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.425	S = 0.615	CV(1)= 1.447	K factor**= 2.523	TL(1)= 1.98E+00	LL(1)=N/A
Statistics-Transformed Background Data	X= -1.322	S = 0.786	CV(2) =-0.595	K factor**= 2.523	TL(2)= 6.63E-01	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW220				
Date Collected	Result	LN(Result)			
10/14/2002	2.00E-01	-1.61E+00			
1/15/2003	2.00E-01	-1.61E+00			

2.00E-01

2.00E-01

2.00E-01

2.00E-01

2.00E-01

2.00E-01

MW394

2.00E+00

2.00E+00

2.00E-01

2.00E-01

2.00E-01

2.00E-01

2.00E-01

2.00E-01

Result

-1.61E+00

-1.61E+00

-1.61E+00

-1.61E+00

-1.61E+00

-1.61E+00

LN(Result)

6.93E-01

6.93E-01

-1.61E+00

-1.61E+00

-1.61E+00

-1.61E+00

-1.61E+00

-1.61E+00

4/10/2003

7/14/2003

10/13/2003

1/13/2004

4/13/2004

7/21/2004

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data									
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)			
MW220	Upgradient	Yes	6.58E-03	N/A	-5.02E+00	NO			
MW221	Sidegradient	Yes	2.11E-02	N/A	-3.86E+00	NO			
MW222	Sidegradient	Yes	8.73E-03	N/A	-4.74E+00	NO			
MW223	Sidegradient	Yes	7.87E-03	N/A	-4.84E+00	NO			
MW224	Sidegradient	Yes	2.74E-02	N/A	-3.60E+00	NO			
MW369	Downgradien	t Yes	1.53E-02	N/A	-4.18E+00	NO			
MW372	Downgradien	t Yes	1.54E+00) N/A	4.32E-01	NO			
MW384	Sidegradient	Yes	8.18E-02	N/A	-2.50E+00	NO			
MW387	Downgradien	t Yes	3.34E-02	N/A	-3.40E+00	NO			
MW391	Downgradien	t Yes	2.22E-02	N/A	-3.81E+00	NO			
MW394	Upgradient	Yes	1.91E-02	N/A	-3.96E+00	NO			

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)
C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Bromide UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 1.000	S = 0.000	CV(1)=0.000	K factor**= 2.523	TL(1)= 1.00E+00	LL(1)= N/A
Statistics-Transformed Background Data	X = 0.000	S = 0.000	CV(2)=#Num!	K factor**= 2.523	TL(2)= 0.00E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result							
Well Number:	MW220						
Date Collected	Result	LN(Result)					
10/14/2002	1.00E+00	0.00E+00					
1/15/2003	1.00E+00	0.00E+00					
4/10/2003	1.00E+00	0.00E+00					
7/14/2003	1.00E+00	0.00E+00					
10/13/2003	1.00E+00	0.00E+00					
1/13/2004	1.00E+00	0.00E+00					
4/13/2004	1.00E+00	0.00E+00					
7/21/2004	1.00E+00	0.00E+00					
Well Number:	MW394						
Date Collected	Result	LN(Result)					
8/13/2002	1.00E+00	0.00E+00					
9/16/2002	1.00E+00	0.00E+00					
10/16/2002	1.00E+00	0.00E+00					
1/13/2003	1.00E+00	0.00E+00					

1.00E+00

1.00E+00

1.00E+00

1.00E+00

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Because CV(1) is less than or equal to
1, assume normal distribution and
continue with statistical analysis
utilizing TL(1).

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	Yes	1.97E-01	NO	-1.62E+00	N/A		
MW221	Sidegradient	Yes	4.21E-01	NO	-8.65E-01	N/A		
MW222	Sidegradient	Yes	4.00E-01	NO	-9.16E-01	N/A		
MW223	Sidegradient	Yes	4.18E-01	NO	-8.72E-01	N/A		
MW224	Sidegradient	Yes	2.98E-01	NO	-1.21E+00	N/A		
MW369	Downgradien	t Yes	3.54E-01	NO	-1.04E+00	N/A		
MW372	Downgradien	t Yes	4.83E-01	NO	-7.28E-01	N/A		
MW384	Sidegradient	Yes	2.77E-01	NO	-1.28E+00	N/A		
MW387	Downgradien	t Yes	4.79E-01	NO	-7.36E-01	N/A		
MW391	Downgradien	t Yes	5.15E-01	NO	-6.64E-01	N/A		
MW394	Upgradient	Yes	5.74E-01	NO	-5.55E-01	N/A		
	10				-5.55E-01 is or data validation			

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

0.00E+00

0.00E+00

0.00E+00

0.00E+00

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Calcium UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 27.638 S=	4.743	CV(1)= 0.172	K factor**= 2.523	TL(1)= 3.96E+01	LL(1)=N/A
Statistics-Transformed Background Data	X =3.304 S =	0.183	CV(2)= 0.055	K factor**= 2.523	TL(2)= 3.76E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	MW220					
Date Collected	Result	LN(Result)				
10/14/2002	2.36E+01	3.16E+00				
1/15/2003	2.59E+01	3.25E+00				
4/10/2003	3.04E+01	3.41E+00				
7/14/2003	3.39E+01	3.52E+00				
10/13/2003	2.13E+01	3.06E+00				

2.03E+01

2.38E+01

1.90E+01

MW394

2.95E+01

2.99E+01

3.12E+01

3.07E+01

3.44E+01

2.96E+01

3.03E+01

2.84E+01

Result

3.01E+00

3.17E+00

2.94E+00

LN(Result)

3.38E+00

3.40E+00

3.44E+00

3.42E+00

3.54E+00

3.39E+00

3.41E+00

3.35E+00

1/13/2004

4/13/2004

7/21/2004

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Because CV(1) is less than or equal to
1, assume normal distribution and
continue with statistical analysis
utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	2.40E+01	NO	3.18E+00	N/A
MW221	Sidegradient	Yes	2.19E+01	NO	3.09E+00	N/A
MW222	Sidegradient	Yes	2.26E+01	NO	3.12E+00	N/A
MW223	Sidegradient	Yes	2.25E+01	NO	3.11E+00	N/A
MW224	Sidegradient	Yes	2.69E+01	NO	3.29E+00	N/A
MW369	Downgradien	t Yes	1.62E+01	NO	2.79E+00	N/A
MW372	Downgradien	t Yes	6.69E+01	YES	4.20E+00	N/A
MW384	Sidegradient	Yes	2.33E+01	NO	3.15E+00	N/A
MW387	Downgradien	t Yes	3.91E+01	NO	3.67E+00	N/A
MW391	Downgradien	t Yes	2.52E+01	NO	3.23E+00	N/A
MW394	Upgradient	Yes	2.79E+01	NO	3.33E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW372

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Chloride UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 49.044	S= 11.2	78 CV(1)=0.230	K factor**= 2.523	TL(1)= 7.75E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 3.866	S= 0.24	4 CV(2) =0.063	K factor**= 2.523	TL(2)= 4.48E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	MW220					
Date Collected	Result	LN(Result)				
10/14/2002	4.46E+01	3.80E+00				
1/15/2003	4.32E+01	3.77E+00				
4/10/2003	3.15E+01	3.45E+00				
7/14/2003	3.08E+01	3.43E+00				
10/13/2003	4.09E+01	3.71E+00				
1/13/2004	4.08E+01	3.71E+00				
4/13/2004	3.75E+01	3.62E+00				
7/21/2004	4.08E+01	3.71E+00				
Well Number:	MW394					
Date Collected	Result	LN(Result)				
8/13/2002	6.04E+01	4.10E+00				
9/16/2002	6.03E+01	4.10E+00				
10/16/2002	5.80E+01	4.06E+00				
1/13/2003	6.07E+01	4.11E+00				
4/10/2003	6.29E+01	4.14E+00				

5.81E+01

5.82E+01

5.60E+01

7/16/2003

10/14/2003

1/13/2004

Because CV(1) is less than or equal to
1, assume normal distribution and
continue with statistical analysis
utilizing TL(1).

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	L(1)? LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	Yes	1.65E+01	NO	2.80E+00	N/A		
MW221	Sidegradient	Yes	3.30E+01	NO	3.50E+00	N/A		
MW222	Sidegradient	Yes	3.29E+01	NO	3.49E+00	N/A		
MW223	Sidegradient	Yes	3.52E+01	NO	3.56E+00	N/A		
MW224	Sidegradient	Yes	2.21E+01	NO	3.10E+00	N/A		
MW369	Downgradien	t Yes	2.75E+01	NO	3.31E+00	N/A		
MW372	Downgradien	t Yes	3.75E+01	NO	3.62E+00	N/A		
MW384	Sidegradient	Yes	2.18E+01	NO	3.08E+00	N/A		
MW387	Downgradien	t Yes	3.57E+01	NO	3.58E+00	N/A		
MW391	Downgradien	t Yes	4.06E+01	NO	3.70E+00	N/A		
MW394	Upgradient	Yes	4.67E+01	NO	3.84E+00	N/A		
N/A - Resu	Its identified as N	Jon-Detects	during lab	oratory analy	sis or data validation	n and were not		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

4.06E+00 4.06E+00

4.03E+00

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Cobalt UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.016	S = 0.040	CV(1)= 2.440	K factor**= 2.523	TL(1)= 1.16E-01 LL(1)=N/A
Statistics-Transformed Background Data	X= -5.582	S = 1.573	CV(2)= -0.282	K factor**= 2.523	TL(2)= -1.61E+00 LL(2)= N/A

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW220			
Date Collected	Result	LN(Result)		

Date Collected	Result	LN(Result)
10/14/2002	4.10E-03	-5.50E+00
1/15/2003	4.96E-03	-5.31E+00
4/10/2003	2.89E-03	-5.85E+00
7/14/2003	1.61E-01	-1.83E+00
10/13/2003	2.26E-02	-3.79E+00
1/13/2004	4.64E-03	-5.37E+00
4/13/2004	1.00E-03	-6.91E+00
7/21/2004	2.64E-03	-5.94E+00
Well Number:	MW394	
ti en rtamoer.	101 (0 5) 1	
Date Collected	Result	LN(Result)
		LN(Result) -3.69E+00
Date Collected	Result	. ,
Date Collected 8/13/2002	Result 2.50E-02	-3.69E+00
Date Collected 8/13/2002 9/16/2002	Result 2.50E-02 2.50E-02	-3.69E+00 -3.69E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 2.50E-02 2.50E-02 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003 7/16/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00 -6.91E+00 -6.91E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL((1)? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW221	Sidegradient	Yes	3.96E-04	N/A	-7.83E+00	NO
MW222	Sidegradient	Yes	1.28E-03	N/A	-6.66E+00	NO
MW223	Sidegradient	Yes	2.40E-03	N/A	-6.03E+00	NO
MW224	Sidegradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW369	Downgradien	t Yes	4.42E-03	N/A	-5.42E+00	NO
MW372	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A
MW384	Sidegradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW387	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A
MW391	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A
MW394	Upgradient	No	1.00E-03	N/A	-6.91E+00	N/A
N/A - Resu	lts identified as N	Jon-Detects	during lab	oratory analys	is or data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Conductivity UNITS: umho/cm URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 382.132 S = 107	7.134 CV(1)=0.280	K factor**= 2.523	TL(1)= 6.52E+02	LL(1)= N/A
Statistics-Transformed Background Data	X = 5.716 S = 1.1	64 CV(2)= 0.204	K factor**= 2.523	TL(2)= 8.65E+00	LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Quarter Data					
Gradient	Detected?	Result	Result >TL(1	1)? LN(Result)	LN(Result) >TL(2)
Upgradient	Yes	4.63E+02	2 NO	6.14E+00	N/A
Sidegradient	Yes	4.94E+02	NO NO	6.20E+00	N/A
Sidegradient	Yes	4.84E+02	NO NO	6.18E+00	N/A
Sidegradient	Yes	4.97E+02	NO NO	6.21E+00	N/A
Sidegradient	Yes	5.50E+02	NO NO	6.31E+00	N/A
Downgradien	t Yes	3.43E+02	NO NO	5.84E+00	N/A
Downgradien	t Yes	7.58E+02	YES	6.63E+00	N/A
Sidegradient	Yes	4.99E+02	NO NO	6.21E+00	N/A
Downgradien	t Yes	6.01E+02	NO NO	6.40E+00	N/A
Downgradien	t Yes	3.73E+02	NO NO	5.92E+00	N/A
Upgradient	Yes	4.36E+02	NO NO	6.08E+00	N/A
	Gradient Upgradient Sidegradient Sidegradient Sidegradient Downgradient Downgradient Downgradient Downgradient Downgradient Upgradient	GradientDetected?UpgradientYesSidegradientYesSidegradientYesSidegradientYesSidegradientYesDowngradientYesDowngradientYesSidegradientYesDowngradientYesDowngradientYesDowngradientYesDowngradientYesDowngradientYesDowngradientYesDowngradientYesDowngradientYesUpgradientYes	GradientDetected?ResultUpgradientYes4.63E+02SidegradientYes4.94E+02SidegradientYes4.84E+02SidegradientYes4.97E+02SidegradientYes5.50E+02DowngradientYes3.43E+02DowngradientYes7.58E+02SidegradientYes7.58E+02DowngradientYes4.99E+02DowngradientYes6.01E+02DowngradientYes3.73E+02UpgradientYes4.36E+02	GradientDetected?ResultResult >TL(1)UpgradientYes $4.63E+02$ NOSidegradientYes $4.94E+02$ NOSidegradientYes $4.84E+02$ NOSidegradientYes $4.97E+02$ NOSidegradientYes $5.50E+02$ NOSidegradientYes $3.43E+02$ NODowngradientYes $7.58E+02$ YESSidegradientYes $6.01E+02$ NODowngradientYes $3.73E+02$ NODowngradientYes $3.73E+02$ NODowngradientYes $4.36E+02$ NO	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

Historical Background Data from

Well Number:

Date Collected

10/14/2002

1/15/2003

4/10/2003

7/14/2003

10/13/2003

1/13/2004

4/13/2004

7/21/2004

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Upgradient Wells with Transformed Result

LN(Result)

5.91E+00

6.07E+00

6.19E+00

6.06E+00

5.85E+00

5.90E+00

6.03E+00

5.87E+00

LN(Result)

6.01E+00

6.04E+00

6.02E+00

6.05E+00

6.04E+00

6.08E+00

1.36E+00

5.98E+00

MW220

3.68E+02

4.33E+02

4.89E+02

4.30E+02

3.46E+02

3.65E+02

4.16E+02

3.53E+02

MW394

4.06E+02

4.18E+02

4.11E+02

4.22E+02

4.20E+02

4.38E+02

3.91E+00

3.95E+02

Result

Result

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW372

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Copper UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.024	S = 0.010	CV(1)= 0.429	K factor**= 2.523	TL(1)= 4.96E-02 LL(1)=N/A
Statistics-Transformed Background Data	X= -3.794	S = 0.312	CV(2) =-0.082	K factor**= 2.523	TL(2)=-3.01E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW220				
Date Collected	Result	LN(Result)			
10/14/2002	2.11E-02	-3.86E+00			
1/15/2003	2.00E-02	-3.91E+00			

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

MW394

5.00E-02

5.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

Result

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

LN(Result)

-3.00E+00

-3.00E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

4/10/2003

7/14/2003

10/13/2003

1/13/2004

4/13/2004

7/21/2004

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	9.84E-04	NO	-6.92E+00	N/A
MW221	Sidegradient	Yes	1.29E-03	NO	-6.65E+00	N/A
MW222	Sidegradient	Yes	1.39E-03	NO	-6.58E+00	N/A
MW223	Sidegradient	Yes	3.04E-03	NO	-5.80E+00	N/A
MW224	Sidegradient	Yes	7.53E-04	NO	-7.19E+00	N/A
MW369	Downgradien	t Yes	2.37E-03	NO	-6.04E+00	N/A
MW372	Downgradien	t Yes	1.62E-03	NO	-6.43E+00	N/A
MW384	Sidegradient	Yes	8.66E-04	NO	-7.05E+00	N/A
MW387	Downgradien	t Yes	4.63E-04	NO	-7.68E+00	N/A
MW391	Downgradien	t Yes	1.50E-03	NO	-6.50E+00	N/A
MW394	Upgradient	Yes	1.74E-03	NO	-6.35E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Dissolved Oxygen UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 3.784	S= 1.887	CV(1)= 0.499	K factor**= 2.523	TL(1)= 8.54E+00	LL(1)= N/A
Statistics-Transformed Background Data	X= 1.182	S = 0.612	CV(2)= 0.518	K factor**= 2.523	TL(2)= 2.73E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW220				
Date Collected	Result	LN(Result)			
10/14/2002	6.79E+00	1.92E+00			
1/15/2003	7.25E+00	1.98E+00			
4/10/2003	3.60E+00	1.28E+00			
7/14/2003	9.40E-01	-6.19E-02			
10/13/2003	1.65E+00	5.01E-01			
1/13/2004	3.48E+00	1.25E+00			
4/13/2004	1.05E+00	4.88E-02			
7/21/2004	4.46E+00	1.50E+00			

112112001	III TOE : 00	1.201.00
Well Number:	MW394	
Date Collected	Result	LN(Result)
8/13/2002	6.09E+00	1.81E+00
9/16/2002	3.85E+00	1.35E+00
10/16/2002	5.11E+00	1.63E+00
1/13/2003	3.83E+00	1.34E+00
4/10/2003	4.15E+00	1.42E+00
7/16/2003	1.83E+00	6.04E-01
10/14/2003	3.33E+00	1.20E+00
1/13/2004	3.14E+00	1.14E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL(1)	2 LN(Result)	LN(Result) >TL(2)	
MW220	Upgradient	Yes	5.36E+00) NO	1.68E+00	N/A	
MW221	Sidegradient	Yes	5.24E+00) NO	1.66E+00	N/A	
MW222	Sidegradient	Yes	4.44E+00) NO	1.49E+00	N/A	
MW223	Sidegradient	Yes	3.71E+00) NO	1.31E+00	N/A	
MW224	Sidegradient	Yes	3.70E+00) NO	1.31E+00	N/A	
MW369	Downgradien	t Yes	4.72E+00) NO	1.55E+00	N/A	
MW372	Downgradien	t Yes	3.71E+00) NO	1.31E+00	N/A	
MW384	Sidegradient	Yes	5.03E+00) NO	1.62E+00	N/A	
MW387	Downgradien	t Yes	3.99E+00) NO	1.38E+00	N/A	
MW391	Downgradien	t Yes	4.40E+00) NO	1.48E+00	N/A	
MW394	Upgradient	Yes	4.80E+00) NO	1.57E+00	N/A	
N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not							

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Dissolved Solids UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 232.68	8 S= 27.490	CV(1)= 0.118	K factor**= 2.523	TL(1)= 3.02E+02	LL(1)=N/A
Statistics-Transformed Background Data	X= 5.443	S = 0.118	CV(2) =0.022	K factor**= 2.523	TL(2)= 5.74E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	MW220					
Date Collected	Result	LN(Result)				

Date Collected	Result	LN(Result)
10/14/2002	2.08E+02	5.34E+00
1/15/2003	2.57E+02	5.55E+00
4/10/2003	2.88E+02	5.66E+00
7/14/2003	2.62E+02	5.57E+00
10/13/2003	1.97E+02	5.28E+00
1/13/2004	1.98E+02	5.29E+00
4/13/2004	2.45E+02	5.50E+00
7/21/2004	2.04E+02	5.32E+00
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 5.51E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 2.47E+02	5.51E+00
Date Collected 8/13/2002 9/16/2002	Result 2.47E+02 2.59E+02	5.51E+00 5.56E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 2.47E+02 2.59E+02 2.01E+02	5.51E+00 5.56E+00 5.30E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 2.47E+02 2.59E+02 2.01E+02 2.28E+02	5.51E+00 5.56E+00 5.30E+00 5.43E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 2.47E+02 2.59E+02 2.01E+02 2.28E+02 2.49E+02	5.51E+00 5.56E+00 5.30E+00 5.43E+00 5.52E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	Yes	2.05E+02	NO	5.32E+00	N/A		
MW221	Sidegradient	Yes	2.18E+02	NO	5.38E+00	N/A		
MW222	Sidegradient	Yes	2.02E+02	NO	5.31E+00	N/A		
MW223	Sidegradient	Yes	2.00E+02	NO	5.30E+00	N/A		
MW224	Sidegradient	Yes	2.39E+02	NO	5.48E+00	N/A		
MW369	Downgradien	t Yes	2.05E+02	NO	5.32E+00	N/A		
MW372	Downgradien	t Yes	4.46E+02	YES	6.10E+00	N/A		
MW384	Sidegradient	Yes	2.00E+02	NO	5.30E+00	N/A		
MW387	Downgradien	t Yes	2.50E+02	NO	5.52E+00	N/A		
MW391	Downgradien	t Yes	1.64E+02	NO	5.10E+00	N/A		
MW394	Upgradient	No	1.00E+01	N/A	2.30E+00	N/A		
N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not								

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW372

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** UNITS: mg/L URGA Iron

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.897	S = 1.050	CV(1)= 1.170	K factor**= 2.523	TL(1)= 3.55E+00	LL(1)=N/A
Statistics-Transformed Background Data	X= -0.565	S= 0.951	CV(2)= -1.683	K factor**= 2.523	TL(2)= 1.83E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result							
Well Number:	MW220						
Date Collected	Result	LN(Result)					
10/14/2002	2.00E-01	-1.61E+00					
1/15/2003	2.00E-01	-1.61E+00					
4/10/2003	4.29E-01	-8.46E-01					
7/14/2003	4.33E+00	1.47E+00					
10/13/2003	1.81E+00	5.93E-01					

7.93E-01

1.30E-01

3.82E-01

MW394

1.34E+00

3.28E-01

1.38E+00

1.30E+00

4.94E-01

6.20E-01

3.70E-01

2.51E-01

Result

1/13/2004

4/13/2004

7/21/2004

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Quarter Data					
Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
Upgradient	No	1.00E-01	N/A	-2.30E+00	N/A
Sidegradient	No	1.00E-01	N/A	-2.30E+00	N/A
Sidegradient	Yes	5.43E-02	N/A	-2.91E+00	NO
Sidegradient	Yes	7.56E-02	N/A	-2.58E+00	NO
Sidegradient	No	1.00E-01	N/A	-2.30E+00	N/A
Downgradien	t Yes	6.52E-02	N/A	-2.73E+00	NO
Downgradient	t No	1.00E-01	N/A	-2.30E+00	N/A
Sidegradient	No	1.00E-01	N/A	-2.30E+00	N/A
Downgradien	t Yes	6.93E-02	N/A	-2.67E+00	NO
Downgradien	t Yes	6.35E-02	N/A	-2.76E+00	NO
Upgradient	Yes	4.18E-02	N/A	-3.17E+00	NO
	Gradient Upgradient Sidegradient Sidegradient Sidegradient Downgradient Downgradient Downgradient Downgradient	GradientDetected?UpgradientNoSidegradientYesSidegradientYesSidegradientYesSidegradientNoDowngradientYesDowngradientNoSidegradientNoDowngradientYesDowngradientYesDowngradientYesDowngradientYesDowngradientYesDowngradientYes	GradientDetected?ResultUpgradientNo1.00E-01SidegradientNo1.00E-01SidegradientYes5.43E-02SidegradientYes7.56E-02SidegradientNo1.00E-01DowngradientYes6.52E-02DowngradientNo1.00E-01SidegradientNo1.00E-01DowngradientNo1.00E-01SidegradientNo1.00E-01DowngradientYes6.93E-02DowngradientYes6.35E-02	GradientDetected?ResultResult >TL(1)?UpgradientNo1.00E-01N/ASidegradientNo1.00E-01N/ASidegradientYes5.43E-02N/ASidegradientYes7.56E-02N/ASidegradientNo1.00E-01N/ADowngradientYes6.52E-02N/ADowngradientNo1.00E-01N/ADowngradientNo1.00E-01N/ADowngradientNo1.00E-01N/ADowngradientYes6.93E-02N/ADowngradientYes6.35E-02N/A	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

- Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

-2.32E-01

-2.04E+00

-9.62E-01

LN(Result)

2.93E-01

3.22E-01

2.62E-01

-7.05E-01

-4.78E-01

-9.94E-01

-1.38E+00

-1.11E+00

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5

- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

** Read from Table 5, Appendix B of Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Guidance, EPA, 1989, based on total number of background results - The K-factor for pH to account for a two-sided tolerance interval instead of a one-sided tolerance limit. The K-factor for pH was computed using a formula from NIST/SEMATECH e-Handbook of Statistical Methods, http://www.itl.nist.gov/div898/handbook/,2009.

D1-39

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Magnesium UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =10.796 S =	1.703	CV(1)= 0.158	K factor**= 2.523	TL(1)= 1.51E+01	LL(1)= N/A
Statistics-Transformed Background Data	X =2.368 S =	0.158	CV(2)= 0.067	K factor**= 2.523	TL(2)= 2.77E+00	LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)	? LN(Result)	LN(Result) > TL(2)
MW220	Upgradient	Yes	9.82E+00	NO	2.28E+00	N/A
MW221	Sidegradient	Yes	9.40E+00	NO	2.24E+00	N/A
MW222	Sidegradient	Yes	9.41E+00	NO	2.24E+00	N/A
MW223	Sidegradient	Yes	9.37E+00	NO	2.24E+00	N/A
MW224	Sidegradient	Yes	1.16E+01	NO	2.45E+00	N/A
MW369	Downgradien	t Yes	6.91E+00	NO	1.93E+00	N/A
MW372	Downgradien	t Yes	2.43E+01	YES	3.19E+00	N/A
MW384	Sidegradient	Yes	1.01E+01	NO	2.31E+00	N/A
MW387	Downgradien	t Yes	1.61E+01	YES	2.78E+00	N/A
MW391	Downgradien	t Yes	1.06E+01	NO	2.36E+00	N/A
MW394	Upgradient	Yes	1.17E+01	NO	2.46E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

Historical Background Data from

Well Number:

Date Collected

10/14/2002

1/15/2003

4/10/2003

7/14/2003

10/13/2003

1/13/2004

4/13/2004

7/21/2004

8/13/2002

9/16/2002

10/16/2002

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Upgradient Wells with Transformed Result

LN(Result)

2.21E+00

2.30E+00

2.38E+00

2.69E+00

2.20E+00

2.14E+00

2.27E+00

2.09E+00

LN(Result)

2.47E+00

2.49E+00

2.42E+00

2.33E+00

2.46E+00

2.48E+00

2.50E+00

2.43E+00

MW220

9.16E+00

1.00E+01

1.08E+01

1.47E+01

9.03E+00

8.49E+00

9.70E+00

8.06E+00

MW394

1.18E+01

1.21E+01

1.13E+01

1.03E+01

1.17E+01

1.20E+01

1.22E+01

1.14E+01

Result

Result

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW372 MW387

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Manganese UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.287	S = 0.619	CV(1)= 2.156	K factor**= 2.523	TL(1)= 1.85E+00	LL(1)=N/A
Statistics-Transformed Background Data	X= -2.455	S= 1.619	CV(2) =-0.659	K factor**= 2.523	TL(2)= 1.63E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result							
Well Number:	MW220						
Date Collected	Result	LN(Result)					

Result	LN(Result)
3.06E-02	-3.49E+00
2.91E-02	-3.54E+00
1.37E-02	-4.29E+00
2.54E+00	9.32E-01
3.78E-01	-9.73E-01
1.59E-01	-1.84E+00
7.07E-03	-4.95E+00
8.41E-02	-2.48E+00
MW394	
Result	LN(Result)
5.42E-01	-6.12E-01
1.55E-01	-1.86E+00
1.03E-01	-2.27E+00
1.03E-01 1.28E-01	-2.27E+00 -2.06E+00
1.28E-01	-2.06E+00
1.28E-01 5.00E-03	-2.06E+00 -5.30E+00
	3.06E-02 2.91E-02 1.37E-02 2.54E+00 3.78E-01 1.59E-01 7.07E-03 8.41E-02 MW394 Result 5.42E-01

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	No	5.00E-03	N/A	-5.30E+00	N/A		
MW221	Sidegradient	Yes	3.22E-03	N/A	-5.74E+00	NO		
MW222	Sidegradient	Yes	1.86E-02	N/A	-3.98E+00	NO		
MW223	Sidegradient	Yes	2.56E-02	N/A	-3.67E+00	NO		
MW224	Sidegradient	Yes	6.38E-03	N/A	-5.05E+00	NO		
MW369	Downgradien	t Yes	1.41E-03	N/A	-6.56E+00	NO		
MW372	Downgradien	t Yes	2.15E-03	N/A	-6.14E+00	NO		
MW384	Sidegradient	No	5.00E-03	N/A	-5.30E+00	N/A		
MW387	Downgradien	t Yes	2.07E-03	N/A	-6.18E+00	NO		
MW391	Downgradien	t No	5.00E-03	N/A	-5.30E+00	N/A		
MW394	Upgradient	No	5.00E-03	N/A	-5.30E+00	N/A		
N/A - Resu	lts identified as N	Jon-Detects	during lab	oratory analysis	or data validatio	n and were not		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Molybdenum UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.006	S = 0.008	CV(1)= 1.261	K factor**= 2.523	TL(1)= 2.64E-02 LL(1)=N/A
Statistics-Transformed Background Data	X= -5.747	S = 1.205	CV(2) =-0.210	K factor**= 2.523	TL(2)= -2.71E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Resul				
Well Number:	MW220			
Date Collected	Result	LN(Result)		
10/11/2002	5 50E 02	5 10E + 00		

10/14/2002 -5.19E+00 5.58E-03 1/15/2003 9.83E-03 -4.62E+00 4/10/2003 1.09E-02 -4.52E+00 7/14/2003 2.45E-03 -6.01E+00 10/13/2003 5.66E-03 -5.17E+00 1/13/2004 5.72E-03 -5.16E+00 4/13/2004 1.00E-03 -6.91E+00 7/21/2004 3.92E-03 -5.54E+00 Well Number: MW394 Date Collected Result LN(Result) 8/13/2002 2.50E-02 -3.69E+00 9/16/2002 2.50E-02 -3.69E+00 1.00E-03 10/16/2002 -6.91E+00 1/13/2003 1.00E-03 -6.91E+00 4/10/2003 1.00E-03 -6.91E+00 7/16/2003 1.00E-03 -6.91E+00 10/14/2003 1.00E-03 -6.91E+00 1.00E-03 1/13/2004 -6.91E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	Yes	8.24E-04	N/A	-7.10E+00	NO		
MW221	Sidegradient	Yes	4.02E-03	N/A	-5.52E+00	NO		
MW222	Sidegradient	Yes	6.37E-03	N/A	-5.06E+00	NO		
MW223	Sidegradient	Yes	2.75E-03	N/A	-5.90E+00	NO		
MW224	Sidegradient	Yes	1.19E-03	N/A	-6.73E+00	NO		
MW369	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A		
MW372	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A		
MW384	Sidegradient	No	1.00E-03	N/A	-6.91E+00	N/A		
MW387	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A		
MW391	Downgradien	t No	1.00E-03	N/A	-6.91E+00	N/A		
MW394	Upgradient	No	1.00E-03	N/A	-6.91E+00	N/A		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Nickel UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.127	S= 0.228	CV(1)= 1.790	K factor**= 2.523	TL(1)= 7.01E-01	LL(1)=N/A
Statistics-Transformed Background Data	X= -3.617	S= 1.837	CV(2)= -0.508	K factor**= 2.523	TL(2)= 1.02E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW220				
Date Collected	Result	LN(Result)			
10/14/2002	4.18E-01	-8.72E-01			
1/15/2003	7.38E-01	-3.04E-01			
4/10/2003	5.44E-01	-6.09E-01			
7/14/2003	1.06E-01	-2.24E+00			
10/13/2003	5.29E-02	-2.94E+00			
1/13/2004	2.09E-02	-3.87E+00			
4/13/2004	5.00E-03	-5.30E+00			
7/21/2004	1.92E-02	-3.95E+00			
Well Number:	MW394				
Date Collected	Result	LN(Result)			
8/13/2002	5.00E-02	-3.00E+00			
9/16/2002	5.00E-02	-3.00E+00			
10/16/2002	5.00E-03	-5.30E+00			

5.00E-03

5.00E-03

5.00E-03

5.00E-03

5.00E-03

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data									
Gradient	Detected?	Result	Result >TL(1)	? LN(Result)	LN(Result) >TL(2)				
Upgradient	Yes	5.72E-03	N/A	-5.16E+00	NO				
Sidegradient	Yes	2.00E-02	N/A	-3.91E+00	NO				
Sidegradient	Yes	1.40E-01	N/A	-1.97E+00	NO				
Sidegradient	Yes	6.06E-01	N/A	-5.01E-01	NO				
Sidegradient	Yes	9.93E-03	N/A	-4.61E+00	NO				
Downgradien	t Yes	3.14E-03	N/A	-5.76E+00	NO				
Downgradien	t Yes	6.43E-04	N/A	-7.35E+00	NO				
Sidegradient	Yes	7.82E-04	N/A	-7.15E+00	NO				
Downgradien	t No	2.00E-03	N/A	-6.21E+00	N/A				
Downgradien	t No	2.00E-03	N/A	-6.21E+00	N/A				
Upgradient	Yes	6.85E-03	N/A	-4.98E+00	NO				
	Gradient Upgradient Sidegradient Sidegradient Sidegradient Downgradien Downgradient Downgradien Downgradien	GradientDetected?UpgradientYesSidegradientYesSidegradientYesSidegradientYesSidegradientYesDowngradientYesDowngradientYesSidegradientYesDowngradientYesDowngradientYesDowngradientNoDowngradientNo	GradientDetected?ResultUpgradientYes5.72E-03SidegradientYes2.00E-02SidegradientYes1.40E-01SidegradientYes6.06E-01SidegradientYes9.93E-03DowngradientYes3.14E-03DowngradientYes6.43E-04SidegradientYes7.82E-04DowngradientNo2.00E-03DowngradientNo2.00E-03	GradientDetected?ResultResult >TL(1)*UpgradientYes5.72E-03N/ASidegradientYes2.00E-02N/ASidegradientYes1.40E-01N/ASidegradientYes6.06E-01N/ASidegradientYes9.93E-03N/ADowngradientYes3.14E-03N/ADowngradientYes6.43E-04N/ASidegradientYes7.82E-04N/ADowngradientNo2.00E-03N/A	Gradient Detected? Result Result >TL(1)? LN(Result) Upgradient Yes $5.72E-03$ N/A $-5.16E+00$ Sidegradient Yes $2.00E-02$ N/A $-3.91E+00$ Sidegradient Yes $1.40E-01$ N/A $-1.97E+00$ Sidegradient Yes $6.06E-01$ N/A $-5.01E-01$ Sidegradient Yes $9.93E-03$ N/A $-4.61E+00$ Downgradient Yes $3.14E-03$ N/A $-5.76E+00$ Downgradient Yes $6.43E-04$ N/A $-7.35E+00$ Sidegradient Yes $7.82E-04$ N/A $-7.15E+00$ Downgradient No $2.00E-03$ N/A $-6.21E+00$				

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

-5.30E+00

-5.30E+00

-5.30E+00

-5.30E+00

-5.30E+00

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Oxidation-Reduction Potential UNITS: mV URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 179.872	2 S = 86.	318	CV(1)= 0.480	K factor**= 2.523	TL(1)= 3.98E+02	LL(1)= N/A
Statistics-Transformed Background Data	X= 4.861	S= 1.2:	52	CV(2)= 0.258	K factor**= 2.523	TL(2)= 8.02E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Res	sult

1 111000

Well Number:	MW220	
Date Collected	Result	LN(Result)
10/14/2002	2.05E+02	5.32E+00
1/15/2003	1.95E+00	6.68E-01
4/10/2003	2.03E+02	5.31E+00
7/14/2003	3.00E+01	3.40E+00
10/13/2003	1.07E+02	4.67E+00
1/13/2004	2.95E+02	5.69E+00
4/13/2004	1.90E+02	5.25E+00
7/21/2004	3.19E+02	5.77E+00
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 4.50E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 9.00E+01	4.50E+00
Date Collected 8/13/2002 9/16/2002	Result 9.00E+01 2.40E+02	4.50E+00 5.48E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 9.00E+01 2.40E+02 1.85E+02	4.50E+00 5.48E+00 5.22E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 9.00E+01 2.40E+02 1.85E+02 2.20E+02	4.50E+00 5.48E+00 5.22E+00 5.39E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 9.00E+01 2.40E+02 1.85E+02 2.20E+02 1.96E+02	4.50E+00 5.48E+00 5.22E+00 5.39E+00 5.28E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003 7/16/2003	Result 9.00E+01 2.40E+02 1.85E+02 2.20E+02 1.96E+02 1.72E+02	4.50E+00 5.48E+00 5.22E+00 5.39E+00 5.28E+00 5.15E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	Yes	4.39E+02	2 YES	6.09E+00	N/A		
MW221	Sidegradient	Yes	4.77E+02	YES	6.17E+00	N/A		
MW222	Sidegradient	Yes	4.26E+02	2 YES	6.06E+00	N/A		
MW223	Sidegradient	Yes	4.11E+02	2 YES	6.02E+00	N/A		
MW224	Sidegradient	Yes	4.36E+02	2 YES	6.08E+00	N/A		
MW369	Downgradien	t Yes	4.63E+02	YES	6.14E+00	N/A		
MW372	Downgradien	t Yes	4.10E+02	YES	6.02E+00	N/A		
MW384	Sidegradient	Yes	4.69E+02	YES	6.15E+00	N/A		
MW387	Downgradien	t Yes	4.57E+02	YES	6.12E+00	N/A		
MW391	Downgradien	t Yes	3.22E+02	NO NO	5.77E+00	N/A		
MW394	Upgradient	Yes	3.78E+02	NO NO	5.93E+00	N/A		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances

MW220 MW221 MW222 MW223 MW224 MW369 MW372 MW384 MW387

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison pH UNITS: Std Unit URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 6.138	S= 0.282	CV(1)= 0.046	K factor**= 2.904	TL(1)= 6.96E+00	LL(1)=5.32E+00
Statistics-Transformed Background Data	X= 1.813	S = 0.047	CV(2) =0.026	K factor**= 2.904	TL(2)= 1.95E+00	LL(2)=1.68E+00

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW220			
Date Collected	Result	LN(Result)		
10/14/2002	6.04E+00	1.80E+00		
1/15/2003	6.31E+00	1.84E+00		
4/10/2003	6.50E+00	1.87E+00		
7/14/2003	6.30E+00	1.84E+00		
10/13/2003	6.34E+00	1.85E+00		
1/13/2004	6.33E+00	1.85E+00		
4/13/2004	6.30E+00	1.84E+00		
7/21/2004	5.90E+00	1.77E+00		
Well Number:	MW394			
Date Collected	Result	LN(Result)		
8/13/2002	5.80E+00	1.76E+00		
9/30/2002	5.93E+00	1.78E+00		
10/16/2002	5.42E+00	1.69E+00		
1/13/2003	6.00E+00	1.79E+00		
4/10/2003	6.04E+00	1.80E+00		
7/16/2003	6.20E+00	1.82E+00		

6.40E+00

6.39E+00

10/14/2003

1/13/2004

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)? Result <ll(1)?< th=""><th>· · · · ·</th><th>LN(Result) >TL(2) LN(Result) <ll(2)< th=""></ll(2)<></th></ll(1)?<>	· · · · ·	LN(Result) >TL(2) LN(Result) <ll(2)< th=""></ll(2)<>
MW220	Upgradient	Yes	5.98E+00) NO	1.79E+00	N/A
MW221	Sidegradient	Yes	5.72E+00) NO	1.74E+00	N/A
MW222	Sidegradient	Yes	5.96E+00) NO	1.79E+00	N/A
MW223	Sidegradient	Yes	5.94E+00) NO	1.78E+00	N/A
MW224	Sidegradient	Yes	6.00E+00) NO	1.79E+00	N/A
MW369	Downgradien	t Yes	6.25E+00) NO	1.83E+00	N/A
MW372	Downgradien	t Yes	6.27E+00) NO	1.84E+00	N/A
MW384	Sidegradient	Yes	5.80E+00) NO	1.76E+00	N/A
MW387	Downgradien	t Yes	6.11E+00) NO	1.81E+00	N/A
MW391	Downgradien	t Yes	6.00E+00) NO	1.79E+00	N/A
MW394	Upgradient	Yes	5.99E+00) NO	1.79E+00	N/A
	Its identified as N	Jon Detects	during lab	oratory analysis o	r data validatio	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

1.86E+00

1.85E+00

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Potassium UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 6.654	S= 9.310	CV(1)=1.399	K factor**= 2.523	TL(1)= 3.01E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 1.130	S= 1.208	CV(2)= 1.069	K factor**= 2.523	TL(2)= 4.18E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW220				
Date Collected	Result	LN(Result)			
10/14/2002	6.70E+00	1.90E+00			
1/15/2003	2.97E+01	3.39E+00			
4/10/2003	2.49E+01	3.21E+00			
7/14/2003	1.13E+00	1.22E-01			
10/13/2003	3.43E+00	1.23E+00			
1/13/2004	6.71E+00	1.90E+00			
4/13/2004	1.93E+01	2.96E+00			
7/21/2004	3.97E+00	1.38E+00			
Well Number:	MW394				
Date Collected	Result	LN(Result)			
8/13/2002	2.00E+00	6.93E-01			
9/16/2002	2.00E+00	6.93E-01			
10/16/2002	1.03E+00	2.96E-02			
1/13/2003	1.10E+00	9.53E-02			
4/10/2003	1.24E+00	2.15E-01			

1.14E+00

1.05E+00

1.07E+00

7/16/2003

10/14/2003

1/13/2004

Because CV(1) is greater than 1, the
natural logarithm of background and
test well results were calculated
utilizing TL(2) for comparison.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)	P LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	2.18E+00) N/A	7.79E-01	NO
MW221	Sidegradient	Yes	7.24E+00) N/A	1.98E+00	NO
MW222	Sidegradient	Yes	7.35E-01	N/A	-3.08E-01	NO
MW223	Sidegradient	Yes	4.78E+00) N/A	1.56E+00	NO
MW224	Sidegradient	Yes	1.08E+00) N/A	7.70E-02	NO
MW369	Downgradien	t Yes	5.76E-01	N/A	-5.52E-01	NO
MW372	Downgradien	t Yes	2.27E+00) N/A	8.20E-01	NO
MW384	Sidegradient	Yes	1.40E+00) N/A	3.36E-01	NO
MW387	Downgradien	t Yes	1.74E+00) N/A	5.54E-01	NO
MW391	Downgradien	t Yes	1.51E+00) N/A	4.12E-01	NO
MW394	Upgradient	Yes	1.44E+00) N/A	3.65E-01	NO
N/A - Resul	lts identified as N	Jon-Detects	during lab	oratory analysis o	r data validatio	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

1.31E-01

4.88E-02

6.77E-02

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Sodium UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 36.363	S= 8.666	CV(1)= 0.238	K factor**= 2.523	TL(1)= 5.82E+01	LL(1)= N/A
Statistics-Transformed Background Data	X= 3.570	S= 0.222	CV(2)= 0.062	K factor**= 2.523	TL(2)= 4.13E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result Well Number: MW220

Date Collected	Result	LN(Result)
10/14/2002	3.54E+01	3.57E+00
1/15/2003	4.06E+01	3.70E+00
4/10/2003	5.10E+01	3.93E+00
7/14/2003	5.82E+01	4.06E+00
10/13/2003	3.81E+01	3.64E+00
1/13/2004	3.70E+01	3.61E+00
4/13/2004	4.32E+01	3.77E+00
7/21/2004	3.38E+01	3.52E+00
*** 11 ** 1		
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 3.49E+00
Date Collected	Result	· · · · · ·
Date Collected 8/13/2002	Result 3.29E+01	3.49E+00
Date Collected 8/13/2002 9/16/2002	Result 3.29E+01 2.99E+01	3.49E+00 3.40E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 3.29E+01 2.99E+01 2.90E+01	3.49E+00 3.40E+00 3.37E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 3.29E+01 2.99E+01 2.90E+01 2.71E+01	3.49E+00 3.40E+00 3.37E+00 3.30E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 3.29E+01 2.99E+01 2.90E+01 2.71E+01 2.48E+01	3.49E+00 3.40E+00 3.37E+00 3.30E+00 3.21E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current (Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	4.12E+01	NO	3.72E+00	N/A
MW221	Sidegradient	Yes	4.73E+01	NO	3.86E+00	N/A
MW222	Sidegradient	Yes	4.59E+01	NO	3.83E+00	N/A
MW223	Sidegradient	Yes	4.45E+01	NO	3.80E+00	N/A
MW224	Sidegradient	Yes	6.19E+01	YES	4.13E+00	N/A
MW369	Downgradient	t Yes	4.77E+01	NO	3.86E+00	N/A
MW372	Downgradient	t Yes	5.95E+01	YES	4.09E+00	N/A
MW384	Sidegradient	Yes	4.49E+01	NO	3.80E+00	N/A
MW387	Downgradient	t Yes	5.35E+01	NO	3.98E+00	N/A
MW391	Downgradient	t Yes	3.25E+01	NO	3.48E+00	N/A
MW394	Upgradient	Yes	3.36E+01	NO	3.51E+00	N/A
N/A - Result	s identified as N	Ion-Detects	during lab	oratory analys	sis or data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW224 MW372

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Sulfate UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 10.481	S= 2.648	CV(1)= 0.253	K factor**= 2.523	TL(1)= 1.72E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.322	S= 0.239	CV(2)= 0.103	K factor**= 2.523	TL(2)= 2.92E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW220				

Date Collected	Result	LN(Result)
10/14/2002	1.04E+01	2.34E+00
1/15/2003	9.80E+00	2.28E+00
4/10/2003	1.54E+01	2.73E+00
7/14/2003	1.49E+01	2.70E+00
10/13/2003	1.35E+01	2.60E+00
1/13/2004	1.03E+01	2.33E+00
4/13/2004	1.43E+01	2.66E+00
7/21/2004	1.05E+01	2.35E+00
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 2.42E+00
Date Collected	Result	()
Date Collected 8/13/2002	Result 1.12E+01	2.42E+00
Date Collected 8/13/2002 9/16/2002	Result 1.12E+01 8.30E+00	2.42E+00 2.12E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 1.12E+01 8.30E+00 8.00E+00	2.42E+00 2.12E+00 2.08E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 1.12E+01 8.30E+00 8.00E+00 8.50E+00	2.42E+00 2.12E+00 2.08E+00 2.14E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 1.12E+01 8.30E+00 8.00E+00 8.50E+00 7.90E+00	2.42E+00 2.12E+00 2.08E+00 2.14E+00 2.07E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003 7/16/2003	Result 1.12E+01 8.30E+00 8.00E+00 8.50E+00 7.90E+00 8.40E+00	2.42E+00 2.12E+00 2.08E+00 2.07E+00 2.07E+00 2.13E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	Yes	1.91E+01	YES	2.95E+00	N/A		
MW221	Sidegradient	Yes	1.52E+01	NO	2.72E+00	N/A		
MW222	Sidegradient	Yes	1.29E+01	NO	2.56E+00	N/A		
MW223	Sidegradient	Yes	1.44E+01	NO	2.67E+00	N/A		
MW224	Sidegradient	Yes	1.93E+01	YES	2.96E+00	N/A		
MW369	Downgradien	t Yes	8.48E+00) NO	2.14E+00	N/A		
MW372	Downgradien	t Yes	1.49E+02	2 YES	5.00E+00	N/A		
MW384	Sidegradient	Yes	1.95E+01	YES	2.97E+00	N/A		
MW387	Downgradien	t Yes	2.57E+01	YES	3.25E+00	N/A		
MW391	Downgradien	t Yes	1.21E+01	NO	2.49E+00	N/A		
MW394	Upgradient	Yes	1.16E+01	NO	2.45E+00	N/A		
N/A - Resul	Its identified as N	Jon-Detects	during lab	oratory analy	sis or data validation	n and were not		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Ex	ceedances
MW220	
MW224	
MW372	
MW384	
MW387	

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Technetium-99 UNITS: pCi/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 9.354	S = 9.280	CV(1)= 0.992	K factor**= 2.523	TL(1)= 3.28E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.270	S = 0.849	CV(2)= 0.374	K factor**= 2.523	TL(2)= 3.26E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	MW220					
Date Collected	Result	LN(Result)				
10/14/2002	1.97E+01	2.98E+00				
1/15/2003	2.61E+01	3.26E+00				
4/10/2003	3.56E+00	1.27E+00				
7/14/2003	0.00E+00	#Func!				
10/13/2003	2.10E+01	3.04E+00				
1/13/2004	6.32E+00	1.84E+00				
4/13/2004	3.00E+00	1.10E+00				
7/21/2004	1.46E+01	2.68E+00				
Well Number:	MW394					
Date Collected	Result	LN(Result)				
8/13/2002	1.40E+01	2.64E+00				
9/16/2002	5.45E+00	1.70E+00				
10/16/2002	2.49E+00	9.12E-01				
1/13/2003	1.83E+01	2.91E+00				
4/10/2003	-1.45E+00	#Func!				
7/16/2003	-1.71E+00	#Func!				
10/14/2003	1.83E+01	2.91E+00				
1/13/2004	0.00E+00	#Func!				

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

#Because the natural log was not possible for all background values, the TL was considered equal to the maximum background value.

Well No.	Gradient	Detected?	Result	Result >TL(1)	? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	No	8.02E+00	N/A	2.08E+00	N/A
MW221	Sidegradient	No	8.82E+00	N/A	2.18E+00	N/A
MW222	Sidegradient	No	7.13E+00	N/A	1.96E+00	N/A
MW223	Sidegradient	No	7.48E+00	N/A	2.01E+00	N/A
MW224	Sidegradient	No	-4.06E+0	0 N/A	#Error	N/A
MW369	Downgradient	t Yes	5.27E+01	YES	3.96E+00	N/A
MW372	Downgradient	t No	7.82E+00	N/A	2.06E+00	N/A
MW384	Sidegradient	Yes	4.68E+01	YES	3.85E+00	N/A
MW387	Downgradient	t Yes	8.86E+01	YES	4.48E+00	N/A
MW391	Downgradient	t No	3.71E+00	N/A	1.31E+00	N/A
MW394	Upgradient	No	9.28E+00	N/A	2.23E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances	
MW369	
MW384	
MW387	

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical AnalysisHistorical Background ComparisonTotal Organic Carbon (TOC)UNITS: mg/LURGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 1.494	S= 0.737	CV(1)= 0.493	K factor**= 2.523	TL(1)= 3.35E+00	LL(1)= N/A
Statistics-Transformed Background Data	X= 0.315	S= 0.402	CV(2)= 1.279	K factor**= 2.523	TL(2)= 1.33E+00	LL(2)= N/A

	kground Data from fells with Transformed Result
Well Number:	MW220

Date Collected	Result	LN(Result)
10/14/2002	1.00E+00	0.00E+00
1/15/2003	1.10E+00	9.53E-02
4/10/2003	1.00E+00	0.00E+00
7/14/2003	3.30E+00	1.19E+00
10/13/2003	1.80E+00	5.88E-01
1/13/2004	1.00E+00	0.00E+00
4/13/2004	2.00E+00	6.93E-01
7/21/2004	3.10E+00	1.13E+00
*** 11 . * 1		
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 2.62E-01
Date Collected	Result	()
Date Collected 8/13/2002	Result 1.30E+00	2.62E-01
Date Collected 8/13/2002 9/16/2002	Result 1.30E+00 1.00E+00	2.62E-01 0.00E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 1.30E+00 1.00E+00 1.00E+00	2.62E-01 0.00E+00 0.00E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 1.30E+00 1.00E+00 1.00E+00 1.60E+00	2.62E-01 0.00E+00 0.00E+00 4.70E-01
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 1.30E+00 1.00E+00 1.00E+00 1.60E+00 1.00E+00	2.62E-01 0.00E+00 0.00E+00 4.70E-01 0.00E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003 7/16/2003	Result 1.30E+00 1.00E+00 1.00E+00 1.60E+00 1.00E+00 1.40E+00	2.62E-01 0.00E+00 0.00E+00 4.70E-01 0.00E+00 3.36E-01

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TI	L(1)? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	5.95E-01	NO	-5.19E-01	N/A
MW221	Sidegradient	Yes	5.72E-01	NO	-5.59E-01	N/A
MW222	Sidegradient	Yes	5.34E-01	NO	-6.27E-01	N/A
MW223	Sidegradient	Yes	5.16E-01	NO	-6.62E-01	N/A
MW224	Sidegradient	Yes	9.23E-01	NO	-8.01E-02	N/A
MW369	Downgradien	t Yes	6.57E-01	NO	-4.20E-01	N/A
MW372	Downgradien	t Yes	7.72E-01	NO	-2.59E-01	N/A
MW384	Sidegradient	Yes	8.36E-01	NO	-1.79E-01	N/A
MW387	Downgradien	t Yes	1.05E+00) NO	4.88E-02	N/A
MW391	Downgradien	t Yes	7.10E-01	NO	-3.42E-01	N/A
MW394	Upgradient	Yes	5.34E-01	NO	-6.27E-01	N/A
N/A - Resu	lts identified as N	Jon-Detects	during lah	oratory analy	sis or data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Total Organic Halides (TOX) UNITS: ug/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 63.475	S=	163.135	CV(1)= 2.570	K factor**= 2.523	TL(1)= 4.75E+02	LL(1)=N/A
Statistics-Transformed Background Data	X= 3.103	S=	1.145	CV(2) =0.369	K factor**= 2.523	TL(2)= 5.99E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	MW220					
Date Collected	Result	LN(Result)				

Date Collected	Result	LN(Result)
10/14/2002	5.00E+01	3.91E+00
1/15/2003	1.00E+01	2.30E+00
4/10/2003	1.00E+01	2.30E+00
7/14/2003	1.00E+01	2.30E+00
10/13/2003	1.00E+01	2.30E+00
1/13/2004	1.00E+01	2.30E+00
4/13/2004	1.00E+01	2.30E+00
7/21/2004	1.00E+01	2.30E+00
TTT 1	100004	
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 3.91E+00
Date Collected	Result	· · · · ·
Date Collected 8/13/2002	Result 5.00E+01	3.91E+00
Date Collected 8/13/2002 9/16/2002	Result 5.00E+01 6.72E+02	3.91E+00 6.51E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 5.00E+01 6.72E+02 5.00E+01	3.91E+00 6.51E+00 3.91E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 5.00E+01 6.72E+02 5.00E+01 3.61E+01	3.91E+00 6.51E+00 3.91E+00 3.59E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 5.00E+01 6.72E+02 5.00E+01 3.61E+01 1.00E+01	3.91E+00 6.51E+00 3.91E+00 3.59E+00 2.30E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	4.84E+00) N/A	1.58E+00	NO
MW221	Sidegradient	Yes	5.10E+00) N/A	1.63E+00	NO
MW222	Sidegradient	No	1.00E+01	N/A	2.30E+00	N/A
MW223	Sidegradient	No	2.70E+01	N/A	3.30E+00	N/A
MW224	Sidegradient	No	1.00E+01	N/A	2.30E+00	N/A
MW369	Downgradien	t No	1.00E+01	N/A	2.30E+00	N/A
MW372	Downgradien	t Yes	2.51E+01	N/A	3.22E+00	NO
MW384	Sidegradient	Yes	1.23E+01	N/A	2.51E+00	NO
MW387	Downgradien	t Yes	2.12E+01	N/A	3.05E+00	NO
MW391	Downgradien	t Yes	4.78E+00) N/A	1.56E+00	NO
MW394	Upgradient	No	1.00E+01	N/A	2.30E+00	N/A
N/A - Resu	lts identified as N	Jon-Detects	during lab	oratory analys	sis or data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Zinc UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.036	S= 0.026	CV(1)= 0.722	K factor**= 2.523	TL(1)= 1.01E-01 LL(1)=N/A
Statistics-Transformed Background Data	X =-3.485	S = 0.525	CV(2) =-0.151	K factor**= 2.523	TL(2)= -2.16E+00 LL(2)= N/A

Historical Bac Upgradient W	0	Result
Well Number:	MW220	

Date Collected	Result	LN(Result)
10/14/2002	2.50E-02	-3.69E+00
1/15/2003	3.50E-02	-3.35E+00
4/10/2003	3.50E-02	-3.35E+00
7/14/2003	3.89E-02	-3.25E+00
10/13/2003	2.60E-02	-3.65E+00
1/13/2004	2.00E-02	-3.91E+00
4/13/2004	2.00E-02	-3.91E+00
7/21/2004	2.00E-02	-3.91E+00
Well Number:	1411/204	
wen Number:	MW394	
Date Collected	Result	LN(Result)
		LN(Result) -2.30E+00
Date Collected	Result	()
Date Collected 8/13/2002	Result 1.00E-01	-2.30E+00
Date Collected 8/13/2002 9/16/2002	Result 1.00E-01 1.00E-01	-2.30E+00 -2.30E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002	Result 1.00E-01 1.00E-01 2.50E-02	-2.30E+00 -2.30E+00 -3.69E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003	Result 1.00E-01 1.00E-01 2.50E-02 3.50E-02	-2.30E+00 -2.30E+00 -3.69E+00 -3.35E+00
Date Collected 8/13/2002 9/16/2002 10/16/2002 1/13/2003 4/10/2003	Result 1.00E-01 1.00E-01 2.50E-02 3.50E-02 3.50E-02	-2.30E+00 -2.30E+00 -3.69E+00 -3.35E+00 -3.35E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	4.71E-03	NO	-5.36E+00	N/A
MW221	Sidegradient	Yes	3.36E-03	NO	-5.70E+00	N/A
MW222	Sidegradient	Yes	4.71E-03	NO	-5.36E+00	N/A
MW223	Sidegradient	Yes	3.83E-03	NO	-5.56E+00	N/A
MW224	Sidegradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW369	Downgradien	t Yes	4.23E-03	NO	-5.47E+00	N/A
MW372	Downgradien	t No	2.00E-02	N/A	-3.91E+00	N/A
MW384	Sidegradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW387	Downgradien	t No	2.00E-02	N/A	-3.91E+00	N/A
MW391	Downgradien	t No	2.00E-02	N/A	-3.91E+00	N/A
MW394	Upgradient	Yes	1.20E-02	NO	-4.42E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Aluminum UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.258	S= 0.221	CV(1)= 0.856	K factor**= 2.523	TL(1)= 8.15E-01	LL(1)=N/A
Statistics-Transformed Background Data	X= -2.266	S= 2.485	CV(2) =-1.097	K factor**= 2.523	TL(2)= 4.00E+00	LL(2)=N/A

Historical Bac	kground Data from
Upgradient W	Yells with Transformed Result
Well Number:	MW395

wen runnoer.	101 00 575	
Date Collected	Result	LN(Result)
8/13/2002	2.00E-01	-1.61E+00
9/16/2002	2.00E-01	-1.61E+00
10/16/2002	2.00E-04	-8.52E+00
1/13/2003	7.37E-01	-3.05E-01
4/10/2003	2.00E-01	-1.61E+00
7/16/2003	2.00E-01	-1.61E+00
10/14/2003	2.00E-01	-1.61E+00
1/13/2004	2.00E-01	-1.61E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) -1.94E-01
Date Collected	Result	()
Date Collected 8/13/2002	Result 8.24E-01	-1.94E-01
Date Collected 8/13/2002 9/16/2002	Result 8.24E-01 2.00E-01	-1.94E-01 -1.61E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 8.24E-01 2.00E-01 2.00E-04	-1.94E-01 -1.61E+00 -8.52E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 8.24E-01 2.00E-01 2.00E-04 3.63E-01	-1.94E-01 -1.61E+00 -8.52E+00 -1.01E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 8.24E-01 2.00E-01 2.00E-04 3.63E-01 2.00E-01	-1.94E-01 -1.61E+00 -8.52E+00 -1.01E+00 -1.61E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 8.24E-01 2.00E-01 2.00E-04 3.63E-01 2.00E-01 2.00E-01	-1.94E-01 -1.61E+00 -8.52E+00 -1.01E+00 -1.61E+00 -1.61E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)	? LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t No	5.00E-02	N/A	-3.00E+00	N/A
MW373	Downgradient	t No	5.00E-02	N/A	-3.00E+00	N/A
MW385	Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW388	Downgradient	t No	5.00E-02	N/A	-3.00E+00	N/A
MW392	Downgradient	t Yes	1.97E-02	NO	-3.93E+00	N/A
MW395	Upgradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW397	Upgradient	No	5.00E-02	N/A	-3.00E+00	N/A
NI/A Dama	4. :	I D.t.t.	desidential and the late	anatami analizaia a		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Boron UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.650	S = 0.805	CV(1)= 1.238	K factor**= 2.523	TL(1)= 2.68E+00	LL(1)=N/A
Statistics-Transformed Background Data	X= -1.034	S= 1.030	CV(2) =-0.996	K factor**= 2.523	TL(2)= 1.56E+00	LL(2)=N/A

	kground Data from fells with Transformed Result
Well Number:	MW395

wen number.	IVI W 393	
Date Collected	Result	LN(Result)
8/13/2002	2.00E+00	6.93E-01
9/16/2002	2.00E+00	6.93E-01
10/16/2002	2.00E-01	-1.61E+00
1/13/2003	2.00E-01	-1.61E+00
4/10/2003	2.00E-01	-1.61E+00
7/16/2003	2.00E-01	-1.61E+00
10/14/2003	2.00E-01	-1.61E+00
1/13/2004	2.00E-01	-1.61E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 6.93E-01
Date Collected	Result	,
Date Collected 8/13/2002	Result 2.00E+00	6.93E-01
Date Collected 8/13/2002 9/16/2002	Result 2.00E+00 2.00E+00	6.93E-01 6.93E-01
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 2.00E+00 2.00E+00 2.00E-01	6.93E-01 6.93E-01 -1.61E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 2.00E+00 2.00E+00 2.00E-01 2.00E-01	6.93E-01 6.93E-01 -1.61E+00 -1.61E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 2.00E+00 2.00E+00 2.00E-01 2.00E-01 2.00E-01	6.93E-01 6.93E-01 -1.61E+00 -1.61E+00 -1.61E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 2.00E+00 2.00E+00 2.00E-01 2.00E-01 2.00E-01 2.00E-01	6.93E-01 6.93E-01 -1.61E+00 -1.61E+00 -1.61E+00 -1.61E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	8.26E-02	N/A	-2.49E+00	NO
MW373	Downgradient	Yes	2.47E+00	N/A	9.04E-01	NO
MW385	Sidegradient	Yes	8.23E-02	N/A	-2.50E+00	NO
MW388	Downgradient	Yes	2.68E-02	N/A	-3.62E+00	NO
MW392	Downgradient	Yes	2.14E-02	N/A	-3.84E+00	NO
MW395	Upgradient	Yes	1.96E-02	N/A	-3.93E+00	NO
MW397	Upgradient	No	1.50E-02	N/A	-4.20E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Bromide UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 1.000	S = 0.000	CV(1)= 0.000	K factor**= 2.523	TL(1)= 1.00E+00	LL(1)=N/A
Statistics-Transformed Background Data	X = 0.000	S = 0.000	CV(2)= #Num!	K factor**= 2.523	TL(2)= 0.00E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW395			
Date Collected	Result	LN(Result)		
8/13/2002	1.00E+00	0.00E+00		
9/16/2002	1.00E+00	0.00E+00		
10/16/2002	1.00E+00	0.00E+00		
1/13/2003	1.00E+00	0.00E+00		
4/10/2003	1.00E+00	0.00E+00		
7/16/2003	1.00E+00	0.00E+00		
10/14/2003	1.00E+00	0.00E+00		
1/13/2004	1.00E+00	0.00E+00		

MW397

1.00E+00

1.00E+00

1.00E+00

1.00E+00

1.00E+00

1.00E+00

1.00E+00

1.00E+00

Result

Well Number:

Date Collected

8/13/2002

9/16/2002

10/17/2002

1/13/2003

4/8/2003

7/16/2003

10/14/2003

1/13/2004

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t Yes	5.51E-01	NO	-5.96E-01	N/A
MW373	Downgradient	t Yes	4.48E-01	NO	-8.03E-01	N/A
MW385	Sidegradient	Yes	2.56E-01	NO	-1.36E+00	N/A
MW388	Downgradient	t Yes	4.35E-01	NO	-8.32E-01	N/A
MW392	Downgradient	t Yes	5.58E-01	NO	-5.83E-01	N/A
MW395	Upgradient	Yes	5.44E-01	NO	-6.09E-01	N/A
MW397	Upgradient	Yes	3.93E-01	NO	-9.34E-01	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

LN(Result)

0.00E+00

0.00E+00

0.00E+00

0.00E+00

0.00E+00

0.00E+00

0.00E+00

0.00E+00

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Calcium UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 23.103	S = 11.538	CV(1)= 0.499	K factor**= 2.523	TL(1)= 5.22E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.357	S= 2.411	CV(2)= 1.023	K factor**= 2.523	TL(2)= 8.44E+00	LL(2)= N/A

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW395			

wen number.	IVI W 393	
Date Collected	Result	LN(Result)
8/13/2002	3.22E+01	3.47E+00
9/16/2002	3.30E+01	3.50E+00
10/16/2002	2.95E-02	-3.52E+00
1/13/2003	3.21E+01	3.47E+00
4/10/2003	4.02E+01	3.69E+00
7/16/2003	3.24E+01	3.48E+00
10/14/2003	3.39E+01	3.52E+00
1/13/2004	3.12E+01	3.44E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 2.97E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 1.94E+01	2.97E+00
Date Collected 8/13/2002 9/16/2002	Result 1.94E+01 1.90E+01	2.97E+00 2.94E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 1.94E+01 1.90E+01 1.79E-02	2.97E+00 2.94E+00 -4.02E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 1.94E+01 1.90E+01 1.79E-02 1.78E+01	2.97E+00 2.94E+00 -4.02E+00 2.88E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 1.94E+01 1.90E+01 1.79E-02 1.78E+01 2.03E+01	2.97E+00 2.94E+00 -4.02E+00 2.88E+00 3.01E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 1.94E+01 1.90E+01 1.79E-02 1.78E+01 2.03E+01 1.94E+01	2.97E+00 2.94E+00 -4.02E+00 2.88E+00 3.01E+00 2.97E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	2.92E+01	NO	3.37E+00	N/A
MW373	Downgradient	Yes	9.10E+01	YES	4.51E+00	N/A
MW385	Sidegradient	Yes	2.34E+01	NO	3.15E+00	N/A
MW388	Downgradient	Yes	2.89E+01	NO	3.36E+00	N/A
MW392	Downgradient	Yes	2.43E+01	NO	3.19E+00	N/A
MW395	Upgradient	Yes	2.79E+01	NO	3.33E+00	N/A
MW397	Upgradient	Yes	3.18E+01	NO	3.46E+00	N/A
N/A - Resul	lts identified as N	on-Detects	during labo	ratory analysis or	data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

Wells with Exceedances MW373

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Chloride UNITS: mg/L **LRGA**

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 51.844	S=	11.652	CV(1)= 0.225	K factor**= 2.523	TL(1)= 8.12E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 3.924	S=	0.229	CV(2) =0.058	K factor**= 2.523	TL(2)= 4.50E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result				
Well Number:	MW395			

Date Collected	Result	LN(Result)
8/13/2002	6.22E+01	4.13E+00
9/16/2002	6.47E+01	4.17E+00
10/16/2002	6.22E+01	4.13E+00
1/13/2003	6.35E+01	4.15E+00
4/10/2003	6.41E+01	4.16E+00
7/16/2003	6.40E+01	4.16E+00
10/14/2003	6.32E+01	4.15E+00
1/13/2004	6.06E+01	4.10E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 3.66E+00
Date Collected	Result	()
Date Collected 8/13/2002	Result 3.89E+01	3.66E+00
Date Collected 8/13/2002 9/16/2002	Result 3.89E+01 3.98E+01	3.66E+00 3.68E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 3.89E+01 3.98E+01 3.93E+01	3.66E+00 3.68E+00 3.67E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 3.89E+01 3.98E+01 3.93E+01 4.05E+01	3.66E+00 3.68E+00 3.67E+00 3.70E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 3.89E+01 3.98E+01 3.93E+01 4.05E+01 4.21E+01	3.66E+00 3.68E+00 3.67E+00 3.70E+00 3.74E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradien	t Yes	4.15E+01	NO	3.73E+00	N/A
MW373	Downgradien	t Yes	3.05E+01	NO	3.42E+00	N/A
MW385	Sidegradient	Yes	2.19E+01	NO	3.09E+00	N/A
MW388	Downgradien	t Yes	3.41E+01	NO	3.53E+00	N/A
MW392	Downgradien	t Yes	4.30E+01	NO	3.76E+00	N/A
MW395	Upgradient	Yes	4.84E+01	NO	3.88E+00	N/A
MW397	Upgradient	Yes	3.28E+01	NO	3.49E+00	N/A
N/A - Result	ts identified as N	Jon-Detects	during lab	oratory analysi	s or data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Cobalt UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.007	S = 0.011	CV(1)= 1.515	K factor**= 2.523	TL(1)= 3.41E-02 LL(1)=N/A
Statistics-Transformed Background Data	X= -6.053	S= 1.416	CV(2) =-0.234	K factor**= 2.523	TL(2)= -2.48E+00 LL(2)= N/A

Historical Background Data from Upgradient Wells with Transformed Resul						
Well Number	MW395					

Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	2.50E-02	-3.69E+00
9/16/2002	2.50E-02	-3.69E+00
10/16/2002	1.00E-03	-6.91E+00
1/13/2003	1.48E-03	-6.52E+00
4/10/2003	1.51E-03	-6.50E+00
7/16/2003	1.00E-03	-6.91E+00
10/14/2003	1.00E-03	-6.91E+00
1/13/2004	1.00E-03	-6.91E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) -3.69E+00
Date Collected	Result	· · · ·
Date Collected 8/13/2002	Result 2.50E-02	-3.69E+00
Date Collected 8/13/2002 9/16/2002	Result 2.50E-02 2.50E-02	-3.69E+00 -3.69E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 2.50E-02 2.50E-02 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00 -6.91E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t No	1.00E-03	N/A	-6.91E+00	N/A
MW373	Downgradient	t Yes	8.77E-04	N/A	-7.04E+00	NO
MW385	Sidegradient	Yes	1.54E-03	N/A	-6.48E+00	NO
MW388	Downgradient	t No	1.00E-03	N/A	-6.91E+00	N/A
MW392	Downgradient	t No	1.00E-03	N/A	-6.91E+00	N/A
MW395	Upgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW397	Upgradient	Yes	4.06E-04	N/A	-7.81E+00	NO

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Conductivity UNITS: umho/cm LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 377.875	5 S= 52.101	CV(1)= 0.138	K factor**= 2.523	TL(1)= 5.09E+02	LL(1)=N/A
Statistics-Transformed Background Data	X= 5.926	S= 0.136	CV(2) =0.023	K factor**= 2.523	TL(2)= 6.27E+00	LL(2)= N/A

	kground Data from ells with Transformed Result
Well Number:	MW395

Date Collected	Result	LN(Result)
8/13/2002	4.05E+02	6.00E+00
9/16/2002	4.01E+02	5.99E+00
10/16/2002	3.92E+02	5.97E+00
1/13/2003	4.04E+02	6.00E+00
4/10/2003	4.88E+02	6.19E+00
7/16/2003	4.50E+02	6.11E+00
10/14/2003	4.10E+02	6.02E+00
1/13/2004	4.13E+02	6.02E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 5.77E+00
Date Collected	Result	· · · · ·
Date Collected 8/13/2002	Result 3.22E+02	5.77E+00
Date Collected 8/13/2002 9/16/2002	Result 3.22E+02 3.15E+02	5.77E+00 5.75E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 3.22E+02 3.15E+02 3.17E+02	5.77E+00 5.75E+00 5.76E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 3.22E+02 3.15E+02 3.17E+02 3.20E+02	5.77E+00 5.75E+00 5.76E+00 5.77E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 3.22E+02 3.15E+02 3.17E+02 3.20E+02 3.90E+02	5.77E+00 5.75E+00 5.76E+00 5.77E+00 5.97E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	4.16E+02	NO O	6.03E+00	N/A
MW373	Downgradient	Yes	9.45E+02	YES O	6.85E+00	N/A
MW385	Sidegradient	Yes	4.91E+02	NO O	6.20E+00	N/A
MW388	Downgradient	Yes	5.29E+02	YES	6.27E+00	N/A
MW392	Downgradient	Yes	3.38E+02	NO :	5.82E+00	N/A
MW395	Upgradient	Yes	3.87E+02	NO :	5.96E+00	N/A
MW397	Upgradient	Yes	3.16E+02	NO :	5.76E+00	N/A
N/A - Resul	lts identified as N	on-Detects	during labo	oratory analysis or	data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW373 MW388

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Copper UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.028 $S = 0.013$	CV(1)= 0.474	K factor**= 2.523	TL(1)= 6.15E-02 LL(1)=N/A
Statistics-Transformed Background Data	X =-3.662 S = 0.406	CV(2) =-0.111	K factor**= 2.523	TL(2)= -2.64E+00 LL(2)=N/A

Historical Bac Upgradient W	kground Data from fells with Transformed Result
Well Number:	MW395

Date Collected	Result	LN(Result)
8/13/2002	5.00E-02	-3.00E+00
9/16/2002	5.00E-02	-3.00E+00
10/16/2002	2.81E-02	-3.57E+00
1/13/2003	2.00E-02	-3.91E+00
4/10/2003	2.00E-02	-3.91E+00
7/16/2003	2.00E-02	-3.91E+00
10/14/2003	2.00E-02	-3.91E+00
1/13/2004	2.00E-02	-3.91E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) -3.00E+00
Date Collected	Result	· · · · · ·
Date Collected 8/13/2002	Result 5.00E-02	-3.00E+00
Date Collected 8/13/2002 9/16/2002	Result 5.00E-02 5.00E-02	-3.00E+00 -3.00E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 5.00E-02 5.00E-02 2.00E-02	-3.00E+00 -3.00E+00 -3.91E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 5.00E-02 5.00E-02 2.00E-02 2.00E-02	-3.00E+00 -3.00E+00 -3.91E+00 -3.91E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 5.00E-02 5.00E-02 2.00E-02 2.00E-02 2.00E-02	-3.00E+00 -3.00E+00 -3.91E+00 -3.91E+00 -3.91E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t Yes	3.60E-03	NO	-5.63E+00	N/A
MW373	Downgradient	t Yes	3.26E-03	NO	-5.73E+00	N/A
MW385	Sidegradient	Yes	7.90E-04	NO	-7.14E+00	N/A
MW388	Downgradient	t Yes	6.45E-04	NO	-7.35E+00	N/A
MW392	Downgradient	t Yes	2.05E-03	NO	-6.19E+00	N/A
MW395	Upgradient	Yes	1.57E-03	NO	-6.46E+00	N/A
MW397	Upgradient	Yes	1.65E-03	NO	-6.41E+00	N/A
N/A Dami	ta idantified on N	Ion Dotoota	طيبينية مراملة		a an data validatio	n and wans not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Dissolved Oxygen UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 4.678	S= 2.431	CV(1)= 0.520	K factor**= 2.523	TL(1)= 1.08E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 1.414	S = 0.550	CV(2)= 0.389	K factor**= 2.523	TL(2)= 2.80E+00	LL(2)=N/A

Historical Bac Upgradient W	-	a from nsformed Result
Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	7.29E+00	1.99E+00
9/30/2002	4.03E+00	1.39E+00
10/16/2002	3.85E+00	1.35E+00

2.36E+00

1.14E+00

1.76E+00

4.05E+00

4.26E+00

MW397

1.16E+01

5.86E+00

5.94E+00

4.66E+00

3.77E+00

3.47E+00

5.34E+00

5.51E+00

Result

8.59E-01

1.31E-01

5.65E-01

1.40E+00

1.45E+00

LN(Result)

2.45E+00

1.77E+00

1.78E+00

1.54E+00

1.33E+00

1.24E+00

1.68E+00

1.71E+00

1/13/2003

4/10/2003

7/16/2003

10/14/2003

1/13/2004

8/13/2002

9/16/2002

10/17/2002

1/13/2003

4/8/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL((1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradien	t Yes	6.23E+00) NO	1.83E+00	N/A
MW373	Downgradien	t Yes	2.08E+00) NO	7.32E-01	N/A
MW385	Sidegradient	Yes	3.54E+00) NO	1.26E+00	N/A
MW388	Downgradien	t Yes	4.69E+00) NO	1.55E+00	N/A
MW392	Downgradien	t Yes	2.56E+00) NO	9.40E-01	N/A
MW395	Upgradient	Yes	5.05E+00) NO	1.62E+00	N/A
MW397	Upgradient	Yes	6.38E+00) NO	1.85E+00	N/A
			1 . 11			1 (

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Dissolved Solids UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =219.25	0 S = 34.107	CV(1)= 0.156	K factor**= 2.523	TL(1)= 3.05E+02	LL(1)=N/A
Statistics-Transformed Background Data	X= 5.379	S= 0.152	CV(2)= 0.028	K factor**= 2.523	TL(2)= 5.76E+00	LL(2)=N/A

	kground Data from fells with Transformed Result
Well Number:	MW395

Date Collected	Result	LN(Result)
8/13/2002	2.49E+02	5.52E+00
9/16/2002	2.72E+02	5.61E+00
10/16/2002	2.55E+02	5.54E+00
1/13/2003	2.11E+02	5.35E+00
4/10/2003	2.89E+02	5.67E+00
7/16/2003	2.36E+02	5.46E+00
10/14/2003	2.24E+02	5.41E+00
1/13/2004	2.35E+02	5.46E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 5.23E+00
Date Collected	Result	· · · · ·
Date Collected 8/13/2002	Result 1.87E+02	5.23E+00
Date Collected 8/13/2002 9/16/2002	Result 1.87E+02 1.97E+02	5.23E+00 5.28E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 1.87E+02 1.97E+02 1.83E+02	5.23E+00 5.28E+00 5.21E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 1.87E+02 1.97E+02 1.83E+02 1.82E+02	5.23E+00 5.28E+00 5.21E+00 5.20E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 1.87E+02 1.97E+02 1.83E+02 1.82E+02 2.17E+02	5.23E+00 5.28E+00 5.21E+00 5.20E+00 5.38E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 1.87E+02 1.97E+02 1.83E+02 1.82E+02 2.17E+02 1.96E+02	5.23E+00 5.28E+00 5.21E+00 5.20E+00 5.38E+00 5.28E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t Yes	2.12E+02	NO	5.36E+00	N/A
MW373	Downgradient	t Yes	5.62E+02	YES	6.33E+00	N/A
MW385	Sidegradient	Yes	1.93E+02	NO	5.26E+00	N/A
MW388	Downgradient	t Yes	1.99E+02	NO	5.29E+00	N/A
MW392	Downgradient	t Yes	1.49E+02	NO	5.00E+00	N/A
MW395	Upgradient	Yes	1.78E+02	NO	5.18E+00	N/A
MW397	Upgradient	Yes	1.52E+02	NO	5.02E+00	N/A
N/A - Result	ts identified as N	Ion-Detects	during lab	oratory analysis of	data validatio	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

Wells with Exceedances MW373

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Iron UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Transformed X= -2.197 S= 2.634 CV(2)=-1.199 K factor**= 2.523 TL(2)= 4.45E+00 LL(2)=N/A
Statistics Transformed
Statistics Transformed

Historical Background Data from Upgradient Wells with Transformed Result

MW305

Well Number

Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	2.94E-01	-1.22E+00
9/16/2002	2.00E-01	-1.61E+00
10/16/2002	2.00E-04	-8.52E+00
1/13/2003	1.33E+00	2.85E-01
4/10/2003	1.31E+00	2.70E-01
7/16/2003	2.00E-01	-1.61E+00
10/14/2003	1.00E-01	-2.30E+00
1/13/2004	1.00E-01	-2.30E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 4.57E-01
Date Collected	Result	()
Date Collected 8/13/2002	Result 1.58E+00	4.57E-01
Date Collected 8/13/2002 9/16/2002	Result 1.58E+00 2.32E-01	4.57E-01 -1.46E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 1.58E+00 2.32E-01 2.00E-04	4.57E-01 -1.46E+00 -8.52E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 1.58E+00 2.32E-01 2.00E-04 4.53E-01	4.57E-01 -1.46E+00 -8.52E+00 -7.92E-01
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 1.58E+00 2.32E-01 2.00E-04 4.53E-01 2.00E-01	4.57E-01 -1.46E+00 -8.52E+00 -7.92E-01 -1.61E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 1.58E+00 2.32E-01 2.00E-04 4.53E-01 2.00E-01 2.00E-01	4.57E-01 -1.46E+00 -8.52E+00 -7.92E-01 -1.61E+00 -1.61E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL(1	l)? LN(Result)	LN(Result) >TL(2)	
MW370	Downgradien	t No	1.00E-01	N/A	-2.30E+00	N/A	
MW373	Downgradien	t Yes	5.62E-02	N/A	-2.88E+00	NO	
MW385	Sidegradient	No	1.00E-01	N/A	-2.30E+00	N/A	
MW388	Downgradien	t Yes	3.87E-02	N/A	-3.25E+00	NO	
MW392	Downgradien	t Yes	4.79E-02	N/A	-3.04E+00	NO	
MW395	Upgradient	Yes	4.15E-02	N/A	-3.18E+00	NO	
MW397	Upgradient	Yes	2.66E-01	N/A	-1.32E+00	NO	
N/A Decui	Ita idantified on N	Ian Dataata	dumin a lab		an data validation	n and man nat	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Magnesium UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 9.102	S= 4.685	CV(1)= 0.515	K factor**= 2.523	TL(1)= 2.09E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 1.423	S = 2.408	CV(2)= 1.692	K factor**= 2.523	TL(2)= 7.50E+00	LL(2)=N/A

Historical Bac	Historical Background Data from				
Upgradient W	Upgradient Wells with Transformed Resul				
Well Number:	MW395				

wen number.	101 00 575	
Date Collected	Result	LN(Result)
8/13/2002	1.25E+01	2.53E+00
9/16/2002	1.30E+01	2.56E+00
10/16/2002	1.27E-02	-4.37E+00
1/13/2003	1.12E+01	2.42E+00
4/10/2003	1.75E+01	2.86E+00
7/16/2003	1.29E+01	2.56E+00
10/14/2003	1.34E+01	2.60E+00
1/13/2004	1.24E+01	2.52E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 2.06E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 7.83E+00	2.06E+00
Date Collected 8/13/2002 9/16/2002	Result 7.83E+00 7.64E+00	2.06E+00 2.03E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 7.83E+00 7.64E+00 6.58E-03	2.06E+00 2.03E+00 -5.02E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 7.83E+00 7.64E+00 6.58E-03 6.69E+00	2.06E+00 2.03E+00 -5.02E+00 1.90E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 7.83E+00 7.64E+00 6.58E-03 6.69E+00 7.28E+00	2.06E+00 2.03E+00 -5.02E+00 1.90E+00 1.99E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 7.83E+00 7.64E+00 6.58E-03 6.69E+00 7.28E+00 7.82E+00	2.06E+00 2.03E+00 -5.02E+00 1.90E+00 1.99E+00 2.06E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)	
MW370	Downgradient	t Yes	1.29E+01	NO	2.56E+00	N/A	
MW373	Downgradient	t Yes	3.39E+01	YES	3.52E+00	N/A	
MW385	Sidegradient	Yes	9.82E+00) NO	2.28E+00	N/A	
MW388	Downgradient	t Yes	1.24E+01	NO	2.52E+00	N/A	
MW392	Downgradient	t Yes	1.04E+01	NO	2.34E+00	N/A	
MW395	Upgradient	Yes	1.18E+01	NO	2.47E+00	N/A	
MW397	Upgradient	Yes	1.42E+01	NO	2.65E+00	N/A	
N/A - Result	ts identified as N	Ion-Detects	during lab	oratory analysis or	data validation	n and were not	

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

Wells with Exceedances MW373

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Manganese UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 0.131	S= 0.195	CV(1)= 1.487	K factor**= 2.523	TL(1)= 6.24E-01	LL(1)=N/A
Statistics-Transformed Background Data	X= -3.104	S= 1.529	CV(2) =-0.493	K factor**= 2.523	TL(2)= 7.55E-01	LL(2)=N/A

Historical Bac Upgradient W				l Result
Well Number:	М	W395		
	-	1	T 3 T/D	1.5

Date Collected	Result	LN(Result)
8/13/2002	3.61E-01	-1.02E+00
9/16/2002	2.80E-02	-3.58E+00
10/16/2002	2.60E-02	-3.65E+00
1/13/2003	7.13E-02	-2.64E+00
4/10/2003	6.29E-01	-4.64E-01
7/16/2003	2.97E-01	-1.21E+00
10/14/2003	1.98E-02	-3.92E+00
1/13/2004	1.26E-02	-4.37E+00
Well Number:	MW397	
wen rumber.		
Date Collected	Result	LN(Result)
		LN(Result) -7.64E-01
Date Collected	Result	(
Date Collected 8/13/2002	Result 4.66E-01	-7.64E-01
Date Collected 8/13/2002 9/16/2002	Result 4.66E-01 7.70E-02	-7.64E-01 -2.56E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 4.66E-01 7.70E-02 2.80E-02	-7.64E-01 -2.56E+00 -3.58E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 4.66E-01 7.70E-02 2.80E-02 1.64E-02	-7.64E-01 -2.56E+00 -3.58E+00 -4.11E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 4.66E-01 7.70E-02 2.80E-02 1.64E-02 4.07E-02	-7.64E-01 -2.56E+00 -3.58E+00 -4.11E+00 -3.20E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)	
MW370	Downgradient	t No	5.00E-03	N/A	-5.30E+00	N/A	
MW373	Downgradient	t Yes	1.36E-01	N/A	-2.00E+00	NO	
MW385	Sidegradient	Yes	1.05E-03	N/A	-6.86E+00	NO	
MW388	Downgradient	t No	5.00E-03	N/A	-5.30E+00	N/A	
MW392	Downgradient	t Yes	1.77E-02	N/A	-4.03E+00	NO	
MW395	Upgradient	Yes	1.34E-03	N/A	-6.62E+00	NO	
MW397	Upgradient	Yes	2.87E-01	N/A	-1.25E+00	NO	
N/A D1	4. : 1	I. D. t. t.	4		an data validatio		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)
C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Molybdenum UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.007	S= 0.011	CV(1)= 1.451	K factor**= 2.523	TL(1)= 3.41E-02 LL(1)=N/A
Statistics-Transformed Background Data	X= -5.990	S= 1.443	CV(2)= -0.241	K factor**= 2.523	TL(2)= -2.35E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

1 111200

Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	2.50E-02	-3.69E+00
9/16/2002	2.50E-02	-3.69E+00
10/16/2002	1.00E-03	-6.91E+00
1/13/2003	6.09E-03	-5.10E+00
4/10/2003	1.00E-03	-6.91E+00
7/16/2003	1.00E-03	-6.91E+00
10/14/2003	1.00E-03	-6.91E+00
1/13/2004	1.00E-03	-6.91E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) -3.69E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 2.50E-02	-3.69E+00
Date Collected 8/13/2002 9/16/2002	Result 2.50E-02 2.50E-02	-3.69E+00 -3.69E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 2.50E-02 2.50E-02 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00 -6.91E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 2.50E-02 2.50E-02 1.00E-03 1.00E-03 1.00E-03 1.00E-03	-3.69E+00 -3.69E+00 -6.91E+00 -6.91E+00 -6.91E+00 -6.91E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Well No. Gradient Detected? Result Result >TL(1)? LN(Result) LN(Result) >TL(1) MW370 Downgradient No 1.00E-03 N/A -6.91E+00 N/A MW373 Downgradient No 1.00E-03 N/A -6.91E+00 N/A MW385 Sidegradient Yes 2.18E-04 N/A -8.43E+00 NO MW388 Downgradient No 1.00E-03 N/A -6.91E+00 N/A MW3892 Downgradient No 1.00E-03 N/A -6.91E+00 N/A	Current	Quarter Data					
MW373 Downgradient No 1.00E-03 N/A -6.91E+00 N/A MW385 Sidegradient Yes 2.18E-04 N/A -8.43E+00 NO MW388 Downgradient No 1.00E-03 N/A -6.91E+00 N/A	Well No.	Gradient	Detected?	Result	Result >TL(1)	? LN(Result)	LN(Result) >TL(2)
MW385 Sidegradient Yes 2.18E-04 N/A -8.43E+00 NO MW388 Downgradient No 1.00E-03 N/A -6.91E+00 N/A	MW370	Downgradient	t No	1.00E-03	N/A	-6.91E+00	N/A
MW388 Downgradient No 1.00E-03 N/A -6.91E+00 N/A	MW373	Downgradient	t No	1.00E-03	N/A	-6.91E+00	N/A
e	MW385	Sidegradient	Yes	2.18E-04	N/A	-8.43E+00	NO
MW392 Downgradient No 1.00E-03 N/A -6.91E+00 N/A	MW388	Downgradient	t No	1.00E-03	N/A	-6.91E+00	N/A
	MW392	Downgradient	t No	1.00E-03	N/A	-6.91E+00	N/A
MW395 Upgradient No 1.00E-03 N/A -6.91E+00 N/A	MW395	Upgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW397 Upgradient Yes 3.59E-04 N/A -7.93E+00 NO	MW397	Upgradient	Yes	3.59E-04	N/A	-7.93E+00	NO

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Nickel UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.018	S = 0.020	CV(1)= 1.089	K factor**= 2.523	TL(1)= 6.83E-02 LL(1)=N/A
Statistics-Transformed Background Data	X= -4.540	S= 1.020	CV(2) =-0.225	K factor**= 2.523	TL(2)= -1.97E+00 LL(2)= N/A

Historical Background Data from Upgradient Wells with Transformed Resu						
Well Number:	MW395					

wen number.	IVI VV 393	
Date Collected	Result	LN(Result)
8/13/2002	5.00E-02	-3.00E+00
9/16/2002	5.00E-02	-3.00E+00
10/16/2002	7.02E-03	-4.96E+00
1/13/2003	2.90E-02	-3.54E+00
4/10/2003	9.10E-03	-4.70E+00
7/16/2003	6.27E-03	-5.07E+00
10/14/2003	5.00E-03	-5.30E+00
1/13/2004	5.00E-03	-5.30E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) -3.00E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 5.00E-02	-3.00E+00
Date Collected 8/13/2002 9/16/2002	Result 5.00E-02 5.00E-02	-3.00E+00 -3.00E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 5.00E-02 5.00E-02 5.00E-03	-3.00E+00 -3.00E+00 -5.30E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 5.00E-02 5.00E-02 5.00E-03 5.02E-03	-3.00E+00 -3.00E+00 -5.30E+00 -5.29E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 5.00E-02 5.00E-02 5.00E-03 5.02E-03 5.00E-03	-3.00E+00 -3.00E+00 -5.30E+00 -5.29E+00 -5.30E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 5.00E-02 5.00E-02 5.00E-03 5.02E-03 5.00E-03 5.00E-03	-3.00E+00 -3.00E+00 -5.30E+00 -5.30E+00 -5.30E+00 -5.30E+00

Because CV(1) is greater than 1, the natural logarithm of background and test well results were calculated utilizing TL(2) for comparison.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradien	t No	2.00E-03	N/A	-6.21E+00	N/A
MW373	Downgradien	t Yes	2.12E-03	N/A	-6.16E+00	NO
MW385	Sidegradient	Yes	1.08E-03	N/A	-6.83E+00	NO
MW388	Downgradien	t No	2.00E-03	N/A	-6.21E+00	N/A
MW392	Downgradien	t Yes	1.24E-03	N/A	-6.69E+00	NO
MW395	Upgradient	Yes	6.71E-04	N/A	-7.31E+00	NO
MW397	Upgradient	Yes	1.37E-03	N/A	-6.59E+00	NO
N7/1 D	1. 1					

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Oxidation-Reduction Potential UNITS: mV LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 157.250 S= 52.376	CV(1)= 0.333	K factor**= 2.523	TL(1)= 2.89E+02 LL(1)=N/A	
Statistics-Transformed Background Data	X = 5.003 S = 0.348	CV(2)= 0.069	K factor**= 2.523	TL(2)= 5.88E+00 LL(2)=N/A	

Historical Bac	kground Data from
Upgradient W	fells with Transformed Result
Well Number:	MW395

Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	8.00E+01	4.38E+00
9/16/2002	1.45E+02	4.98E+00
10/16/2002	1.25E+02	4.83E+00
1/13/2003	8.50E+01	4.44E+00
4/10/2003	1.59E+02	5.07E+00
7/16/2003	9.80E+01	4.58E+00
10/14/2003	1.38E+02	4.93E+00
1/13/2004	2.33E+02	5.45E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 4.74E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 1.15E+02	4.74E+00
Date Collected 8/13/2002 9/30/2002	Result 1.15E+02 1.40E+02	4.74E+00 4.94E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002	Result 1.15E+02 1.40E+02 1.85E+02	4.74E+00 4.94E+00 5.22E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002 1/13/2003	Result 1.15E+02 1.40E+02 1.85E+02 2.30E+02	4.74E+00 4.94E+00 5.22E+00 5.44E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002 1/13/2003 4/8/2003	Result 1.15E+02 1.40E+02 1.85E+02 2.30E+02 1.55E+02	4.74E+00 4.94E+00 5.22E+00 5.44E+00 5.04E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 1.15E+02 1.40E+02 1.85E+02 2.30E+02 1.55E+02 1.88E+02	4.74E+00 4.94E+00 5.22E+00 5.44E+00 5.04E+00 5.24E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Q	uarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	P LN(Result)	LN(Result) >TL(2)
MW370 I	Downgradient	Yes	6.02E+02	YES	6.40E+00	N/A
MW373 I	Downgradient	Yes	4.28E+02	YES	6.06E+00	N/A
MW385 S	Sidegradient	Yes	4.34E+02	YES	6.07E+00	N/A
MW388 I	Downgradient	Yes	4.04E+02	YES	6.00E+00	N/A
MW392 I	Downgradient	Yes	4.71E+02	YES	6.15E+00	N/A
MW395 U	Upgradient	Yes	3.84E+02	YES	5.95E+00	N/A
MW397 U	Upgradient	Yes	3.89E+02	YES	5.96E+00	N/A
NI/A Descales	: 1	Detecto	4	notomy on olympic o		

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data	Wells with Exceedances
	MW370
The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated	MW373
concentration with respect to historical background data.	MW385
	MW388
	MW392
	MW395
	MW397

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison pH UNITS: Std Unit LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 6.048	S= 0.248	CV(1)= 0.041	K factor**= 2.904	TL(1)= 6.77E+00	LL(1)=5.33E+00
Statistics-Transformed Background Data	X= 1.799	S= 0.042	CV(2)= 0.023	K factor**= 2.904	TL(2)= 1.92E+00	LL(2)=1.68E+00

	kground Data from ells with Transformed Result
Well Number:	MW395

Date Collected	Result	LN(Result)
8/13/2002	5.80E+00	1.76E+00
9/16/2002	6.00E+00	1.79E+00
10/16/2002	5.47E+00	1.70E+00
1/13/2003	6.00E+00	1.79E+00
4/10/2003	6.18E+00	1.82E+00
7/16/2003	6.00E+00	1.79E+00
10/14/2003	6.31E+00	1.84E+00
1/13/2004	6.24E+00	1.83E+00
X7 11 X7 1	100207	
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
	11110001	LN(Result) 1.76E+00
Date Collected	Result	()
Date Collected 8/13/2002	Result 5.84E+00	1.76E+00
Date Collected 8/13/2002 9/30/2002	Result 5.84E+00 6.00E+00	1.76E+00 1.79E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002	Result 5.84E+00 6.00E+00 5.75E+00	1.76E+00 1.79E+00 1.75E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002 1/13/2003	Result 5.84E+00 6.00E+00 5.75E+00 6.00E+00	1.76E+00 1.79E+00 1.75E+00 1.79E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002 1/13/2003 4/8/2003	Result 5.84E+00 6.00E+00 5.75E+00 6.00E+00 6.30E+00	1.76E+00 1.79E+00 1.75E+00 1.79E+00 1.84E+00
Date Collected 8/13/2002 9/30/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 5.84E+00 6.00E+00 5.75E+00 6.00E+00 6.30E+00 6.20E+00	1.76E+00 1.79E+00 1.75E+00 1.79E+00 1.84E+00 1.82E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(Result <ll(< th=""><th>/ /</th><th>LN(Result) >TL(2)? LN(Result) <ll(2)?< th=""></ll(2)?<></th></ll(<>	/ /	LN(Result) >TL(2)? LN(Result) <ll(2)?< th=""></ll(2)?<>
MW370	Downgradient	Yes	6.28E+00	NO	1.84E+00	N/A
MW373	Downgradient	t Yes	6.14E+00	NO	1.81E+00	N/A
MW385	Sidegradient	Yes	5.91E+00	NO	1.78E+00	N/A
MW388	Downgradient	t Yes	5.97E+00	NO	1.79E+00	N/A
MW392	Downgradient	t Yes	5.74E+00	NO	1.75E+00	N/A
MW395	Upgradient	Yes	5.97E+00	NO	1.79E+00	N/A
MW397	Upgradient	Yes	6.00E+00	NO	1.79E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Potassium UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 1.590	S = 0.642	CV(1)= 0.404	K factor**= 2.523	TL(1)= 3.21E+00 LL(1)=N	J∕A
Statistics-Transformed Background Data	X= -0.306	S = 2.457	CV(2) =-8.028	K factor**= 2.523	TL(2)= 5.89E+00 LL(2)=N	J/A

	Historical Background Data from Upgradient Wells with Transformed Result
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1 111200

Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	2.00E+00	6.93E-01
9/16/2002	2.00E+00	6.93E-01
10/16/2002	1.29E-03	-6.65E+00
1/13/2003	1.51E+00	4.12E-01
4/10/2003	1.67E+00	5.13E-01
7/16/2003	1.73E+00	5.48E-01
10/14/2003	1.70E+00	5.31E-01
1/13/2004	1.58E+00	4.57E-01
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 7.08E-01
Date Collected	Result	
Date Collected 8/13/2002	Result 2.03E+00	7.08E-01
Date Collected 8/13/2002 9/16/2002	Result 2.03E+00 2.00E+00	7.08E-01 6.93E-01
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 2.03E+00 2.00E+00 1.45E-03	7.08E-01 6.93E-01 -6.54E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 2.03E+00 2.00E+00 1.45E-03 1.69E+00	7.08E-01 6.93E-01 -6.54E+00 5.25E-01
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 2.03E+00 2.00E+00 1.45E-03 1.69E+00 1.73E+00	7.08E-01 6.93E-01 -6.54E+00 5.25E-01 5.48E-01
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 2.03E+00 2.00E+00 1.45E-03 1.69E+00 1.73E+00 2.00E+00	7.08E-01 6.93E-01 -6.54E+00 5.25E-01 5.48E-01 6.93E-01

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL((1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t Yes	2.47E+00) NO	9.04E-01	N/A
MW373	Downgradient	t Yes	3.03E+00) NO	1.11E+00	N/A
MW385	Sidegradient	Yes	1.56E+00) NO	4.45E-01	N/A
MW388	Downgradient	t Yes	1.75E+00) NO	5.60E-01	N/A
MW392	Downgradient	t Yes	2.07E+00) NO	7.28E-01	N/A
MW395	Upgradient	Yes	1.63E+00) NO	4.89E-01	N/A
MW397	Upgradient	Yes	7.90E-01	NO	-2.36E-01	N/A
N/A - Resul	ts identified as N	Ion-Detects	during lab	oratory analys	is or data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Sodium UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 29.560	S = 13.894	CV(1)= 0.470	K factor**= 2.523	TL(1)= 6.46E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.615	S= 2.411	CV(2)= 0.922	K factor**= 2.523	TL(2)= 8.70E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

MW205

Wall Number

Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	2.70E+01	3.30E+00
9/16/2002	2.72E+01	3.30E+00
10/16/2002	2.53E-02	-3.68E+00
1/13/2003	2.26E+01	3.12E+00
4/10/2003	5.39E+01	3.99E+00
7/16/2003	3.00E+01	3.40E+00
10/14/2003	2.91E+01	3.37E+00
1/13/2004	2.64E+01	3.27E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 3.56E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 3.52E+01	3.56E+00
Date Collected 8/13/2002 9/16/2002	Result 3.52E+01 3.43E+01	3.56E+00 3.54E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 3.52E+01 3.43E+01 3.36E-02	3.56E+00 3.54E+00 -3.39E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 3.52E+01 3.43E+01 3.36E-02 3.13E+01	3.56E+00 3.54E+00 -3.39E+00 3.44E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 3.52E+01 3.43E+01 3.36E-02 3.13E+01 4.61E+01	3.56E+00 3.54E+00 -3.39E+00 3.44E+00 3.83E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 3.52E+01 3.43E+01 3.36E-02 3.13E+01 4.61E+01 3.84E+01	3.56E+00 3.54E+00 -3.39E+00 3.44E+00 3.83E+00 3.65E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradien	t Yes	4.59E+01	NO	3.83E+00	N/A
MW373	Downgradien	t Yes	7.32E+01	YES	4.29E+00	N/A
MW385	Sidegradient	Yes	4.52E+01	NO	3.81E+00	N/A
MW388	Downgradien	t Yes	4.53E+01	NO	3.81E+00	N/A
MW392	Downgradien	t Yes	2.44E+01	NO	3.19E+00	N/A
MW395	Upgradient	Yes	3.11E+01	NO	3.44E+00	N/A
MW397	Upgradient	Yes	9.92E+01	YES	4.60E+00	N/A
N/A - Resu	lts identified as N	Ion-Detects	during lab	oratory analysis or	data validatio	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW373 MW397

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Historical Background Comparison** Sulfate UNITS: mg/L **LRGA**

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 10.756	S= 2.147	CV(1)= 0.200	K factor**= 2.523	TL(1)= 1.62E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.356	S = 0.203	CV(2)= 0.086	K factor**= 2.523	TL(2)= 2.87E+00	LL(2)=N/A

Historical Bac Upgradient W	kground Da ells with Tr	ta from ansformed Result
Well Number:	MW395	
Date Collected	Result	LN(Result)

Date Collected	Result	LN(Result)
8/13/2002	1.03E+01	2.33E+00
9/16/2002	9.10E+00	2.21E+00
10/16/2002	8.80E+00	2.17E+00
1/13/2003	9.00E+00	2.20E+00
4/10/2003	8.30E+00	2.12E+00
7/16/2003	8.20E+00	2.10E+00
10/14/2003	8.30E+00	2.12E+00
1/13/2004	8.20E+00	2.10E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 2.64E+00
Date Collected	Result	· · · · ·
Date Collected 8/13/2002	Result 1.40E+01	2.64E+00
Date Collected 8/13/2002 9/16/2002	Result 1.40E+01 1.28E+01	2.64E+00 2.55E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 1.40E+01 1.28E+01 1.23E+01	2.64E+00 2.55E+00 2.51E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 1.40E+01 1.28E+01 1.23E+01 1.27E+01	2.64E+00 2.55E+00 2.51E+00 2.54E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 1.40E+01 1.28E+01 1.23E+01 1.27E+01 1.28E+01	2.64E+00 2.55E+00 2.51E+00 2.54E+00 2.55E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t Yes	2.03E+01	YES	3.01E+00	N/A
MW373	Downgradient	t Yes	2.11E+02	2 YES	5.35E+00	N/A
MW385	Sidegradient	Yes	1.94E+01	YES	2.97E+00	N/A
MW388	Downgradient	t Yes	2.07E+01	YES	3.03E+00	N/A
MW392	Downgradient	t Yes	7.43E+00) NO	2.01E+00	N/A
MW395	Upgradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW397	Upgradient	Yes	1.14E+01	NO	2.43E+00	N/A
N/A - Resul	ts identified as N	Ion-Detects	during lab	oratory analysis or	data validatio	n and were not

included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances	
MW370	
MW373	
MW385	
MW388	

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution. CV

- S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5
- Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)TL
- Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Technetium-99 UNITS: pCi/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 11.359	S= 9.138	CV(1)= 0.805	K factor**= 2.523	TL(1)= 3.44E+01	LL(1)= N/A
Statistics-Transformed Background Data	X= 2.398	S = 0.859	CV(2)= 0.358	K factor**= 2.523	TL(2)= 3.25E+00	LL(2)=N/A

Historical Bac Upgradient W		a from nsformed Result
Well Number:	MW395	
Date Collected	Result	LN(Result)
8/13/2002	2.08E+01	3.03E+00
9/16/2002	1.62E+01	2.79E+00
10/16/2002	8.28E+00	2.11E+00
1/13/2003	1.30E+01	2.56E+00
4/10/2003	-9.37E+00	#Func!
7/16/2003	8.26E-01	-1.91E-01
10/14/2003	1.41E+01	2.65E+00
1/13/2004	0.00E+00	#Func!
Well Number:	MW397	
Date Collected	Result	LN(Result)
8/13/2002	6.06E+00	1.80E+00
9/16/2002	1.73E+01	2.85E+00
10/17/2002	2.57E+01	3.25E+00
1/13/2003	2.09E+01	3.04E+00
4/8/2003	2.01E+01	3.00E+00
7/16/2003	9.20E+00	2.22E+00
10/14/2003	1.01E+01	2.31E+00
1/13/2004	8.54E+00	2.14E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

#Because the natural log was not possible for all background values, the TL was considered equal to the maximum background value.

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	P LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	1.10E+01	N/A	2.40E+00	N/A
MW373	Downgradient	No	-6.18E+0	0 N/A	#Error	N/A
MW385	Sidegradient	Yes	4.36E+01	YES	3.78E+00	N/A
MW388	Downgradient	Yes	3.55E+01	YES	3.57E+00	N/A
MW392	Downgradient	No	-5.13E+0	0 N/A	#Error	N/A
MW395	Upgradient	No	2.80E+00) N/A	1.03E+00	N/A
MW397	Upgradient	No	1.90E+01	N/A	2.94E+00	N/A
N/A Doon	Its identified as N	on Dotoota	during lab	arotory analyzic a	r data validatio	n and wara not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to historical background data.

Wells with Exceedances MW385 MW388

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical AnalysisHistorical Background ComparisonTotal Organic Carbon (TOC)UNITS: mg/LLRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 1.544	S = 0.856	CV(1)= 0.554	K factor**= 2.523	TL(1)= 3.70E+00	LL(1)=N/A
Statistics-Transformed Background Data	X = 0.325	S = 0.452	CV(2)= 1.393	K factor**= 2.523	TL(2)= 1.46E+00	LL(2)=N/A

	kground Data from fells with Transformed Result
Well Number:	MW395

ti en raunoen.	11110000	
Date Collected	Result	LN(Result)
8/13/2002	1.60E+00	4.70E-01
9/16/2002	1.10E+00	9.53E-02
10/16/2002	1.00E+00	0.00E+00
1/13/2003	2.00E+00	6.93E-01
4/10/2003	3.40E+00	1.22E+00
7/16/2003	2.00E+00	6.93E-01
10/14/2003	1.00E+00	0.00E+00
1/13/2004	1.00E+00	0.00E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 0.00E+00
Date Collected	Result	
Date Collected 8/13/2002	Result 1.00E+00	0.00E+00
Date Collected 8/13/2002 9/16/2002	Result 1.00E+00 1.00E+00	0.00E+00 0.00E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 1.00E+00 1.00E+00 1.00E+00	0.00E+00 0.00E+00 0.00E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 1.00E+00 1.00E+00 1.00E+00 3.60E+00	0.00E+00 0.00E+00 0.00E+00 1.28E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 1.00E+00 1.00E+00 1.00E+00 3.60E+00 1.90E+00	0.00E+00 0.00E+00 0.00E+00 1.28E+00 6.42E-01
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 1.00E+00 1.00E+00 1.00E+00 3.60E+00 1.90E+00 1.10E+00	0.00E+00 0.00E+00 0.00E+00 1.28E+00 6.42E-01 9.53E-02

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradien	t Yes	6.36E-01	NO	-4.53E-01	N/A
MW373	Downgradien	t Yes	9.53E-01	NO	-4.81E-02	N/A
MW385	Sidegradient	Yes	8.00E-01	NO	-2.23E-01	N/A
MW388	Downgradien	t Yes	7.95E-01	NO	-2.29E-01	N/A
MW392	Downgradien	t Yes	4.37E-01	NO	-8.28E-01	N/A
MW395	Upgradient	Yes	5.24E-01	NO	-6.46E-01	N/A
MW397	Upgradient	Yes	4.44E-01	NO	-8.12E-01	N/A
11/1 D						

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Total Organic Halides (TOX) UNITS: ug/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 31.513	S = 18.609	CV(1)= 0.591	K factor**= 2.523	TL(1)= 7.85E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 3.240	S = 0.707	CV(2)= 0.218	K factor**= 2.523	TL(2)= 5.02E+00	LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result					
Well Number:	MW395				
Date Collected	Result	LN(Result)			
8/13/2002	5.00E+01	3.91E+00			
9/16/2002	5.00E+01	3.91E+00			
10/16/2002	5.00E+01	3.91E+00			
1/13/2003	1.83E+01	2.91E+00			
4/10/2003	5.12E+01	3.94E+00			
7/16/2003	4.26E+01	3.75E+00			
10/14/2003	1.23E+01	2.51E+00			
1/13/2004	1.00E+01	2.30E+00			
Well Number:	MW397				
Date Collected	Result	LN(Result)			

Well Number:	MW397	
Date Collected	Result	LN(Result)
8/13/2002	5.00E+01	3.91E+00
9/16/2002	5.00E+01	3.91E+00
10/17/2002	5.00E+01	3.91E+00
1/13/2003	1.20E+01	2.48E+00
4/8/2003	1.99E+01	2.99E+00
7/16/2003	1.79E+01	2.88E+00
10/14/2003	1.00E+01	2.30E+00
1/13/2004	1.00E+01	2.30E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradien	t Yes	5.23E+01	l NO	3.96E+00	N/A
MW373	Downgradien	t Yes	3.57E+01	l NO	3.58E+00	N/A
MW385	Sidegradient	Yes	1.67E+01	l NO	2.82E+00	N/A
MW388	Downgradien	t No	1.00E+01	l N/A	2.30E+00	N/A
MW392	Downgradien	t Yes	2.11E+01	l NO	3.05E+00	N/A
MW395	Upgradient	No	1.00E+01	l N/A	2.30E+00	N/A
MW397	Upgradient	Yes	3.56E+00) NO	1.27E+00	N/A
N/A Pecu	Its identified as N	Ion Detects	during lab	oratory analysis	or data validation	n and were not

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Vanadium UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.021 $S = 0.002$	CV(1)= 0.105	K factor**= 2.523	TL(1)= 2.69E-02 LL(1)=N/A
Statistics-Transformed Background Data	X =-3.856 S = 0.100	CV(2) =-0.026	K factor**= 2.523	TL(2)= -3.60E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result						
Well Number:	Well Number: MW395					
Date Collected	Result	LN(Result)				
8/13/2002	2.50E-02	-3.69E+00				
9/16/2002	2.50E-02	-3.69E+00				

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

MW397

2.50E-02

2.50E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

2.00E-02

Result

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

LN(Result)

-3.69E+00

-3.69E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

-3.91E+00

10/16/2002

1/13/2003

7/16/2003

10/14/2003

1/13/2004

4/12/2004

8/13/2002

9/16/2002

10/17/2002

1/13/2003

4/8/2003

7/16/2003

10/14/2003

1/13/2004

Well Number:

Date Collected

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW373	Downgradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW385	Sidegradient	Yes	3.37E-03	NO	-5.69E+00	N/A
MW388	Downgradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW392	Downgradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW395	Upgradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW397	Upgradient	No	2.00E-02	N/A	-3.91E+00	N/A

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Historical Background Comparison Zinc UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is evidence of an exceedance of the statistically-derived historical background concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 0.044 $S = 0.03$	4 CV(1)=0.760	K factor**= 2.523	TL(1)= 1.29E-01 LL(1)=N/A
Statistics-Transformed Background Data	X =-3.342 S = 0.65	CV(2) =-0.197	K factor**= 2.523	TL(2)= -1.68E+00 LL(2)=N/A

	kground Data from fells with Transformed Result
Well Number:	MW395

wen runnber.	11111375	
Date Collected	Result	LN(Result)
8/13/2002	1.00E-01	-2.30E+00
9/16/2002	1.00E-01	-2.30E+00
10/16/2002	2.50E-02	-3.69E+00
1/13/2003	3.50E-02	-3.35E+00
4/10/2003	3.50E-02	-3.35E+00
7/16/2003	2.00E-02	-3.91E+00
10/14/2003	2.00E-02	-3.91E+00
1/13/2004	2.00E-02	-3.91E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) -2.30E+00
Date Collected	Result	()
Date Collected 8/13/2002	Result 1.00E-01	-2.30E+00
Date Collected 8/13/2002 9/16/2002	Result 1.00E-01 1.00E-01	-2.30E+00 -2.30E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002	Result 1.00E-01 1.00E-01 2.50E-02	-2.30E+00 -2.30E+00 -3.69E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003	Result 1.00E-01 1.00E-01 2.50E-02 3.50E-02	-2.30E+00 -2.30E+00 -3.69E+00 -3.35E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003	Result 1.00E-01 1.00E-01 2.50E-02 3.50E-02 3.50E-02	-2.30E+00 -2.30E+00 -3.69E+00 -3.35E+00 -3.35E+00
Date Collected 8/13/2002 9/16/2002 10/17/2002 1/13/2003 4/8/2003 7/16/2003	Result 1.00E-01 1.00E-01 2.50E-02 3.50E-02 3.50E-02 2.00E-02	-2.30E+00 -2.30E+00 -3.69E+00 -3.35E+00 -3.35E+00 -3.91E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL((1)? LN(Result)	LN(Result) >TL(2)
MW370	Downgradien	t Yes	7.61E-03	NO	-4.88E+00	N/A
MW373	Downgradien	t Yes	5.84E-03	NO	-5.14E+00	N/A
MW385	Sidegradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW388	Downgradien	t No	2.00E-02	N/A	-3.91E+00	N/A
MW392	Downgradien	t Yes	3.37E-03	NO	-5.69E+00	N/A
MW395	Upgradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW397	Upgradient	No	2.00E-02	N/A	-3.91E+00	N/A
NUA D	1. 1	T D ()	1 . 11			1 /

N/A - Results identified as Non-Detects during laboratory analysis or data validation and were not included in the statistical evaluation. Additionally for parameters that have MCLs, where the result for a well did not exceed the MCL value, that well was not included in the statistical evaluation.

Conclusion of Statistical Analysis on Historical Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from historical background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

ATTACHMENT D2

COMPARISON OF CURRENT DATA TO ONE-SIDED UPPER TOLERANCE INTERVAL TEST CALCULATED USING CURRENT BACKGROUND DATA

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C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonOxidation-Reduction PotentialUNITS: mVUCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

austics-Dackg	ground Data	X = 317.62	5 S =	68.750	CV(1)= 0.216	K fac	tor**= 3.	.188 TL(1	l)= 5.37E+02	LL(1)= N/A
ackground Data X= 5.74		X = 5.741	S=	0.212	CV(2)= 0.037	K fac	tor**= 3.	.188 TL(2	2)= 6.42E+00	LL(2)= N/A
Current Backs Wells with Tra	2	from Upgradient esult					1,	, assume n	(1) is less th ormal distri th statistical	
Well Number:	MW396							tilizing TL		
Date Collected	Result	LN(Result)								
Date Concetted										
	2.40E+02	5.48E+00								
1/25/2023	2.40E+02 2.50E+02	5.48E+00 5.52E+00								
1/25/2023 4/27/2023										
1/25/2023 4/27/2023 7/27/2023	2.50E+02	5.52E+00								
1/25/2023 4/27/2023 7/27/2023 10/18/2023	2.50E+02 3.15E+02	5.52E+00 5.75E+00		Curr	ent Quarter Data					
1/25/2023 4/27/2023 7/27/2023 10/18/2023 1/30/2024	2.50E+02 3.15E+02 2.62E+02	5.52E+00 5.75E+00 5.57E+00						D. 1/2 TI /1		
1/25/2023 4/27/2023 7/27/2023 10/18/2023 1/30/2024 4/16/2024	2.50E+02 3.15E+02 2.62E+02 3.08E+02	5.52E+00 5.75E+00 5.57E+00 5.73E+00		Curr Well N		Detected?	? Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2
1/25/2023 4/27/2023 7/27/2023 10/18/2023 1/30/2024 4/16/2024 7/24/2024	2.50E+02 3.15E+02 2.62E+02 3.08E+02 3.53E+02	5.52E+00 5.75E+00 5.57E+00 5.73E+00 5.87E+00			lo. Gradient	Detected? Yes	? Result 1.68E+02	`)? LN(Result) 5.13E+00	LN(Result) >TL(2 N/A
Jac concerct 1/25/2023 4/27/2023 7/27/2023 10/18/2023 1/30/2024 4/16/2024 7/24/2024 10/15/2024	2.50E+02 3.15E+02 2.62E+02 3.08E+02 3.53E+02 3.73E+02	5.52E+00 5.75E+00 5.57E+00 5.73E+00 5.87E+00 5.92E+00		Well N	Io. Gradient 86 Sidegradient	Yes		NO NO	· · · ·	LN(Result) >TL(2 N/A N/A
1/25/2023 4/27/2023 7/27/2023 10/18/2023 1/30/2024 4/16/2024 7/24/2024	2.50E+02 3.15E+02 2.62E+02 3.08E+02 3.53E+02 3.73E+02	5.52E+00 5.75E+00 5.57E+00 5.73E+00 5.87E+00 5.92E+00		Well N MW3	Io. Gradient 86 Sidegradient 90 Downgradient	Yes Yes	1.68E+02	2 NO 2 NO	5.13E+00	N/A

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from current background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonTechnetium-99UNITS: pCi/LUCRS

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Back	ground Data	X =-1.005	S= 6.961	CV(1)= -6.927	K factor**= 3.1	TL(1)= 2.12E+01	LL(1)= N/A
Statistics-Trans Background Da		X =1.480	S= 0.571	CV(2)= 0.386	K factor**= 3.1	TL(2)= 2.22E+00	LL(2)=N/A
Current Back Wells with Tr Well Number:	0	from Upgradient esult			1, co	ecause CV(1) is less th assume normal distri ntinue with statistical ilizing TL(1).	bution and
Date Collected 1/25/2023 4/27/2023 7/27/2023	Result -1.01E+01 9.19E+00 3.97E+00	LN(Result) #Func! 2.22E+00 1.38E+00			po TI	Because the natural log ssible for all backgro was considered equa aximum background	und values, the al to the
10/18/2023 1/30/2024	4.46E+00 -5.21E+00	1.50E+00 #Func!	Cu	rrent Quarter Data			
4/16/2024 7/24/2024	-3.78E+00 -8.86E+00	#Func! #Func!				Result >TL(1)? LN(Result) YES 4.35E+00	LN(Result) >TL(2) N/A
10/15/2024	2.29E+00	8.29E-01	IVI W	390 Downgradient	res /./5E+01	1E5 4.35E+00	1N/A

Conclusion of Statistical Analysis on Current Data

Wells with Exceedances MW390

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Current Background Comparison Beta activity UNITS: pCi/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

tatistics-Back	ground Data	X =11.726	S=	10.441	CV(1)= 0.890	K fac	ctor**= 2.5	523 TL(1)=	= 3.81E+01	LL(1)= N/A
tatistics-Trans ackground Da		X = 2.235	S=	0.796	CV(2)= 0.356	K fac	ctor**= 2.5	523 TL(2)=	= 3.64E+00	LL(2)=N/A
Current Back Wells with Tr		from Upgradient esult					1,	ecause CV(1 assume nor ntinue with	mal distri	
Well Number:	MW220						ut	ilizing TL(1	.).	
Date Collected	Result	LN(Result)					#B	Because the	natural lo	g was not
1/23/2023	3.82E+01	3.64E+00							•	und values, the
5/1/2023	1.07E+01	2.37E+00					-	L was consi	0	
7/28/2023	6.86E+00	1.93E+00						aximum ba	-	
10/16/2023	1.90E+01	2.94E+00			_				8	
1/29/2024	1.82E+01	2.90E+00		Cur	rent Quarter Data					
4/11/2024	2.95E+01	3.38E+00		337 11			0 D 1/ I			
7/24/2024	1.76E+01	2.87E+00								LN(Result) >TL(2)
10/14/2024	1.06E+01	2.36E+00		MW3	87 Downgradient	t Yes	7.41E+01	YES	4.31E+00	N/A
Well Number:	MW394									
Date Collected	Result	LN(Result)								
1/25/2023	-3.31E-01	#Func!								
4/27/2023	7.26E+00	1.98E+00								
7/27/2023	4.40E+00	1.48E+00								
10/17/2023	2.65E+00	9.75E-01								
1/30/2024	3.38E+00	1.22E+00								
4/16/2024	7.19E+00	1.97E+00								
7/24/2024	3.93E+00	1.37E+00								
10/15/2024	8.47E+00	2.14E+00								

Conclusion of Statistical Analysis on Current Data

Wells with Exceedances MW387

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Current Background Comparison Calcium UNITS: mg/L URGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 24.906	S = 3.042	CV(1)= 0.122	K factor**= 2.523	TL(1)= 3.26E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 3.208	S = 0.127	CV(2)= 0.040	K factor**= 2.523	TL(2)= 3.53E+00	LL(2)= N/A

Current Background Data from Upgradient Wells with Transformed Result Well Number: MW220 Date Collected Result LN(Result) 1/23/2023 2.01E+01 3.00E+00 5/1/2023 2.82E+01 3.34E+00 2.21E+01 7/28/2023 3.10E+00 10/16/2023 2.16E+01 3.07E+00 1/29/2024 2.02E+01 3.01E+00 4/11/2024 2.33E+01 3.15E+00 7/24/2024 2.55E+01 3.24E+00 10/14/2024 2.05E+01 3.02E+00 MW394 Well Number: Date Collected Result LN(Result) 1/25/2023 2.69E+01 3.29E+00 4/27/2023 2.69E+01 3.29E+00 7/27/2023 2.65E+01 3.28E+00 10/17/2023 2.79E+01 3.33E+00

3.29E+00

3.33E+00

3.31E+00

3.28E+00

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW372	Downgradient	t Yes	6.69E+01	YES	4.20E+00	N/A

Conclusion of Statistical Analysis on Current Data

1/30/2024

4/16/2024

7/24/2024

10/15/2024

2.68E+01

2.79E+01

2.75E+01

2.66E+01

Wells with Exceedances MW372

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonConductivityUNITS: umho/cmURGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 384.500 S	= 35.054	CV(1)= 0.091	K factor**= 2.523	TL(1)= 4.73E+02	LL(1)= N/A
Statistics-Transformed Background Data	X = 5.948 S	= 0.094	CV(2)= 0.016	K factor**= 2.523	TL(2)= 6.19E+00	LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Well Number:	MW220	
Date Collected	Result	LN(Result)
1/23/2023	3.34E+02	5.81E+00
5/1/2023	4.20E+02	6.04E+00
7/31/2023	3.54E+02	5.87E+00
10/16/2023	3.23E+02	5.78E+00
1/29/2024	3.31E+02	5.80E+00
4/11/2024	3.78E+02	5.93E+00
7/24/2024	4.17E+02	6.03E+00
10/14/2024	3.42E+02	5.83E+00
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 6.00E+00
Date Collected	Result	<pre> /</pre>
Date Collected 1/25/2023	Result 4.04E+02	6.00E+00
Date Collected 1/25/2023 4/27/2023	Result 4.04E+02 4.09E+02	6.00E+00 6.01E+00
Date Collected 1/25/2023 4/27/2023 7/27/2023	Result 4.04E+02 4.09E+02 4.15E+02	6.00E+00 6.01E+00 6.03E+00
Date Collected 1/25/2023 4/27/2023 7/27/2023 10/17/2023	Result 4.04E+02 4.09E+02 4.15E+02 4.03E+02	6.00E+00 6.01E+00 6.03E+00 6.00E+00
Date Collected 1/25/2023 4/27/2023 7/27/2023 10/17/2023 1/30/2024	Result 4.04E+02 4.09E+02 4.15E+02 4.03E+02 4.03E+02	6.00E+00 6.01E+00 6.03E+00 6.00E+00 6.01E+00

Current Background Data from Upgradient

Wells with Transformed Result

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW372	Downgradien	t Yes	7.58E+02	YES	6.63E+00	N/A

Conclusion of Statistical Analysis on Current Data

Wells with Exceedances MW372

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonDissolved SolidsUNITS: mg/LURGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 193.37	5 S= 21.061	CV(1)= 0.109	K factor**= 2.523	TL(1)= 2.47E+02	LL(1)=N/A
Statistics-Transformed Background Data	X= 5.259	S = 0.107	CV(2)= 0.020	K factor**= 2.523	TL(2)= 5.53E+00	LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Date Collected	Result	LN(Result)
1/23/2023	1.72E+02	5.15E+00
5/1/2023	2.02E+02	5.31E+00
7/31/2023	1.76E+02	5.17E+00
10/16/2023	1.58E+02	5.06E+00
1/29/2024	1.90E+02	5.25E+00
4/11/2024	1.98E+02	5.29E+00
7/24/2024	2.46E+02	5.51E+00
10/14/2024	1.81E+02	5.20E+00
Well Number:	MW394	
Date Collected	Result	LN(Result)
Date Collected 1/25/2023	Result 1.84E+02	LN(Result) 5.21E+00
		· · · · · ·
1/25/2023	1.84E+02	5.21E+00
1/25/2023 4/27/2023	1.84E+02 1.96E+02	5.21E+00 5.28E+00
1/25/2023 4/27/2023 7/27/2023	1.84E+02 1.96E+02 2.01E+02	5.21E+00 5.28E+00 5.30E+00
1/25/2023 4/27/2023 7/27/2023 10/17/2023	1.84E+02 1.96E+02 2.01E+02 1.70E+02	5.21E+00 5.28E+00 5.30E+00 5.14E+00
1/25/2023 4/27/2023 7/27/2023 10/17/2023 1/30/2024	1.84E+02 1.96E+02 2.01E+02 1.70E+02 2.00E+02	5.21E+00 5.28E+00 5.30E+00 5.14E+00 5.30E+00
1/25/2023 4/27/2023 7/27/2023 10/17/2023 1/30/2024 4/16/2024	1.84E+02 1.96E+02 2.01E+02 1.70E+02 2.00E+02 1.92E+02	5.21E+00 5.28E+00 5.30E+00 5.30E+00 5.30E+00 5.26E+00

Current Background Data from Upgradient

MW220

Wells with Transformed Result

Well Number:

Current	Quarter Data					
Well No.	Gradient	Detected	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)
MW372	Downgradien	t Yes	4.46E+02	YES	6.10E+00	N/A

Conclusion of Statistical Analysis on Current Data

Wells with Exceedances MW372

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonMagnesiumUNITS: mg/LURGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =10.353 S = 1.337	CV(1)= 0.129	K factor**= 2.523	TL(1)= 1.37E+01 LL(1)=N/A
Statistics-Transformed Background Data	X =2.329 S = 0.135	CV(2)= 0.058	K factor**= 2.523	TL(2)= 2.67E+00 LL(2)= N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected	? Result	Result >TL(1)	? LN(Result)	LN(Result) >TL(2)	
MW372	Downgradient	Yes	2.43E+01	YES	3.19E+00	N/A	
MW387	Downgradient	Yes	1.61E+01	YES	2.78E+00	N/A	

well Number:	MW220	
Date Collected	Result	LN(Result)
1/23/2023	8.28E+00	2.11E+00
- 11 10 0 0 0	4.405.04	2 40E . 00

Wells with Transformed Result

W-11 March and MW2220

Current Background Data from Upgradient

19E+01	2.48E+00
97E+00	2.19E+00
85E+00	2.18E+00
23E+00	2.11E+00
96E+00	2.30E+00
04E+01	2.34E+00
55E+00	2.15E+00
01/204	
AW394	
Aw394 Result	LN(Result)
	LN(Result) 2.43E+00
Result	· · · · · ·
Result 14E+01	2.43E+00
Result 14E+01 13E+01	2.43E+00 2.42E+00
Result 14E+01 13E+01 07E+01	2.43E+00 2.42E+00 2.37E+00
Result 14E+01 13E+01 07E+01 16E+01	2.43E+00 2.42E+00 2.37E+00 2.45E+00
Result 14E+01 13E+01 07E+01 16E+01 10E+01	2.43E+00 2.42E+00 2.37E+00 2.45E+00 2.40E+00
	19E+01 97E+00 85E+00 23E+00 96E+00 04E+01 55E+00

Conclusion of Statistical Analysis on Current Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

- CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.
- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

** Read from Table 5, Appendix B of Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Guidance, EPA, 1989, based on total number of background results - The K-factor for pH to account for a two-sided tolerance interval instead of a one-sided tolerance limit. The K-factor for pH was computed using a formula from NIST/SEMATECH e-Handbook of Statistical Methods, http://www.itl.nist.gov/div898/handbook/,2009.

Wells with Exceedances MW372 MW387

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonOxidation-Reduction PotentialUNITS: mVURGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 443.125 S = 54.798	CV(1)= 0.124	K factor**= 2.523	TL(1)= 5.81E+02 LL(1)=N/A
Statistics-Transformed Background Data	X = 6.087 S = 0.125	CV(2)= 0.020	K factor**= 2.523	TL(2)= 6.40E+00 LL(2)= N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)	
MW220	Upgradient	Yes	4.39E+02	NO	6.09E+00	N/A	
MW221	Sidegradient	Yes	4.77E+02	NO	6.17E+00	N/A	
MW222	Sidegradient	Yes	4.26E+02	NO	6.06E+00	N/A	
MW223	Sidegradient	Yes	4.11E+02	NO	6.02E+00	N/A	
MW224	Sidegradient	Yes	4.36E+02	NO	6.08E+00	N/A	
MW369	Downgradient	t Yes	4.63E+02	NO	6.14E+00	N/A	
MW372	Downgradient	t Yes	4.10E+02	NO	6.02E+00	N/A	
MW384	Sidegradient	Yes	4.69E+02	NO	6.15E+00	N/A	
MW387	Downgradient	t Yes	4.57E+02	NO	6.12E+00	N/A	

Current Background Data from Upgradient Wells with Transformed Result Well Number: MW220

wen Number.	IVI VV 220	
Date Collected	Result	LN(Result)
1/23/2023	3.66E+02	5.90E+00
5/1/2023	4.77E+02	6.17E+00
7/31/2023	3.77E+02	5.93E+00
10/16/2023	4.06E+02	6.01E+00
1/29/2024	4.63E+02	6.14E+00
4/11/2024	3.66E+02	5.90E+00
7/24/2024	3.92E+02	5.97E+00
10/14/2024	5.00E+02	6.21E+00
Well Number:	MW394	
Well Number: Date Collected	MW394 Result	LN(Result)
		LN(Result) 6.15E+00
Date Collected	Result	. ,
Date Collected 1/25/2023	Result 4.69E+02	6.15E+00
Date Collected 1/25/2023 4/27/2023	Result 4.69E+02 4.51E+02	6.15E+00 6.11E+00
Date Collected 1/25/2023 4/27/2023 7/27/2023	Result 4.69E+02 4.51E+02 4.94E+02	6.15E+00 6.11E+00 6.20E+00
Date Collected 1/25/2023 4/27/2023 7/27/2023 10/17/2023	Result 4.69E+02 4.51E+02 4.94E+02 4.61E+02	6.15E+00 6.11E+00 6.20E+00 6.13E+00
Date Collected 1/25/2023 4/27/2023 7/27/2023 10/17/2023 1/30/2024	Result 4.69E+02 4.51E+02 4.94E+02 4.61E+02 5.18E+02	6.15E+00 6.11E+00 6.20E+00 6.13E+00 6.25E+00
Date Collected 1/25/2023 4/27/2023 7/27/2023 10/17/2023 1/30/2024 4/16/2024	Result 4.69E+02 4.51E+02 4.94E+02 4.61E+02 5.18E+02 4.12E+02	6.15E+00 6.11E+00 6.20E+00 6.13E+00 6.25E+00 6.02E+00

Conclusion of Statistical Analysis on Current Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from current background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Current Background Comparison URGA** Sodium UNITS: mg/L

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =37.113 S = 5.817	CV(1)= 0.157	K factor**= 2.523	TL(1)= 5.18E+01 LL(1)=N/A
Statistics-Transformed	X = 3.604 S = 0.143	CV(2)= 0.040	K factor**= 2.523	TL(2)= 3.97E+00 LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)	
MW224	Sidegradient	Yes	6.19E+01	YES	4.13E+00	N/A	
MW372	Downgradient	Yes	5.95E+01	YES	4.09E+00	N/A	

Conclusion of Statistical Analysis on Current Data

Background Data

Well Number:

Date Collected

1/23/2023

5/1/2023

7/28/2023

10/16/2023

1/29/2024

4/11/2024

7/24/2024

10/14/2024

Well Number:

Date Collected

1/25/2023

4/27/2023

7/27/2023

10/17/2023

1/30/2024

4/16/2024

7/24/2024

10/15/2024

Current Background Data from Upgradient

LN(Result)

3.63E+00

3.97E+00

3.65E+00

3.62E+00

3.58E+00

3.77E+00

3.83E+00

3.61E+00

LN(Result)

3.53E+00

3.50E+00

3.46E+00

3.54E+00

3.45E+00

3.53E+00

3.50E+00

3.49E+00

MW220

Result

3.77E+01

5.30E+01

3.85E+01

3.72E+01

3.58E+01

4.34E+01

4.60E+01

3.69E+01

MW394

3.40E+01

3.32E+01

3.18E+01

3.45E+01

3.16E+01

3.41E+01

3.32E+01

3.29E+01

Result

Wells with Transformed Result

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5

- LL Lower Tolerance Limit, LL = X (K * S)TL Upper Tolerance Limit, TL = X + (K * S),
- Х Mean, X = (sum of background results)/(count of background results)

** Read from Table 5, Appendix B of Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Guidance, EPA, 1989, based on total number of background results - The K-factor for pH to account for a two-sided tolerance interval instead of a one-sided tolerance limit. The K-factor for pH was computed using a formula from NIST/SEMATECH e-Handbook of Statistical Methods, http://www.itl.nist.gov/div898/handbook/,2009.

Wells with Exceedances MW224 MW372

C-746-S/T First Quarter 2025 Statistical Analysis **Current Background Comparison URGA** Sulfate UNITS: mg/L

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =14.744 S = 3.401	CV(1)= 0.231	K factor**= 2.523	TL(1)= 2.33E+01 LL(1)=N/A
Statistics-Transformed Background Data	X =2.667 S = 0.222	CV(2)= 0.083	K factor**= 2.523	TL(2)= 3.23E+00 LL(2)= N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data								
Well No.	Gradient	Detected?	Result	Result >TL(1)	2 LN(Result)	LN(Result) >TL(2)		
MW220	Upgradient	Yes	1.91E+01	NO	2.95E+00	N/A		
MW224	Sidegradient	Yes	1.93E+01	NO	2.96E+00	N/A		
MW372	Downgradient	t Yes	1.49E+02	YES	5.00E+00	N/A		
MW384	Sidegradient	Yes	1.95E+01	NO	2.97E+00	N/A		
MW387	Downgradient	t Yes	2.57E+01	YES	3.25E+00	N/A		

Conclusion of Statistical Analysis on Current Data

Current Background Data from Upgradient

LN(Result)

2.80E+00

3.00E+00

2.88E+00

2.74E+00

2.69E+00

2.92E+00

3.07E+00

2.81E+00

LN(Result)

2.49E+00

2.46E+00

2.50E+00

2.46E+00

2.45E+00

2.48E+00

2.46E+00

2.46E+00

MW220

Result

1.64E+01

2.00E+01

1.78E+01

1.55E+01

1.47E+01

1.86E+01

2.16E+01

1.66E+01

MW394

1.21E+01

1.17E+01

1.22E+01

1.17E+01

1.16E+01

1.20E+01

1.17E+01

1.17E+01

Result

Wells with Transformed Result

Well Number:

Date Collected

1/23/2023

5/1/2023

7/31/2023

10/16/2023

1/29/2024

4/11/2024

7/24/2024

10/14/2024

1/25/2023

4/27/2023

7/27/2023

10/17/2023

1/30/2024

4/16/2024

7/24/2024

10/15/2024

Well Number: Date Collected

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5

LL Lower Tolerance Limit, LL = X - (K * S)TL Upper Tolerance Limit, TL = X + (K * S),

Х Mean, X = (sum of background results)/(count of background results)

** Read from Table 5, Appendix B of Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Guidance, EPA, 1989, based on total number of background results - The K-factor for pH to account for a two-sided tolerance interval instead of a one-sided tolerance limit. The K-factor for pH was computed using a formula from NIST/SEMATECH e-Handbook of Statistical Methods, http://www.itl.nist.gov/div898/handbook/,2009.

Wells with Exceedances MW372 MW387

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonTechnetium-99UNITS: pCi/LURGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 9.912	S= 6.767	CV(1)= 0.683	K factor**= 2.523	TL(1)= 2.70E+01 LL(1)=N/A	
Statistics-Transformed Background Data	X= 1.849	S= 1.283	CV(2)= 0.694	K factor**= 2.523	TL(2)= 5.09E+00 LL(2)=N/A	

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data							
Well No.	Gradient	Detected	Result	Result >TL(1)? LN(Result)	LN(Result) >TL(2)	
MW369	Downgradient	Yes	5.27E+01	YES	3.96E+00	N/A	
MW384	Sidegradient	Yes	4.68E+01	YES	3.85E+00	N/A	
MW387	Downgradient	Yes	8.86E+01	YES	4.48E+00	N/A	

Conclusion of Statistical Analysis on Current Data

Current Background Data from Upgradient

LN(Result)

2.65E+00

2.42E+00

2.95E+00

2.76E+00

3.00E+00

2.80E+00

1.03E+00

2.69E+00

LN(Result)

4.95E-01

1.92E+00

1.46E+00

2.79E+00

8.50E-01

1.77E+00

1.92E+00

-1.92E+00

MW220

Result

1.42E+01

1.13E+01

1.91E+01

1.58E+01

2.00E+01

1.64E+01

2.79E+00

1.48E+01

MW394

1.64E+00

6.79E+00

4.32E+00

1.63E+01

2.34E+00

5.85E+00

6.82E+00

1.47E-01

Result

Wells with Transformed Result

Well Number:

Date Collected

1/23/2023

5/1/2023

7/28/2023

10/16/2023

1/29/2024

4/11/2024

7/24/2024

10/14/2024

1/25/2023

4/27/2023

7/27/2023

10/17/2023

1/30/2024

4/16/2024

7/24/2024

10/15/2024

Well Number: Date Collected

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

Wells with Exceedances MW369 MW384 MW387

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Current Background Comparison Calcium UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 22.644 $S = 4.621$	CV(1)= 0.204	K factor**= 2.523	TL(1)= 3.43E+01 LL(1)=N/A	ł
Statistics-Transformed Background Data	X =3.100 S = 0.207	CV(2) =0.067	K factor**= 2.523	TL(2)= 3.62E+00 LL(2)=N/A	ł

Current Background Data from Upgradient Wells with Transformed Result Well Number: MW395 Date Collected LN(Result) Result 1/25/2023 2.69E+01 3.29E+00 4/27/2023 2.71E+01 3.30E+00 7/27/2023 2.62E+01 3.27E+00 10/18/2023 2.78E+01 3.33E+00 1/30/2024 2.66E+01 3.28E+00 4/16/2024 2.78E+01 3.33E+00 7/24/2024 2.69E+01 3.29E+00 10/15/2024 2.74E+01 3.31E+00 MW397 Well Number: Date Collected Result LN(Result) 1/23/2023 2.90E+00 1.81E+01 5/1/2023 1.87E+01 2.93E+00 7/27/2023 1.76E+01 2.87E+00 10/16/2023 1.86E+01 2.92E+00 1/30/2024 1.73E+01 2.85E+00 4/15/2024 1.89E+01 2.94E+00 7/22/2024 1.84E+01 2.91E+00 10/16/2024 1.80E+01 2.89E+00

Because CV(1) is less than or equal to
1, assume normal distribution and
continue with statistical analysis
utilizing TL(1).

Current	Quarter Data						
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)	
MW373	Downgradient	Yes	9.10E+01	YES	4.51E+00	N/A	

Conclusion of Statistical Analysis on Current Data

Wells with Exceedances MW373

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

Current Background Comparison C-746-S/T First Quarter 2025 Statistical Analysis Conductivity **LRGA UNITS: umho/cm**

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X = 360.563 S = 40.759	CV(1)= 0.113	K factor**= 2.523	TL(1)= 4.63E+02 LL(1)=N/A
Statistics-Transformed Background Data	X = 5.882 S = 0.114	CV(2)= 0.019	K factor**= 2.523	TL(2)= 6.17E+00 LL(2)= N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW373	Downgradient	Yes	9.45E+02	YES	6.85E+00	N/A
MW388	Downgradient	Yes	5.29E+02	YES	6.27E+00	N/A

Conclusion of Statistical Analysis on Current Data

Current Background Data from Upgradient

LN(Result)

5.97E+00

6.00E+00

5.95E+00

5.95E+00

5.96E+00

5.99E+00

5.97E+00

5.95E+00

LN(Result)

5.77E+00

5.77E+00

5.77E+00

5.73E+00

5.76E+00

5.75E+00

5.76E+00

6.04E+00

MW395

3.93E+02

4.05E+02

3.85E+02

3.83E+02

3.88E+02

4.01E+02

3.91E+02

3.84E+02

MW397

3.22E+02

3.20E+02

3.19E+02

3.09E+02

3.17E+02

3.14E+02

3.18E+02

4.20E+02

Result

Result

Wells with Transformed Result

Well Number:

Date Collected

1/25/2023

4/27/2023

7/27/2023

10/18/2023

1/30/2024

4/16/2024

7/24/2024

10/15/2024

1/23/2023

5/1/2023

7/27/2023

10/16/2023

1/30/2024

4/15/2024

7/22/2024

10/16/2024

Well Number: Date Collected

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5

- LL Lower Tolerance Limit, LL = X (K * S)TL Upper Tolerance Limit, TL = X + (K * S),
- Х Mean, X = (sum of background results)/(count of background results)

** Read from Table 5, Appendix B of Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Guidance, EPA, 1989, based on total number of background results - The K-factor for pH to account for a two-sided tolerance interval instead of a one-sided tolerance limit. The K-factor for pH was computed using a formula from NIST/SEMATECH e-Handbook of Statistical Methods, http://www.itl.nist.gov/div898/handbook/,2009.

Wells with Exceedances MW373 MW388

Well No.	Gradient	Detected	? Result	Result >TL	(1)? LN(Result)	LN(Result) >TL(2)
MW373	Downgradien	t Yes	9.45E+02	YES	6.85E+00	N/A
MW388	Downgradien	t Yes	5.29E+02	YES	6.27E+00	N/A

C-746-S/T First Quarter 2025 Statistical Analysis Current Background Comparison Dissolved Solids UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 176.50	0 S = 24.083	CV(1)= 0.136	K factor**= 2.523	TL(1)= 2.37E+02	LL(1)= N/A
Statistics-Transformed Background Data	X= 5.164	S= 0.139	CV(2)= 0.027	K factor**= 2.523	TL(2)= 5.52E+00	LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current Quarter Data						
Well No.	Gradient	Detected	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2
MW373	Downgradient	Yes	5.62E+02	YES	6.33E+00	N/A

Conclusion of Statistical Analysis on Current Data

Current Background Data from Upgradient

LN(Result)

5.19E+00

5.27E+00

5.24E+00

5.17E+00

5.33E+00

5.31E+00

5.37E+00

5.34E+00

LN(Result)

5.06E+00

4.85E+00

5.02E+00

5.11E+00

5.08E+00

5.11E+00

5.08E+00

5.10E+00

MW395

1.80E+02

1.94E+02

1.88E+02

1.76E+02

2.07E+02

2.02E+02

2.14E+02

2.09E+02

MW397

1.58E+02

1.28E+02

1.52E+02

1.65E+02

1.61E+02

1.66E+02

1.60E+02

1.64E+02

Result

Result

Wells with Transformed Result

Well Number:

Date Collected

1/25/2023

4/27/2023

7/27/2023

10/18/2023

1/30/2024

4/16/2024

7/24/2024

10/15/2024

1/23/2023

5/1/2023

7/27/2023

10/16/2023

1/30/2024

4/15/2024

7/22/2024

10/16/2024

Well Number: Date Collected

> Wells with Exceedances MW373

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis **Current Background Comparison LRGA** Magnesium UNITS: mg/L

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X= 9.426	S= 1.911	CV(1)= 0.203	K factor**= 2.523	TL(1)= 1.42E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.224	S= 0.205	CV(2)= 0.092	K factor**= 2.523	TL(2)= 2.74E+00	LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Date Collected	Result	LN(Result)
1/25/2023	1.14E+01	2.43E+00
4/27/2023	1.14E+01	2.43E+00
7/27/2023	1.05E+01	2.35E+00
10/18/2023	1.15E+01	2.44E+00
1/30/2024	1.08E+01	2.38E+00
4/16/2024	1.16E+01	2.45E+00
7/24/2024	1.13E+01	2.42E+00
10/15/2024	1.15E+01	2.44E+00
Well Number:	MW397	
i en ramoen	101 00 5577	
Date Collected	Result	LN(Result)
		LN(Result) 2.04E+00
Date Collected	Result	(
Date Collected 1/23/2023	Result 7.66E+00	2.04E+00
Date Collected 1/23/2023 5/1/2023	Result 7.66E+00 7.95E+00	2.04E+00 2.07E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023	Result 7.66E+00 7.95E+00 7.07E+00	2.04E+00 2.07E+00 1.96E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023	Result 7.66E+00 7.95E+00 7.07E+00 7.83E+00	2.04E+00 2.07E+00 1.96E+00 2.06E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023 1/30/2024	Result 7.66E+00 7.95E+00 7.07E+00 7.83E+00 7.49E+00	2.04E+00 2.07E+00 1.96E+00 2.06E+00 2.01E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023 1/30/2024 4/15/2024	Result 7.66E+00 7.95E+00 7.07E+00 7.83E+00 7.49E+00 7.73E+00	2.04E+00 2.07E+00 1.96E+00 2.06E+00 2.01E+00 2.05E+00

Current Background Data from Upgradient

MW395

Wells with Transformed Result

Well Number:

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)	? LN(Result)	LN(Result) >TL(2)
MW373	Downgradient	t Yes	3.39E+01	YES	3.52E+00	N/A

Conclusion of Statistical Analysis on Current Data

Wells with Exceedances MW373

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, S = [Sum ([(background result-X)^2]/[count of background results -1])]^0.5

LL Lower Tolerance Limit, LL = X - (K * S)TL Upper Tolerance Limit, TL = X + (K * S),

Х Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonOxidation-Reduction PotentialUNITS: mVLRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =403.500 S = 86.216 CV(1) =0.214	K factor**= 2.523 TL(1)= 6.21E+02 LL(1)= N/A
Statistics-Transformed Background Data	X = 5.974 S = 0.250 CV(2) = 0.042	K factor**= 2.523 TL(2)= 6.60E+00 LL(2)= N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	t Yes	6.02E+02	NO	6.40E+00	N/A
MW373	Downgradient	t Yes	4.28E+02	NO	6.06E+00	N/A
MW385	Sidegradient	Yes	4.34E+02	NO	6.07E+00	N/A
MW388	Downgradient	t Yes	4.04E+02	NO	6.00E+00	N/A
MW392	Downgradient	t Yes	4.71E+02	NO	6.15E+00	N/A
MW395	Upgradient	Yes	3.84E+02	NO	5.95E+00	N/A
MW397	Upgradient	Yes	3.89E+02	NO	5.96E+00	N/A

Current Background Data from Upgradient Wells with Transformed Result Well Number: MW395

Date Collected	Result	LN(Result)
1/25/2023	4.25E+02	6.05E+00
4/27/2023	1.90E+02	5.25E+00
7/27/2023	3.02E+02	5.71E+00
10/18/2023	4.09E+02	6.01E+00
1/30/2024	5.09E+02	6.23E+00
4/16/2024	3.99E+02	5.99E+00
7/24/2024	3.93E+02	5.97E+00
10/15/2024	4.60E+02	6.13E+00
Well Number:	MW397	
Well Number: Date Collected	MW397 Result	LN(Result)
		LN(Result) 5.93E+00
Date Collected	Result	· · · · · ·
Date Collected 1/23/2023	Result 3.77E+02	5.93E+00
Date Collected 1/23/2023 5/1/2023	Result 3.77E+02 4.76E+02	5.93E+00 6.17E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023	Result 3.77E+02 4.76E+02 4.05E+02	5.93E+00 6.17E+00 6.00E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023	Result 3.77E+02 4.76E+02 4.05E+02 4.87E+02	5.93E+00 6.17E+00 6.00E+00 6.19E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023 1/30/2024	Result 3.77E+02 4.76E+02 4.05E+02 4.87E+02 5.40E+02	5.93E+00 6.17E+00 6.00E+00 6.19E+00 6.29E+00

Conclusion of Statistical Analysis on Current Data

None of the test wells exceeded the Upper Tolerance Limit, which is evidence that concentrations in these wells are not different from current background concentrations to a statistically-significant level.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

- CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.
- S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$
- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

C-746-S/T First Quarter 2025 Statistical Analysis Current Background Comparison Sodium UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =31.294 S = 1.680	CV(1)= 0.054	K factor**= 2.523	TL(1)= 3.55E+01 LL(1)=N/A
Statistics-Transformed Background Data	X = 3.442 S = 0.053	CV(2)= 0.015	K factor**= 2.523	TL(2)= 3.58E+00 LL(2)=N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected	P Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW373	Downgradient	Yes	7.32E+01	YES	4.29E+00	N/A
MW397	Upgradient	Yes	9.92E+01	YES	4.60E+00	N/A

Conclusion of Statistical Analysis on Current Data

Current Background Data from Upgradient

LN(Result)

3.48E+00

3.43E+00

3.35E+00

3.42E+00

3.37E+00

3.45E+00

3.43E+00

3.42E+00

LN(Result)

3.50E+00

3.58E+00

3.40E+00

3.45E+00

3.40E+00

3.46E+00

3.48E+00

3.46E+00

MW395

Result

3.24E+01

3.10E+01

2.85E+01

3.06E+01

2.92E+01

3.14E+01

3.08E+01

3.06E+01

MW397

3.31E+01

3.57E+01

3.00E+01

3.15E+01

3.00E+01

3.19E+01

3.23E+01

3.17E+01

Result

Wells with Transformed Result

Well Number:

Date Collected

1/25/2023

4/27/2023

7/27/2023

10/18/2023

1/30/2024

4/16/2024

7/24/2024

10/15/2024

1/23/2023

5/1/2023

7/27/2023

10/16/2023

1/30/2024

4/15/2024

7/22/2024

10/16/2024

Well Number: Date Collected

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

- TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X (K * S)
- X Mean, X = (sum of background results)/(count of background results)

** Read from Table 5, Appendix B of Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Guidance, EPA, 1989, based on total number of background results - The K-factor for pH to account for a two-sided tolerance interval instead of a one-sided tolerance limit. The K-factor for pH was computed using a formula from NIST/SEMATECH e-Handbook of Statistical Methods, http://www.itl.nist.gov/div898/handbook/,2009.

Wells with Exceedances MW373 MW397

C-746-S/T First Quarter 2025 Statistical Analysis Current Background Comparison Sulfate UNITS: mg/L LRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =11.500 S = 0.383	CV(1)= 0.033	K factor**= 2.523	TL(1)= 1.25E+01 LL(1)=N/A
Statistics-Transformed Background Data	X = 2.442 S = 0.033	CV(2)= 0.014	K factor**= 2.523	TL(2)= 2.53E+00 LL(2)= N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	2.03E+01	YES	3.01E+00	N/A
MW373	Downgradient	Yes	2.11E+02	YES	5.35E+00	N/A
MW385	Sidegradient	Yes	1.94E+01	YES	2.97E+00	N/A
MW388	Downgradient	Yes	2.07E+01	YES	3.03E+00	N/A

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

** Read from Table 5, Appendix B of Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Interim Guidance, EPA, 1989, based on total number of background results - The K-factor for pH to account for a two-sided tolerance interval instead of a one-sided tolerance limit. The K-factor for pH was computed using a formula from NIST/SEMATECH e-Handbook of Statistical Methods, http://www.itl.nist.gov/div898/handbook/,2009.

Wells with Exceedances MW370 MW373 MW385 MW388

2.41E+00Well No.Gradie2.40E+00MW370DowngMW373DowngMW385Sidegra

1/25/2023	1.17E+01	2.46E+00
4/27/2023	1.10E+01	2.40E+00
7/27/2023	1.15E+01	2.44E+00
10/18/2023	1.10E+01	2.40E+00
1/30/2024	1.12E+01	2.42E+00
4/16/2024	1.13E+01	2.42E+00
7/24/2024	1.11E+01	2.41E+00
10/15/2024	1.10E+01	2.40E+00
	1111207	
Well Number:	MW397	
Well Number: Date Collected	Result	LN(Result)
		LN(Result) 2.48E+00
Date Collected	Result	· · · · · ·
Date Collected 1/23/2023	Result 1.20E+01	2.48E+00
Date Collected 1/23/2023 5/1/2023	Result 1.20E+01 1.21E+01	2.48E+00 2.49E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023	Result 1.20E+01 1.21E+01 1.21E+01	2.48E+00 2.49E+00 2.49E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023	Result 1.20E+01 1.21E+01 1.21E+01 1.15E+01	2.48E+00 2.49E+00 2.49E+00 2.44E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023 1/30/2024	Result 1.20E+01 1.21E+01 1.21E+01 1.15E+01 1.16E+01	2.48E+00 2.49E+00 2.49E+00 2.44E+00 2.45E+00
Date Collected 1/23/2023 5/1/2023 7/27/2023 10/16/2023 1/30/2024 4/15/2024	Result 1.20E+01 1.21E+01 1.21E+01 1.15E+01 1.16E+01 1.17E+01	2.48E+00 2.49E+00 2.49E+00 2.44E+00 2.45E+00 2.45E+00 2.46E+00

Current Background Data from Upgradient

LN(Result)

MW395

Result

Wells with Transformed Result

Well Number:

Date Collected

C-746-S/T First Quarter 2025 Statistical AnalysisCurrent Background ComparisonTechnetium-99UNITS: pCi/LLRGA

The CV is calculated to determine if background data are normally distributed. If so, the current test well results are compared to the TL. If not, a transformation is performed on the background and test well results, then each transformed test well result is compared to the transformed TL. If the test well result exceeds the TL, that is statistically significant evidence of elevated concentration in that well. For pH only, the current test well results are compared to the TL and LL. If the test well result for pH exceeds the TL or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data	X =10.666 S = 7.3	380 CV(1)=0.692	K factor**= 2.523	TL(1)= 2.93E+01 LL(1)=N/A
Statistics-Transformed Background Data	X =2.112 S = 0.7	781 CV(2)=0.370	K factor**= 2.523	TL(2)= 4.08E+00 LL(2)= N/A

Because CV(1) is less than or equal to 1, assume normal distribution and continue with statistical analysis utilizing TL(1).

Current	Quarter Data					
Well No.	Gradient	Detected	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW385	Sidegradient	Yes	4.36E+01	YES	3.78E+00	N/A
MW388	Downgradient	t Yes	3.55E+01	YES	3.57E+00	N/A

wen runder.	11110375	
Date Collected	Result	LN(Result)
1/25/2023	1.25E+01	2.53E+00
4/27/2023	2.51E+00	9.20E-01
7/27/2023	3.76E+00	1.32E+00
10/18/2023	1.64E+01	2.80E+00
1/30/2024	5.75E+00	1.75E+00
4/16/2024	2.17E+00	7.75E-01
7/24/2024	3.05E+00	1.12E+00
10/15/2024	1.07E+01	2.37E+00

MW395

Current Background Data from Upgradient

Wells with Transformed Result

Well Number:

Well Number:	MW397	
Date Collected	Result	LN(Result)
1/23/2023	8.51E+00	2.14E+00
5/1/2023	1.41E+01	2.65E+00
7/27/2023	2.77E+01	3.32E+00
10/16/2023	2.29E+01	3.13E+00
1/30/2024	1.08E+01	2.38E+00
4/15/2024	5.18E+00	1.64E+00
7/22/2024	9.13E+00	2.21E+00
10/16/2024	1.55E+01	2.74E+00

Conclusion of Statistical Analysis on Current Data

The test well(s) listed exceeded the Upper Tolerance Limit, which is evidence of elevated concentration with respect to current background data.

MW385 MW388

Wells with Exceedances

NOTE: For UCRS wells, background ("upgradient") wells are those located in the same direction as RGA wells located upgradient from the landfill.

CV Coefficient-of-Variation, CV = S/X If CV is less than or equal to 1 assume normal distribution.

S Standard Deviation, $S = [Sum ([(background result-X)^2]/[count of background results -1])]^{0.5}$

TL Upper Tolerance Limit, TL = X + (K * S), LL Lower Tolerance Limit, LL = X - (K * S)

X Mean, X = (sum of background results)/(count of background results)

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ATTACHMENT D3

STATISTICIAN QUALIFICATION STATEMENT

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Solution FOUR RIVERS

Four Rivers Nuclear Partnership, LLC 5511 Hobbs Road Kevil, KY 42053 www.fourriversnuclearpartnership.com

April 29, 2025

Mr. Dennis Greene Four Rivers Nuclear Partnership, LLC 5511 Hobbs Road Kevil, KY 42053

Dear Mr. Greene:

As an Environmental Scientist, with a bachelor's degree in Earth Sciences/Geology, I have over 30 years of experience in reviewing and assessing laboratory analytical results associated with environmental sampling and investigation activities. For the generation of these statistical analyses, my work was reviewed by a qualified independent technical reviewer with Four Rivers Nuclear Partnership, LLC.

For this project, the statistical analyses conducted on the first quarter 2025 monitoring well data collected from the C-746-S&T and C-746-U Landfills were performed in accordance with guidance provided in the U.S. Environmental Protection Agency guidance document, *EPA Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Interim Final Guidance* (1989).

Sincerely,

Bryan Smith

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APPENDIX E

GROUNDWATER FLOW RATE AND DIRECTION

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RESIDENTIAL/INERT—QUARTERLY, 1st CY 2025 Facility: U.S. DOE—Paducah Gaseous Diffusion Plant Permit Numbers: SW07300014, SW07300015, SW07300045 Finds/Unit: <u>KY8-890-008-982/1</u> LAB ID: <u>None</u>

GROUNDWATER FLOW RATE AND DIRECTION

Whenever monitoring wells (MWs) are sampled, 401 *KAR* 48:300, Section 11, requires determination of groundwater flow rate and direction of flow in the uppermost aquifer. The uppermost aquifer below the C-746-S&T Landfills is the Regional Gravel Aquifer (RGA). Water level measurements currently are recorded in several wells at the landfill on a quarterly basis. These measurements were used to plot the potentiometric surface of the RGA for the first quarter 2025 and to determine the groundwater flow rate and direction.

Water levels during this reporting period were measured on January 21–22, 2025. As shown on Figure E.1, MW389, screened in the Upper Continental Recharge System (UCRS), is usually dry, while other UCRS wells have recordable water levels. During this reporting period, MW389 did not have sufficient water for a water level measurement.

The UCRS has a strong vertical hydraulic gradient; therefore, the limited number of available UCRS wells, screened over different elevations, is not sufficient for mapping the potentiometric surface. Figure E.1 shows the location of UCRS MWs. The Upper Regional Gravel Aquifer (URGA) and Lower Regional Gravel Aquifer (LRGA) data were corrected for barometric pressure, if necessary, and converted to elevations to plot the potentiometric surface of the RGA, as a whole, as shown on Table E.1. Figure E.2 is a composite or average map of the URGA and LRGA elevations where well clusters exist. The contour lines are placed based on the average water level elevations of the clusters.¹ During October, RGA groundwater flow was directed inward and then northeast towards the Ohio River. Based on the site potentiometric map (Figure E.2), the hydraulic gradient beneath the landfill, as measured along the defined groundwater flow directions, is 3.81×10^{-4} ft/ft. Additional water level measurements in October (Figure E.3) document the vicinity groundwater hydraulic gradient for the RGA to be 3.16×10^{-4} ft/ft, northeastward. The hydraulic gradients are shown in Table E.2.

The average linear groundwater flow velocity (v) is determined by multiplying the hydraulic gradient (i) by the hydraulic conductivity (K) [resulting in the specific discharge (q)] and dividing by the effective porosity (n_e). The RGA hydraulic conductivity values used are reported in the administrative application for the New Solid Waste Landfill Permit No. 073-00045NWC1 and range from 4.25×10^2 to 7.25×10^2 ft/day (1.50×10^{-1} to 2.56×10^{-1} cm/s). RGA effective porosity is assumed to be 25%. Vicinity and site flow velocities were calculated using the low and high values for hydraulic conductivity, as shown in Table E.3.

Regional groundwater flow near the C-746-S&T Landfills typically trends northeastward toward the Ohio River. As demonstrated on the potentiometric map for January 2025, RGA groundwater flow from the landfill area was directed to the north.

¹ Additional water level measurements, in wells at the C-746-U Landfill and in wells of the surrounding region (MW98, MW100, MW125, MW139, MW165A, MW173, MW193, MW197, and MW200), were used to contour the RGA potentiometric surface.



Figure E.1. Potentiometric Measurements of the Upper Continental Recharge System at the C-746-S&T Landfills, January 21–22, 2025

							Raw	v Data	*Corre	cted Data
Date	Time	Well	Formation	Datum Elev	BP	Delta BP	DTW	Elev	DTW	Elev
				(ft amsl)	(in Hg)	(ft H20)	(ft)	(ft amsl)	(ft)	(ft amsl)
1/21/2025	10:36	MW220	URGA	382.01	30.66	0.00	59.05	322.96	59.05	322.96
1/21/2025	10:42	MW221	URGA	391.38	30.66	0.00	68.40	322.98	68.40	322.98
1/21/2025	10:46	MW222	URGA	395.27	30.66	0.00	72.41	322.86	72.41	322.86
1/21/2025	10:44	MW223	URGA	394.38	30.66	0.00	73.46	320.92	73.46	320.92
1/21/2025	10:48	MW224	URGA	395.69	30.66	0.00	72.86	322.83	72.86	322.83
1/21/2025	10:39	MW225	URGA	385.73	30.66	0.00	62.86	322.87	62.86	322.87
1/22/2025	9:29	MW353	LRGA	375.05	30.46	0.23	51.64	323.41	51.87	323.18
1/21/2025	10:04	MW369	URGA	364.23	30.66	0.00	41.23	323.00	41.23	323.00
1/21/2025	10:06	MW370	LRGA	365.12	30.66	0.00	42.12	323.00	42.12	323.00
1/21/2025	10:05	MW371	UCRS	364.64	30.66	0.00	26.73	337.91	26.73	337.91
1/21/2025	9:58	MW372	URGA	359.42	30.66	0.00	36.41	323.01	36.41	323.01
1/21/2025	10:00	MW373	LRGA	359.73	30.66	0.00	36.70	323.03	36.70	323.03
1/21/2025	9:59	MW374	UCRS	359.44	30.66	0.00	21.29	338.15	21.29	338.15
1/22/2025	9:37	MW384	URGA	365.29	30.46	0.23	41.99	323.30	42.22	323.07
1/21/2025	10:30	MW385	LRGA	365.74	30.66	0.00	42.66	323.08	42.66	323.08
1/21/2025	10:29	MW386	UCRS	365.32	30.66	0.00	18.26	347.06	18.26	347.06
1/21/2025	10:31	MW387	URGA	363.48	30.66	0.00	40.50	322.98	40.50	322.98
1/21/2025	10:32	MW388	LRGA	363.45	30.66	0.00	40.48	322.97	40.48	322.97
1/21/2025	10:34	MW389	UCRS	364.11			NA			
1/21/2025	10:33	MW390	UCRS	360.39	30.66	0.00	37.47	322.92	37.47	322.92
1/21/2025	10:13	MW391	URGA	366.67	30.66	0.00	43.74	322.93	43.74	322.93
1/21/2025	10:12	MW392	LRGA	365.85	30.66	0.00	42.95	322.90	42.95	322.90
1/21/2025	10:11	MW393	UCRS	366.62	30.66	0.00	29.11	337.51	29.11	337.51
1/21/2025	10:18	MW394	URGA	378.46	30.66	0.00	55.44	323.02	55.44	323.02
1/21/2025	10:20	MW395	LRGA	379.12	30.66	0.00	56.13	322.99	56.13	322.99
1/21/2025	10:19	MW396	UCRS	378.75	30.66	0.00	2.75	376.00	2.75	376.00
1/21/2025	10:24	MW397	LRGA	387.00	30.66	0.00	64.00	323.00	64.00	323.00
1/21/2025	10:15	MW418	URGA	367.21	30.66	0.00	44.21	323.00	44.21	323.00
1/21/2025	10:16	MW419	LRGA	367.05	30.66	0.00	44.10	322.95	44.10	322.95

Table E.1. C-746-S&T Landfills First Quarter 2025 (January) Water Levels

Elev = elevation

amsl = above mean sea level

ams1 = above mean sea level BP = barometric pressure DTW = depth to water in feet below datum URGA = Upper Regional Gravel Aquifer LRGA = Lower Regional Gravel Aquifer UCRS = Upper Continental Recharge System *Assumes a barometric efficiency of 1.0



Figure E.2. Composite Potentiometric Surface of the Regional Gravel Aquifer at the C-746-S&T Landfills, January 21–22, 2025



Figure E.3. Vicinity Potentiometric Surface of the Regional Gravel Aquifer, January 21–22, 2025

	ft/ft
Beneath Landfill Mound	3.81×10^{-4}
Vicinity	3.16×10^{-4}

Table E.2. C-746-S&T Landfills Hydraulic Gradients

 Table E.3. C-746-S&T Landfills Groundwater Flow Rate

Hydraulic Co	onductivity (K)	Specific I	Discharge (q)	Average Linea	r Velocity (v)
ft/day	cm/s	ft/day	cm/s	ft/day	cm/s
Beneath Landfill	Mound				
7.25×10^{2}	2.56×10^{-1}	2.76 x 10 ⁻¹	9.75 × 10 ⁻⁵	1.10	3.90×10^{-4}
4.25×10^{2}	1.50×10^{-1}	1.62 x 10 ⁻¹	5.71 × 10 ⁻⁵	6.47 x 10 ⁻¹	2.28×10^{-4}
Vicinity 199		·			
7.25×10^{2}	2.56×10^{-1}	2.29 x 10 ⁻¹	8.10 x 10 ⁻⁵	9.17 x 10 ⁻¹	3.24 x 10 ⁻⁴
4.25×10^{2}	1.50×10^{-1}	1.34 x 10 ⁻¹	4.74 x 10 ⁻⁵	5.38 x 10 ⁻¹	1.90 x 10 ⁻⁴

Table E.4. Regional First Quarter 2025 (January) Water Levels

				Regional (Ja	nuary 2025	5) Water Leve	els			
							Raw	Data	*Correc	ted Data
Date	Time	Well	Aquifer	Datum Elev	BP	Delta BP	DTW	Elev	DTW	Elev
				(ft amsl)	(in Hg)	(ft H20)	(ft)	(ft amsl)	(ft)	(ft amsl)
1/21/2025	9:30	MW98	RGA	370.55	30.66	0.00	48.52	322.03	48.52	322.03
1/21/2025	12:32	MW100	RGA	373.39	30.65	0.01	51.24	322.15	51.25	322.14
1/21/2025	12:50	MW125	RGA	375.57	30.65	0.01	52.70	322.87	52.71	322.86
1/21/2025	9:43	MW139	RGA	363.75	30.66	0.00	41.45	322.30	41.45	322.30
1/21/2025	14:14	MW165A	RGA	380.94	30.62	0.05	57.84	323.10	57.89	323.05
1/21/2025	14:09	MW173	RGA	373.63	30.62	0.05	50.86	322.77	50.91	322.72
1/21/2025	12:38	MW193	RGA	368.30	30.65	0.01	45.09	323.21	45.10	323.20
1/21/2025	12:57	MW197	RGA	368.39	30.63	0.03	45.41	322.98	45.44	322.95
1/21/2025	12:45	MW200	RGA	378.70	30.65	0.01	55.47	323.23	55.48	323.22
Reference Ba	arometric	Pressure	30.66							

Elev = elevation

amsl = above mean sea level

BP = barometric pressure

DTW = depth to water in feet below datum

URGA = Upper Regional Gravel Aquifer

LRGA = Lower Regional Gravel Aquifer

UCRS = Upper Continental Recharge System

*Assumes a barometric efficiency of 1.0

APPENDIX F

NOTIFICATIONS

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NOTIFICATIONS

In accordance with 401 *KAR* 48:300 § 7, the notification for parameters that exceed the maximum contaminant level (MCL) has been submitted to the Kentucky Division of Waste Management. The parameters are listed on page F-4. The notification for parameters that do not have MCLs but had statistically significant increased concentrations relative to historical background concentrations is provided below.

STATISTICAL ANALYSIS OF PARAMETERS NOTIFICATION

The statistical analyses conducted on the first quarter 2025 groundwater data collected from the C-746-S&T Landfills monitoring wells were performed in accordance with *Groundwater Monitoring Plan for the Solid Waste Permitted Landfills (C-746-S Residential Landfill, C-746-T Inert Landfill, and C-746-U Contained Landfill) at the Paducah Gaseous Diffusion Plant, Paducah, Kentucky* (LATA Kentucky 2014).

The following are the permit required parameters in 40 *CFR* § 302.4, Appendix A, which had statistically significant, increased concentrations relative to historical background concentrations.

	Parameter	Monitoring Well
Upper Continental Recharge System	Technetium-99	MW390
Upper Regional Gravel Aquifer	Sodium Technetium-99	MW224, MW372 MW369, MW384, MW387
Lower Regional Gravel Aquifer	Sodium Technetium-99	MW373, MW397 MW385, MW388

NOTE: Although technetium-99 is not cited in 40 CFR § 302.4, Appendix A, this radionuclide is being reported along with the parameters of this regulation.

3/4/2025

Four Rivers Nuclear Partnership, LLC PROJECT ENVIRONMENTAL MEASUREMENTS SYSTEM C-746-S&T LANDFILLS SOLID WASTE PERMIT NUMBER SW07300014, SW07300015, SW07300045 MAXIMUM CONTAMINANT LEVEL (MCL) EXCEEDANCE REPORT Quarterly Groundwater Sampling

AKGWA	Station	Analysis	Method	Results	Units	MCL
8004-4815	MW387	Beta activity	9310	74.1	pCi/L	50

NOTE 1: MCLs are defined in 401 KAR 47:030.

NOTE 2: MW369, MW370, MW372, and MW373 are down-gradient wells for the C-746-S and C-746-T Landfills and upgradient for the C-746-U Landfill. These wells are sampled with the C-746-U Landfill monitoring well network. These wells are reported on the exceedance reports for C-746-S, C-746-T, and C-746-U.

APPENDIX G

CHART OF MCL AND UTL EXCEEDANCES

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Groundwater Flow System			UCR								URGA	_								LRGA	-		
Gradient	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Monitoring Well	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
ACETONE																							
Quarter 3, 2003							*					*											
Quarter 4, 2003											*								*				
Quarter 1, 2005									*														
Quarter 4, 2019																*							
ALPHA ACTIVITY																							
Quarter 4, 2002																							
Quarter 4, 2008																							
Quarter 4, 2010																							
ALUMINUM																							
Quarter 1, 2003			*				*					*	*	*									
Quarter 2, 2003			*				*						*	*									
Quarter 3, 2003			*				*	*					*	*									
Quarter 4, 2003							*	*			*			*									
Quarter 1, 2004			*				*	*			*												
Quarter 2, 2004							*							*									
Quarter 3, 2004	+	1	1				*							*									
Quarter 4, 2004	1		*		-	-	<u> </u>			-				-		-			-	-			<u> </u>
Quarter 1, 2005	+	-	*													-							
Quarter 2, 2005	-		*				*																-
	+	-	*				*			*							-		-		*		
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Monitoring Well	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	39'
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Monitoring Well	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
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Groundwater Flow System			UCRS	2							URGA	\ \								LRGA	\		
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Monitoring Well	386		390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373		392	395	397
OXIDATION-REDUCTION PO																							
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Quarter 4, 2012				*		*		*	*	*	*		*	*			*	*	*	*	*		
Quarter 1, 2013				*		*		*	*		*		*	*				*		*	*		
Quarter 2, 2013	*			*			*		*		*		*				*	*	*	*	*		
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Quarter 3, 2017	*		*	*	*												*	*	*	*	*	*	*
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Quarter 2, 2019	*		*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2019	*		*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*
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Quarter 2, 2020	*		*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*
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Quarter 1, 2021 Quarter 2, 2021	*	-	*	* *	*	*	*	* *	*	*	*	*	*	*	* *		* *	*	* *	*	*	*	* *
Quarter 2, 2021 Quarter 3, 2021	*		*	* *	*	*	*	*	*	*	*	*	*	*	*	*	*	*	* *	*	*	*	*
Quarter 3, 2021 Quarter 4, 2021	*		*	* *	*	*	*	*	*	-			-1+	-1+	* *		*	*	* *	*	*	*	*
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Quarter 2, 2022	*	1	*	*	*		*		*	*		*	*		*	*	*	*	*	*	*	*	*
Quarter 3, 2022	*	1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2022	*	1	*	*	*	*	*	*			*	*					*	*	*		*	*	*
Quarter 1, 2023	*			*	*	*					*	*	*			*	*	*	*	*	*	*	*
Quarter 2, 2023	*		*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*		*
Quarter 3, 2023	*		*	*	*		*	*		*	*		*	*		*	*	*	*	*	*	*	*
Quarter 4, 2023	*			*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2024	*			*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2024	*			*	*											*	*	*	*	*	*	*	*
Quarter 3, 2024	*		*	*	*	*		*		*	*	*	*			*	*	*	*	*	*	*	*
Quarter 4, 2024	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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Groundwater Flow System			UCRS	5						1	URGA	4]	LRGA	1		1
Gradient	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Monitoring Well	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
PCB-1016																							
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PCB-1232																							
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Groundwater Flow System			UCRS	S						1	URG	4								LRGA	1		
Gradient	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Monitoring Well	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
RADIUM-226																							
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Quarter 4, 2021 * * * * * *					*					*	*	*	*							*			21

Groundwater Flow System	1		UCRS	5						1	URGA	A]	LRGA	4		
Gradient	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Monitoring Well	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
TECHNETIUM-99 Quarter 1, 2022			*							*	*	*	*				*						
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Quarter 3, 2022			*								*	*	*										
Quarter 4, 2022			*							*	*	*					*			*			
Quarter 1, 2023											*	*	*										
Quarter 2, 2023			*							*	*	*	*				*						
Quarter 3, 2023			*							*	*		*				*						
Quarter 4, 2023										*	*		*				*						
Quarter 1, 2024											*	*	*										
Quarter 2, 2024			*							*	*	*	*				*						
Quarter 3, 2024 Quarter 4, 2024			*							*	*	*	*				*						
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Quarter 1, 2017	-14		*							*			44				*			-			
Quarter 4, 2024 THORIUM-234	*												*							*			
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Groundwater Flow System	T		UCRS	5							URGA	ł]	LRGA	1		-
Gradient	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Monitoring Well	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
TRICHLOROETHENE																							
Quarter 1, 2017																							
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TURBIDITY																							
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* Statistical test results indicate an	eleva	ted co	ncent	ration	lie	a stat	tistica	lly sie	mifica	nt in	rease)											
MCL Exceedance	i cicva	icu ci	, neelli	auor	i (i.c.,	a sid	usued	ny sig	,iiiica	an ni	licase	<i>.</i> ,.											
 MCL Exceedance Previously reported as an MC 	T ava	eeda.	nce h	awer.	ar ror	ailt w	as e.e.	ial te	MCI														
			ice, n	oweve	., ies	ouit Wi	as equ	101 10	WICL														
UCRS = Upper Continental Rechar URGA = Upper Regional Gravel A		ncill																					
	-																						
LRGA = Lower Regional Gravel A S = Sidegradient; D = Downgradient		Unc	radia-	t																			
5 – Sidegradient, D – Downgradier	m, U -	- opgi	auidi	it.																			

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APPENDIX H

METHANE MONITORING DATA

CP3-WM-0017-F03 - C-746-S & T LANDFILL METHANE MONITORING REPORT

Date:	Janua	January 29, 2025 Time: 1315 Monitor: Michael									l Hideg									
Weather Co	ndition	s: Sı	inny	, Ap	prox	tima	tely	59°	F, I	hur	nidi	ty: 3	0%	 1.	 	 				
Monitoring Equipment: Multi RAE – Serial # 11881																				
Monitoring Location												Reading (% LEL)								
Ogden Landing Road Entrance Checked at ground level												0								
North Landfi	andfill Gate Checked at ground level												0							
	est Side of												0							
East Side of Landfill: North 37° West 88°	f Checked at ground level												0							
Cell 1 Gas Ve	ent (17)	1 0													0					
Cell 2 Gas V	'ent (3)	1 0	2 0	3 0															0	
Cell 3 Gas V	′ent (7)	1 0	2 0	3 0	4 0	5 0	6 0	7 0											0	
	I Office	Che	eckec	l at g	round	d leve	əl							 		 			0	
Suspect or P	roblem Areas	Nor	ne no	ted															N/A	
Remarks:																				
All gas ven	ts chec	ked	1" fr	om (open	ning.														
Performed	by:	N),		1	^/+	2	b										2	/	3/2025	
	/	VU			Si	gnat	ure	ر						 	 	 		-1	Date	



Figure H.1. C-746-S&T Landfill Methane Monitoring Locations

APPENDIX I

SURFACE WATER ANALYSES AND LABORATORY REPORTS

Paducah OREIS SURFACE WATER MONITORING REPORT

Facility: <u>C-746-S&T Landfi</u>	<u>II</u> C	ounty:	McCracken		Permit #	: <u>SW073000</u>)14,SW0	7300015,SW07	300045
Sampling Point: <u>L135</u>	UPST	REAM				Period: 1st	Quarter	2025	
SAMPLE ID: L135SS2-2	5	Sa	imple Type	: REG					
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Chloride	W	4.68	mg/L	0.2	1/31/2025			EPA-300.0	х
Sulfate		2.49	mg/L	0.4	1/31/2025			EPA-300.0	х
Conductivity		86	µmhos/cm		1/31/2025				х
рН		7.86	Std Unit		1/31/2025				х
Iron		2.03	mg/L	0.1	1/31/2025			EPA-200.8	х
Sodium		3.33	mg/L	0.25	1/31/2025			EPA-200.8	х
Uranium		0.00145	mg/L	0.0002	1/31/2025			EPA-200.8	х
Alpha activity	U	-1.25	pCi/L	6.72	1/31/2025	2.43	2.44	SW846-9310	х
Beta activity	U	6.6	pCi/L	9.76	1/31/2025	6	6.1	SW846-9310	х
Dissolved Solids		84	mg/L	10	1/31/2025			EPA-160.1	х
Suspended Solids		16.1	mg/L	2.5	1/31/2025			EPA-160.2	х
Chemical Oxygen Demand (COD)		23.2	mg/L	20	1/31/2025			EPA-410.4	Х
Total Solids		136	mg/L	10	1/31/2025			SM-2540B	х
Total Organic Carbon (TOC)		10.1	mg/L	2	1/31/2025			SW846-9060A	Х

Paducah OREIS SURFACE WATER MONITORING REPORT

Facility: <u>C-746-S&T Landfil</u>	<u> </u>	County:	McCracken		Permit #	: <u>SW073000</u>)14,SW0	7300015,SW07	300045
Sampling Point: <u>L136</u>	INST	REAM				Period: 1st	Quarter	2025	
SAMPLE ID: L136SS2-2	5	Sa	mple Type	: REG					
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Chloride	W	2.16	mg/L	0.2	1/31/2025			EPA-300.0	Х
Sulfate		21.7	mg/L	0.8	1/31/2025			EPA-300.0	Х
Conductivity		358	µmhos/cm		1/31/2025				Х
рН		7.68	Std Unit		1/31/2025				Х
Iron		0.16	mg/L	0.1	1/31/2025			EPA-200.8	Х
Sodium		2.27	mg/L	0.25	1/31/2025			EPA-200.8	Х
Uranium		0.0069	mg/L	0.0002	1/31/2025			EPA-200.8	Х
Alpha activity	U	5.47	pCi/L	6.42	1/31/2025	4.57	4.66	SW846-9310	Х
Beta activity		13.2	pCi/L	12.1	1/31/2025	7.83	8.13	SW846-9310	Х
Dissolved Solids		222	mg/L	10	1/31/2025			EPA-160.1	х
Suspended Solids		3.9	mg/L	2.5	1/31/2025			EPA-160.2	Х
Chemical Oxygen Demand (COD)	J	14.1	mg/L	20	1/31/2025			EPA-410.4	Х
Total Solids		270	mg/L	10	1/31/2025			SM-2540B	Х
Total Organic Carbon (TOC)		7.65	mg/L	2	1/31/2025			SW846-9060A	Х

Paducah OREIS SURFACE WATER MONITORING REPORT

Facility: <u>C-746-S&T Landfi</u>	<u> Co</u>	ounty:	McCracken		Permit #	: <u>SW073000</u>)14,SWO	7300015,SW07	300045
Sampling Point: <u>L154</u>	INSTR	EAM				Period: 1st	Quarter	2025	
SAMPLE ID:L154US2-2	25	Sa	mple Type	: REG					
Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Counting Error (+/-)	TPU	Method	Validation
Chloride	W	3.36	mg/L	0.2	1/31/2025			EPA-300.0	х
Sulfate		2.02	mg/L	0.4	1/31/2025			EPA-300.0	х
Conductivity		62	µmhos/cm		1/31/2025				х
рН		7.58	Std Unit		1/31/2025				х
Iron		1.61	mg/L	0.1	1/31/2025			EPA-200.8	х
Sodium		2.21	mg/L	0.25	1/31/2025			EPA-200.8	х
Uranium		0.00095	mg/L	0.0002	1/31/2025			EPA-200.8	х
Alpha activity	U	3.38	pCi/L	5.79	1/31/2025	3.66	3.71	SW846-9310	х
Beta activity	U	9.13	pCi/L	9.47	1/31/2025	6.12	6.32	SW846-9310	х
Dissolved Solids		55	mg/L	10	1/31/2025			EPA-160.1	х
Suspended Solids		13.1	mg/L	2.5	1/31/2025			EPA-160.2	х
Chemical Oxygen Demand (COD)		21	mg/L	20	1/31/2025			EPA-410.4	х
Total Solids		117	mg/L	10	1/31/2025			SM-2540B	х
Total Organic Carbon (TOC)		10	mg/L	1	1/31/2025			SW846-9060A	Х

Qualifier	Code Definitions
*	Duplicate analysis not within control limits.
В	Analyte was detected in the associated blank.
н	Analysis performed outside holding time requirement.
J	Estimated quantitation.
L	LCS and/or LCSD recovery outside of control limits.
L1	LCS/LCSD RPD outside acceptance criteria.
N	Sample spike (MS/MSD) recovery not within control limits
N1	MS/MSD or PS/PSD RPD outside acceptance criteria.
Q	Quality issue exists with instrument calibration.
Р	Difference between results from two GC columns outside control limits.
S	Sample surrogate recovery outside acceptance criteria.
Т	Tracer recovery outside control limits of 30-110%.
U	Not detected. RADS: Value reported is < MDA and/or TPU.
W	Post-digestion spike recovery out of control limits.
W1	Post-digestion spike and post-digestion spike duplicate RPD out of control limits.
х	Other specific flags and footnotes may be required to properly define the results.
Y1	MS/MSD recovery outside acceptance criteria.
Y2	MS/MSD RPD outside acceptance criteria.

RGA Type Code Definitions								
LRGA	Lower Regional Gravel Aquifer							
UCRS	Upper Continental Recharge System							
URGA	Upper Regional Gravel Aquifer							
NA	Not Applicable.							

Sample Type Code Definitions

REG	Regular
FR	Field Replicate (code used for Field Duplicate)
RI	Equipment Rinsate Blank
FB	Field Blank
ТВ	Trip Blank

Validation Code Definitions

=	Validated result, no additional qualifier necessary
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
UJ	Analyte not detected above the reported detection limit, and the reported detection limit is approximated due to quality deficiency.
Х	Not validated

ATTACHMENT I1

GEL LABORATORIES CERTIFICATE OF ANALYSIS

GEL LABORATORIES LLC 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Company : Address :	Four Rivers N LLC 5600 Hobbs F		ership,								
	Kevil, Kentuc	ky 42053:						Re	eport Date:	April 29,	2025
Contact:	Ms. Jaime Mo	orrow							-	_	
Project:	C-746-U Lan	dfill Surface	Water Quar	rterly (US25-02	<u>!</u>)						
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:	ID: L154US 7070050 WS 31-JAN 04-FEB Client	002 I-25					oject: ient ID:		NP00612 NP006		
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	t Date Time	Batch Mtd.
Rad Gas Flow Propor GFPC, Gross A/B, l Alpha Beta			+/-3.66 +/-6.12	5.79 9.47	+/-3.71 +/-6.32	15.0 50.0	pCi/L pCi/L		AH4	02/13/25 1619	2745852 1
The following Analyt		vere perform	ned								
	escription										
1 EP.	A 900.0/SW846 9)310									
Surrogate/Tracer Re	covery 7	Гest						Batch I	ID Recover	ry% Accepta	ble Limits
Notes: The MDC is a sam TPU and Countin	1 I		ted at the S	5% confidence	ce level (1.96-sigma	ı).					
<i>Column headers a</i> DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le MDA: Minimum I MDC: Minimum I	or nit evel Detectable Ac	tivity	PF: Pr RL: R	Method rep Factor Reporting Limi Total Propaga	it ated Uncertainty						

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			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-U Landfill Surface Water Quarterly (US25-02)			
Client Sample ID:	L154US2-25	Project:	FRNP00612	
Sample ID:	707005002	Client ID:	FRNP006	
Matrix:	WS			
Collect Date:	31-JAN-25 08:10			
Receive Date:	04-FEB-25			
Collector:	Client			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	vst Date	Time Batch	Method
Carbon Analysis											
9060A, Total Organie	c Carbon "As R	eceived"									
Total Organic Carbon Ave	rage	10.0	0.330	1.00	mg/L		1	KB3	02/20/25	1108 275306	2 1
Ion Chromatography											
EPA 300.0 Anions (C	Chloride and Su	lfate) "As Receive	ed"								
Chloride	W	3.36	0.0670	0.200	mg/L		1	CWW	02/08/25	0110 274456	5 2
Sulfate		2.02	0.133	0.400	mg/L		1				
Metals Analysis-ICP-	MS										
200.8/200.2 MIMICE	Metals- Fe Na	U "As Received"	,								
Iron		1.61	0.0330	0.100	mg/L	1.00	1	JD2	02/11/25	1834 274469	8 3
Uranium		0.000950	0.0000670	0.000200	mg/L	1.00	1	JD2	02/12/25	1233 274469	8 4
Sodium		2.21	0.0800	0.250	mg/L	1.00	1	BAJ	02/13/25	1520 274469	8 5
Solids Analysis											
EPA 160.1 Solids, Di	ssolved "As Re	eceived"									
Total Dissolved Solids		55.0	2.38	10.0	mg/L			RR4	02/06/25	1317 274581	4 6
EPA 160.2 Total Sus	pended Liq "As	Received"									
Total Suspended Solids		13.1	0.570	2.50	mg/L			RR4	02/06/25	0816 274576	1 7
SM 2540 B Solids, T	otal "As Receiv	ved"									
Total Solids		117	6.29	10.0	mg/L			RR4	02/07/25	0937 274663	3 8
Spectrometric Analys	sis										
EPA 410.4 Chem. Ox	xygen Demand	"As Received"									
COD		21.0	8.95	20.0	mg/L		1	JW2	02/05/25	1312 274504	9 9
The following Prep N	Iethods were po	erformed:									
Method	Description	n		Analyst	Date	7	Гime	e Pr	ep Batch		
EPA 200.2	ICP-MS 200.	2 PREP		BB2	02/08/25	()950	27	44697		

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-U Landfill Surface Water Quarterly (US25-02)			
Client Sample ID: Sample ID:	L154US2-25 707005002	Project: Client ID:	FRNP00612 FRNP006	

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following Ana	lytical Methods w	vere performed:							
Method	Description					Analys	st Comments		
1	SW846 9060A	L.							
2	EPA 300.0								
3	EPA 200.8								
4	EPA 200.8								
5	EPA 200.8								
6	EPA 160.1								
7	EPA 160.2								
8	SM 2540B								
9	EPA 410.4								
Notes:									

Column headers are defined as follows:	
DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit

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Certificate of Analysis

Company : Address :	Four Rivers LLC 5600 Hobbs	Nuclear Partn Road	ership,								
	Kevil, Kentu	ucky 42053						R	eport Date:	April 29,	, 2025
Contact:	Ms. Jaime M	forrow							-		
Project:	C-746-S&T	6-S&T Landfill Surface Water Quarterly(SS25-02)									
Client Sample Sample ID: Matrix: Collect Date: Receive Date: Collector:	707006 WS 31-JAN	6001 N-25 B-25					oject: ent ID:		NP00617 NP006		
Parameter	Qualifier	Result Un	certainty	MDC	TPU	RL	Units	PF	DF Analyst	Date Time	e Batch Mtd.
Rad Gas Flow Propo GFPC, Gross A/B, Alpha Beta The following Analy	liquid "As Rece U U	eived" -1.25 6.60	+/-2.43 +/-6.00	6.72 9.76	+/-2.44 +/-6.10	15.0 50.0	pCi/L pCi/L		AH4 (02/13/25 1619	2745852 1
Method De	escription										
1 EI	PA 900.0/SW846	9310									
Surrogate/Tracer R	lecovery	Test						Batch I	ID Recovery	% Accepta	able Limits
	ng Uncertainty	y are calculat	ted at the 9	5% confid	lence level (1.96-sigma	ı).					
Column headers of DF: Dilution Fact DL: Detection Lit Lc/LC: Critical L MDA: Minimum	tor imit Level Detectable A	ctivity	PF: Pr RL: R TPU:	Method ep Factor eporting L Total Prop							

MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration

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Company : Address :	Four Rivers N LLC 5600 Hobbs F		ership,							
	Kevil, Kentuc	cky 42053						R	eport Date:	April 29, 2025
Contact:	Ms. Jaime Mo	orrow								
Project:	C-746-S&T L	_andfill Surf:	2)							
Client Sample I Sample ID: Matrix: Collect Date: Receive Date: Collector:					oject: ient ID:		NP00617 NP006			
Parameter	Qualifier	Result Un	icertainty	MDC	TPU	RL	Units	PF	DF Analyst	t Date Time Batch Mtd.
Rad Gas Flow Propor GFPC, Gross A/B, l Alpha Beta	<i>iquid "As Recei</i> U	<i>ived"</i> 5.47 13.2	+/-4.57 +/-7.83	6.42 12.1	+/-4.66 +/-8.13	15.0 50.0	pCi/L pCi/L		AH4	02/13/25 1619 2745852 1
The following Analyti Method De		vere perforn	ned							
	scription	0210								
	A 900.0/SW846 9									
Surrogate/Tracer Re	covery 7	Гest						Batch	ID Recover	y% Acceptable Limits
Notes: The MDC is a sam TPU and Counting <i>Column headers a</i> DF: Dilution Facto DL: Detection Lin Lc/LC: Critical Le	Mtd.: PF: Pr	5% confidence Method ep Factor eporting Limit	e level (1.96-sigma).						

			Report Date:	April 29, 2025
Company :	Four Rivers Nuclear Partnership, LLC			
Address :	5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Surface Water Quarterly(SS25-02)			
Client Sample ID:	L135SS2-25	Project:	FRNP00617	
Sample ID:	707006001	Client ID:	FRNP006	
Matrix:	WS			
Collect Date:	31-JAN-25 08:45			
Receive Date:	04-FEB-25			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	vst Date	Time	Batch	Method
Carbon Analysis												
9060A, Total Organic	Carbon "As R	eceived"										
Total Organic Carbon Aver	age	10.1	0.330	2.00	mg/L		1	KB3	02/20/25	1233	2753062	1
Ion Chromatography												
EPA 300.0 Anions (C	hloride and Su	lfate) "As Receiv	ved"									
Chloride	W	4.68	0.0670	0.200	mg/L		1	CWW	02/08/25	0214	2744565	2
Sulfate		2.49	0.133	0.400	mg/L		1					
Metals Analysis-ICP-	MS											
200.8/200.2 MIMICP	Metals- Fe Na	U "As Received	["									
Iron		2.03	0.0330	0.100	mg/L	1.00	1	JD2	02/11/25	1842	2744698	3
Uranium		0.00145	0.0000670	0.000200	mg/L	1.00	1	JD2	02/12/25		2744698	4
Sodium		3.33	0.0800	0.250	mg/L	1.00	1	BAJ	02/13/25	1524	2744698	5
Solids Analysis												
EPA 160.1 Solids, Dis	ssolved "As Re	eceived"										
Total Dissolved Solids		84.0	2.38	10.0	mg/L			RR4	02/06/25	1317	2745814	6
EPA 160.2 Total Susp	ended Liq "As	Received"										
Total Suspended Solids		16.1	0.570	2.50	mg/L			RR4	02/06/25	0816	2745761	7
SM 2540 B Solids, To	otal "As Receiv	ved"										
Total Solids		136	6.29	10.0	mg/L			RR4	02/07/25	0937	2746633	8
Spectrometric Analys	is											
EPA 410.4 Chem. Ox	ygen Demand	"As Received"										
COD		23.2	8.95	20.0	mg/L		1	JW2	02/05/25	1312	2745049	9
The following Prep M	lethods were pe	erformed:										
Method	Description	n		Analyst	Date]	Гime	e Pr	ep Batch			
EPA 200.2	ICP-MS 200.	2 PREP		BB2	02/08/25	()950	27	44697			

			Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
	Kevil, Kentucky 42053				
Contact:	Ms. Jaime Morrow				
Project:	C-746-S&T Landfill Surface Water Quarterly(SS25-02)				
Client Sample ID:	L135SS2-25	Project:	FRNP00617		
Sample ID:	707006001	Client ID:	FRNP006		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method
The following A	nalytical Methods w	vere performed:							
Method	Description					Analys	st Comments		
1	SW846 9060A					-			
2	EPA 300.0								
3	EPA 200.8								
4	EPA 200.8								
5	EPA 200.8								
6	EPA 160.1								
7	EPA 160.2								
8	SM 2540B								
9	EPA 410.4								
Notes:									
Column headers	are defined as follo	w.s.							

Lc/LC: Critical Level
PF: Prep Factor
RL: Reporting Limit
SQL: Sample Quantitation Limit

			Report Date:	April 29, 2025
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road			
	Kevil, Kentucky 42053			
Contact:	Ms. Jaime Morrow			
Project:	C-746-S&T Landfill Surface Water Quarterly(SS25-02)			
Client Sample ID:	L136SS2-25	Project:	FRNP00617	
Sample ID:	707006002	Client ID:	FRNP006	
Matrix:	WS			
Collect Date:	31-JAN-25 08:25			
Receive Date:	04-FEB-25			
Collector:	Client			

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analy	st Date	Time Batch	Method
Carbon Analysis											
9060A, Total Organic	c Carbon "As R	leceived"									
Total Organic Carbon Ave	rage	7.65	0.330	2.00	mg/L		1	KB3	02/20/25	1305 2753062	2 1
Ion Chromatography											
EPA 300.0 Anions (C	Chloride and Su	lfate) "As Receive	d"								
Chloride	W	2.16	0.0670	0.200	mg/L		1	CWW	02/08/25	0246 274456	5 2
Sulfate		21.7	0.266	0.800	mg/L		2	CWW	02/08/25	1726 274456	5 3
Metals Analysis-ICP-	MS										
200.8/200.2 MIMICP	Metals- Fe Na	U "As Received"									
Iron		0.160	0.0330	0.100	mg/L	1.00	1	JD2	02/11/25	1846 2744698	3 4
Uranium		0.00690	0.0000670	0.000200	mg/L	1.00	1	JD2	02/12/25	1240 2744698	3 5
Sodium		2.27	0.0800	0.250	mg/L	1.00	1	BAJ	02/13/25	1525 2744698	8 6
Solids Analysis											
EPA 160.1 Solids, Di	ssolved "As Re	eceived"									
Total Dissolved Solids		222	2.38	10.0	mg/L			RR4	02/06/25	1317 2745814	4 7
EPA 160.2 Total Susp	pended Liq "As	s Received"									
Total Suspended Solids		3.90	0.570	2.50	mg/L			RR4	02/06/25	0816 274576	l 8
SM 2540 B Solids, Te	otal "As Receiv	/ed"									
Total Solids		270	6.29	10.0	mg/L			RR4	02/07/25	0937 2746633	3 9
Spectrometric Analys	is										
EPA 410.4 Chem. Ox	ygen Demand	"As Received"									
COD	J	14.1	8.95	20.0	mg/L		1	JW2	02/05/25	1312 2745049	9 10
The following Prep M	lethods were po	erformed:									
Method	Description	n		Analyst	Date	7	Гiте	e Pr	ep Batch		
EPA 200.2	ICP-MS 200.	2 PREP		BB2	02/08/25	()950	27	44697		

			Report Date:	April 29, 2025	
Company : Address :	Four Rivers Nuclear Partnership, LLC 5600 Hobbs Road				
Contact: Project:	Kevil, Kentucky 42053 Ms. Jaime Morrow C-746-S&T Landfill Surface Water Quarterly(SS25-02)				
Client Sample ID: Sample ID:	L136SS2-25 707006002	Project: Client ID:	FRNP00617 FRNP006		

Parameter	Qualifier R	esult	DL	RL	Units	PF	DF Analyst Date	Time Batch	Method			
The following Ar	nalytical Methods were	performed:										
Method	Description		Analyst Comments									
1	SW846 9060A											
2	EPA 300.0											
3	EPA 300.0											
4	EPA 200.8											
5	EPA 200.8											
6	EPA 200.8											
7	EPA 160.1											
8	EPA 160.2											
9	SM 2540B											
10	EPA 410.4											
Notes:												
Column headers are defined as follows: DF: Dilution Factor DL: Detection Limit MDA: Minimum Detectable Activity MDC: Minimum Detectable Concentration		Lc/LC: Critic PF: Prep Fact RL: Reportin ion SQL: Sample	tor g Limit	n Limit								

APPENDIX J

ANALYTICAL LABORATORY CERTIFICATION



Accredited Laboratory

A2LA has accredited

GEL LABORATORIES, LLC Charleston, SC

for technical competence in the field of

Environmental Testing

In recognition of the successful completion of the A2LA evaluation process that includes an assessment of the laboratory's compliance with ISO/IEC 17025:2017, the 2009 and 2016 TNI Environmental Testing Laboratory Standard, the requirements of the Department of Defense Environmental Laboratory Accreditation Program (DoD ELAP), and the requirements of the Department of Energy Consolidated Audit Program (DOECAP) as detailed in Version 5.4 of the DoD/DOE Quality System Manual for Environmental Laboratories (QSM), accreditation is granted to this laboratory to perform recognized EPA methods as defined on the associated A2LA Environmental Scope of Accreditation. This accreditation demonstrates technical competence for this defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 26th day of June 2023.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 2567.01 Valid to June 30, 2025

APPENDIX K

LABORATORY ANALYTICAL METHODS

LABORATORY ANALYTICAL METHODS

Analytical Method	Preparation Method	Product
SM 2540B		Solids, Total
SW846 8260D		Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer
SW846 8011	SW846 8011 PREP	Analysis of 1,2-Dibromoethane (EDB), 1,2-Dibromo-3-Chloropropane (DBCP) and
		1,2,3-Trichloropropane in Water by GC/ECD Using Methods 504.1 or 8011
SW846 8082A	SW846 3535A	Analysis of Polychlorinated Biphenyls by GC/ECD by ECD
SW846 6020B	SW846 3005A	Determination of Metals by ICP-MS
SW846 7470A	SW846 7470A Prep	Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer
SW846 9060A		Carbon, Total Organic
SW846 9012B	SW846 9010C Distillation	Cyanide, Total
EPA 300.0		Ion Chromatography Iodide
SW846 9056A		Ion Chromatography
EPA 160.1		Solids, Total Dissolved
EPA 160.2		Solids, Total Suspended
EPA 200.8	EPA 200.2	Determination of Metals by ICP-MS
EPA 410.4		COD
Eichrom Industries, AN-1418		AlphaSpec Ra226, Liquid
DOE EML HASL-300, Th-01-RC Modified		Th-01-RC M, Th Isotopes, Liquid
EPA 904.0 Modified		904.0Mod, Ra228, Liquid
SW846 9310		9310, Alpha/Beta Activity, liquid
EPA 905.0 Modified		905.0Mod, Sr90, liquid
DOE EML HASL-300, Tc-02-RC Modified		Tc-02-RC-MOD, Tc99, Liquid
EPA 906.0 Modified		906.0M, Tritium Dist, Liquid
SW846 9020B		Total Organic Halogens (TOX)

APPENDIX L

MICRO-PURGING STABILITY PARAMETERS

Micro-Purge Stability Parameters for the C-746-S&T Landfills

				/	/				<u> </u>		
			Juint Human	on /	od of The line	\geq / /			Divid Hermon	Junio Disolu	
		our conduct	inos		- Star		Tenner		no		
		<u> </u>	BAT CHILL		ed oxyeen to	STON /		<u> </u>	and the set	1	134°
		and I	ine /	Unit	20°	S /		and a	in /	Un	200
	1720	, nitre	. 50	ي الم	1010		THE.	nd ¹¹	, etc	e gor	Cutor Cutor
	<u> </u>	<u> </u>	<u> </u>	- Q ¹²	<u></u>	/	<u> </u>	<u> </u>	<u> </u>		141
MW220											
Date Collected: 1/29/2025						Date Collected: 1/29/2025					
004	60.9	461	5.97	5.93	3.31	0704	56.8	507 495	5.70	5.89	2.29
007 010	60.7 60.6	463 463	5.99 5.98	5.40 5.36	1.73 1.26	0707 0710	56.1 55.9	495	5.72 5.72	5.30 5.24	1.58
1W222	00.0	403	5.98	3.30	1.20	MW223	55.9	494	3.72	5.24	1.46
ate Collected: 1/29/2025						Date Collected: 1/29/2025					
340	61.4	487	5.98	5.18	1.18	0747	58.7	513	5.92	5.00	2.73
343	60.6	485	5.99	4.50	1.04	0750	59.4	499	5.94	3.69	1.99
346	60.3	484	5.96	4.44	1.01	0753	59.5	497	5.94	3.71	1.81
W224	00.5	101	5.70	1.17	1.05	MW369	57.5	127	5.57	5.71	1.01
ate Collected: 1/29/2025						Date Collected: 1/28/2025					
023	61.5	550	6.02	4.87	1.05	1024	57.1	340	6.37	5.03	2.17
026	60.3	550	6.00	3.75	0.98	1027	57.0	341	6.26	4.77	2.21
029	60.1	550	6.00	3.70	0.83	1030	57.0	343	6.25	4.72	2.25
IW370						MW372					
ate Collected: 1/28/2025						Date Collected: 1/28/2025					
45	54.3	408	6.18	6.40	45.14	1417	60.0	758	6.27	3.81	1.57
48	53.5	416	6.22	6.11	45.36	1420	60.0	758	6.27	3.75	2.01
51	52.9	416	6.28	6.23	46.34	1423	60.0	758	6.27	3.71	2.62
W373						MW384					
te Collected: 1/28/2025						Date Collected: 1/30/2025					
31	58.6	941	6.15	2.37	1.01	0821	57.3	495	5.78	6.06	0.06
34	58.6	943	6.14	2.19	0.93	0824	57.3	499	5.78	5.08	0.00
37	58.6	945	6.14	2.08	0.99	0827	56.5	499	5.80	5.03	0.00
W385						MW386					
te Collected: 1/30/2025	50.2	400	5.05	5.01	0.00	Date Collected: 1/30/2025	50.2	(70	(21	2.65	0.45
24	58.3	498	5.85	5.01	0.00	1010	59.3	670	6.31	2.65	0.45
0	57.2 57.0	492 491	5.90 5.91	3.57 3.54	0.01	1013 1016	59.3 59.1	692 694	6.56 6.55	1.09 0.99	0.05
V387	57.0	491	5.91	5.54	0.00	MW388	39.1	094	0.55	0.99	0.08
v 387 te Collected: 1/29/2025						Date Collected: 1/29/2025					
)2	61.0	601	6.12	5.40	2.55	1343	60.3	526	6.10	5.07	1.43
)5	60.8	601	6.11	3.40	2.33	1346	60.0	527	5.98	4.74	1.43
)8	60.7	601	6.11	3.99	2.35	1349	59.9	529	5.97	4.69	1.17
W390	00.7	001	0.111	5.77	2.55	MW391	57.7	527	5.57		
te Collected: 1/29/2025						Date Collected: 1/29/2025					
44	61.3	662	6.17	4.38	2.50	0946	57.1	374	6.00	4.29	3.27
47	60.3	664	6.20	3.36	2.06	0949	57.0	373	6.00	4.37	3.44
50	60.0	665	6.21	3.34	1.94	0952	56.6	373	6.00	4.40	2.80
W392						MW393					
ate Collected: 1/29/2025						Date Collected: 1/29/2025					
19	57.4	333	5.65	3.50	1.72	0901	57.4	388	6.12	2.13	7.55
22	56.1	337	5.69	2.65	2.18	0904	56.9	417	6.14	1.90	7.40
25	55.8	338	5.74	2.56	2.77	0907	57.1	427	6.16	1.80	7.68
W394						MW395					
te Collected: 1/29/2025						Date Collected: 1/29/2025					
07	59.1	454	6.01	4.22	1.37	1038	58.6	386	5.99	5.52	0.80
10	59.0	444	5.99	4.74	1.40	1041	58.7	386	5.98	5.09	1.04
13	58.8	436	5.99	4.80	1.45	1044	58.7	387	5.97	5.05	1.05
W396						MW397					
		1			ļ	Date Collected: 1/29/2025	<i>(</i> () -	200	6.00		
			A								
ate Collected: 1/29/2025	60.2	685	6.43	1.20	2.91	1402	60.2	322	6.00	6.56	2.89
	60.2 60.1 60.1	685 685 686	6.43 6.43 6.43	1.20 1.14 1.06	2.91 3.30 4.17	1402 1405 1408	60.2 60.3 60.4	322 318 316	6.00 6.00 6.00	6.36 6.39 6.38	2.89 2.99 3.17