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February 24, 2026

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Dear Mr. Anderson and Mr. Hendricks:

C-746-S&T LANDFILLS FOURTH QUARTER CALENDAR YEAR 2025 (OCTOBER–DECEMBER) COMPLIANCE MONITORING REPORT, PADUCAH GASEOUS DIFFUSION PLANT, PADUCAH, KENTUCKY, FRNP-RPT-0386/V4, PERMIT NUMBER SW07300014, SW07300015, SW07300045, AGENCY INTEREST ID NO. 3059

The subject report for the fourth 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 fourth quarter CY 2025 monitoring well 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 conductivity, dissolved solids, and sulfate in MW373. These statistical exceedances are Type 2 Exceedances—Source Unknown. Additionally, there was a Type 2 Exceedance for beta activity in MW387. Continued evaluation of beta activity, conductivity, dissolved solids, and sulfate levels through future quarterly monitoring events is recommended. This report also serves as the statistical exceedance

notification for the fourth quarter CY 2025, in accordance with Monitoring Condition GSTR0001, Standard Requirement 5, of the Permit.

If you have any questions or require additional information, please contact Scott McIntyre at (270) 556-6025.

Sincerely,

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April Ladd
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Enclosure:

C-746-S&T Landfills Fourth Quarter Calendar Year 2025 (October–December) Compliance Monitoring Report, Paducah Gaseous Diffusion Plant, Paducah, Kentucky,
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**C-746-S&T Landfills
Fourth Quarter Calendar Year 2025
(October–December)
Compliance Monitoring Report,
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**



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**C-746-S&T Landfills
Fourth Quarter Calendar Year 2025
(October–December)
Compliance Monitoring Report,
Paducah Gaseous Diffusion Plant,
Paducah, Kentucky**

Date Issued—February 2026

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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CONTENTS

FIGURES.....	v
TABLES	v
ACRONYMS.....	vii
1. INTRODUCTION.....	1
1.1 BACKGROUND.....	1
1.2 MONITORING PERIOD ACTIVITIES	1
1.2.1 Groundwater Monitoring.....	1
1.2.2 Methane Monitoring.....	3
1.2.3 Surface Water Monitoring.....	4
1.3 KEY RESULTS.....	4
2. DATA EVALUATION/STATISTICAL SYNOPSIS.....	9
2.1 STATISTICAL ANALYSIS OF GROUNDWATER DATA.....	10
2.1.1 Upper Continental Recharge System	10
2.1.2 Upper Regional Gravel Aquifer	10
2.1.3 Lower Regional Gravel Aquifer.....	11
2.2 DATA VERIFICATION AND VALIDATION.....	11
3. PROFESSIONAL GEOLOGIST AUTHORIZATION.....	13
4. REFERENCES.....	15
APPENDIX A: GROUNDWATER, SURFACE WATER, LEACHATE, AND METHANE MONITORING SAMPLE DATA REPORTING FORM.....	A-1
APPENDIX B: FACILITY INFORMATION SHEET	B-1
APPENDIX C: GROUNDWATER SAMPLE ANALYSES AND LABORATORY REPORTS.....	C-1
APPENDIX D: STATISTICAL ANALYSES AND QUALIFICATION STATEMENT	D-1
APPENDIX E: GROUNDWATER FLOW RATE AND DIRECTION.....	E-1
APPENDIX F: NOTIFICATIONS	F-1
APPENDIX G: CHART OF MCL AND UTL EXCEEDANCES	G-1
APPENDIX H: METHANE MONITORING DATA	H-1
APPENDIX I: SURFACE WATER ANALYSES AND LABORATORY REPORTS	I-1
APPENDIX J: ANALYTICAL LABORATORY CERTIFICATION.....	J-1

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.....	4
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	7
5. Exceedances of Current Background UTL in Downgradient UCRS Wells	8
6. Monitoring Wells Included in Statistical Analysis.....	10

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ACRONYMS

CCV	continuing calibration verification
CFR	<i>Code of Federal Regulations</i>
KAR	<i>Kentucky Administrative Regulations</i>
KRS	<i>Kentucky Revised Statutes</i>
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

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1. INTRODUCTION

This report, *C-746-S&T Landfills Fourth Quarter Calendar Year 2025 (October–December) 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.

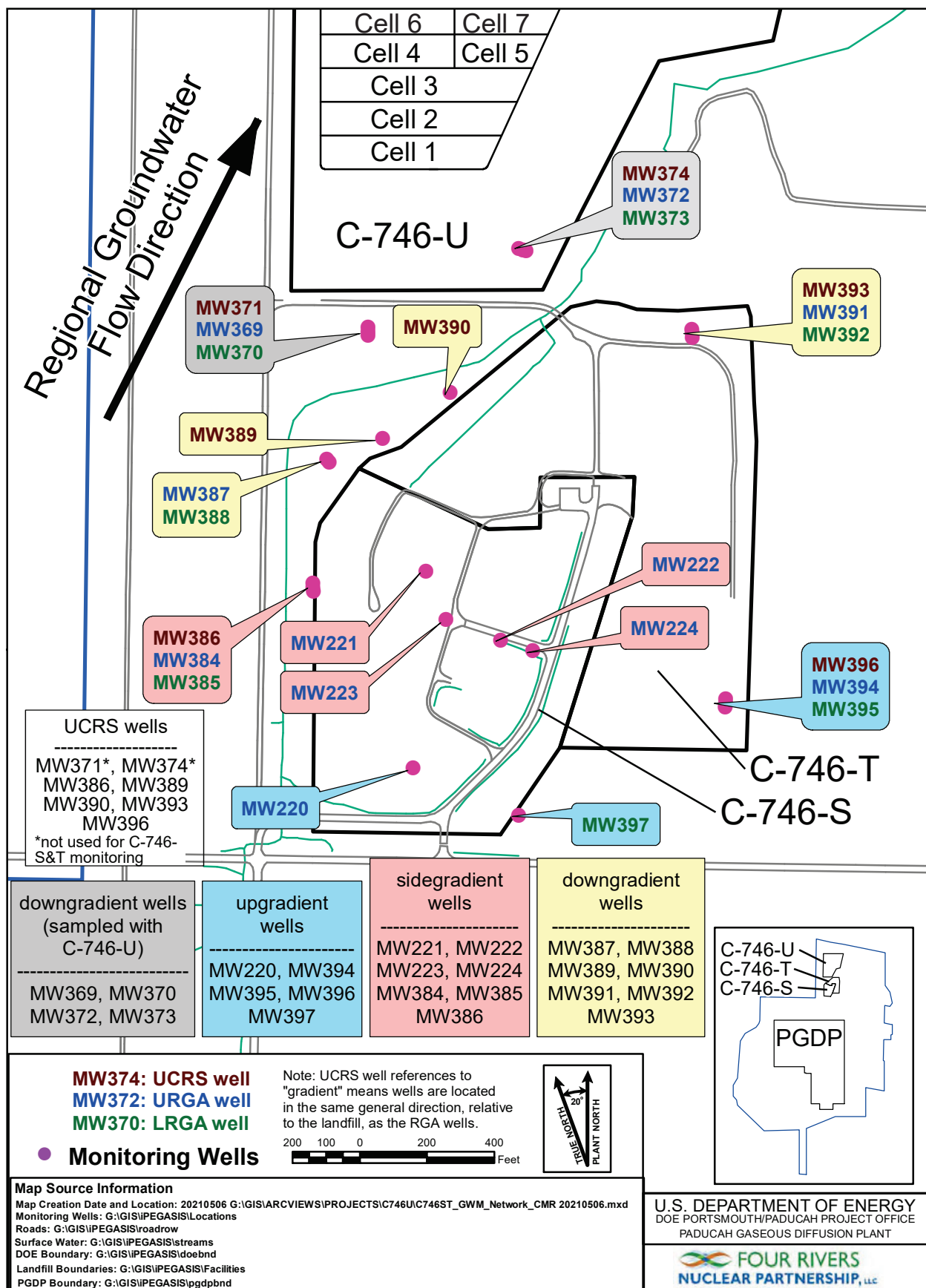


Figure 1. C-746-S&T Landfills Groundwater Monitoring Well Network

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 fourth 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 fourth quarter 2025 was conducted on October 14–20, 2025. The analytical laboratory used U.S. Environmental Protection Agency-approved methods, as applicable. The parameters specified in Permit Condition GSTR0003, Special Condition 2, were analyzed for all locations sampled.

The groundwater flow rate and direction determination are provided in Appendix E. Depth-to-water was measured on October 14, 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 October 2025, RGA groundwater flow was directed inward and then north toward the Ohio River. The hydraulic gradient for the RGA in the vicinity of the C-746-S&T Landfills in October 2025 was 5.87×10^{-4} ft/ft, while the gradient beneath the C-746-S&T Landfills was approximately 7.98×10^{-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 1.36 to 2.31 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 October 1, 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 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). The sample at location L154 was collected on October 7, 2025, and the samples from L135 and L136 were collected on October 27, 2025. 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.

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. For the current reporting quarter, parameters that exceeded their respective MCLs 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 fourth 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, the MCL exceedance for beta activity in downgradient well MW387 exceeds the historical background concentration and is further compared to the current background UTL (LATA Kentucky 2014).

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

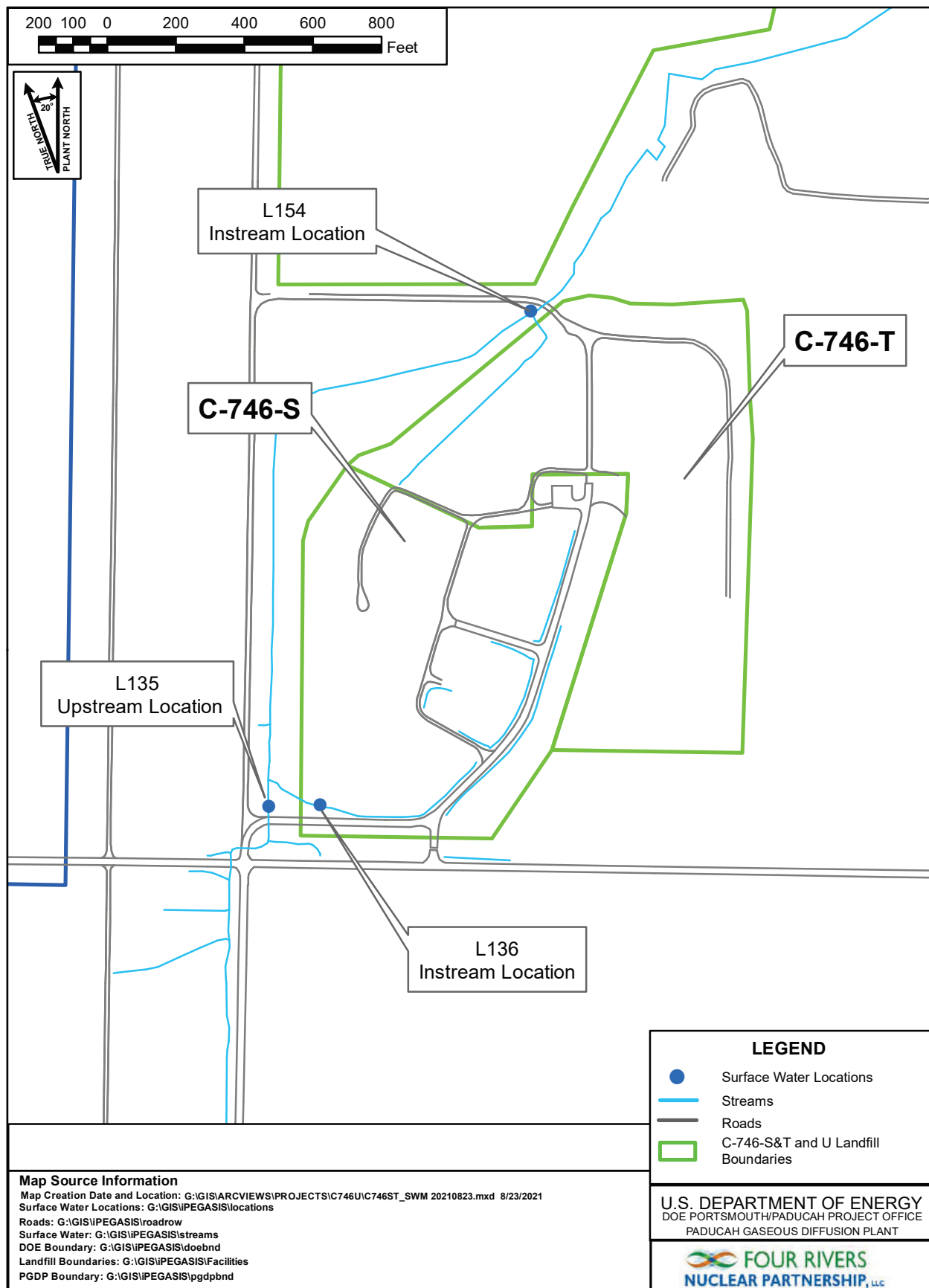


Figure 2. C-746-S&T Landfill Surface Water Monitoring Locations

Table 2. Exceedances of Statistically Derived Historical Background Concentrations

UCRS ^a	URGA	LRGA
MW386: Oxidation-reduction potential ^b	MW220: Oxidation-reduction potential ^b	MW370: Oxidation-reduction potential ^b and sulfate
MW390: Oxidation-reduction potential ^b and technetium-99	MW221: Oxidation-reduction potential ^b	MW373: Calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential, ^b sodium, and sulfate
MW393: Oxidation-reduction potential ^b	MW222: Oxidation-reduction potential ^b	MW385: Oxidation-reduction potential, ^b sulfate, and technetium-99
MW396: Oxidation-reduction potential ^b	MW223: Oxidation-reduction potential ^b	MW388: Oxidation-reduction potential ^b and sulfate
	MW224: Oxidation-reduction potential ^b and sulfate	MW392: Oxidation-reduction potential ^b
	MW369: Oxidation-reduction potential ^b and technetium-99	MW395: Oxidation-reduction potential ^b
	MW372: Calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential, ^b sodium, sulfate, and technetium-99	MW397: Oxidation-reduction potential ^b
	MW384: Oxidation-reduction potential ^b and sulfate	
	MW387: Beta activity, dissolved solids, magnesium, oxidation-reduction potential, ^b sulfate, and technetium-99	
	MW391: Oxidation-reduction potential ^b	
	MW394: Oxidation-reduction potential ^b	

^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.

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, 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 (LATA Kentucky 2014).

Table 3. Exceedances of Current Background UTL in Downgradient Wells

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

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. Fifteen of the 19 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.

Table 4. C-746-S&T Landfills Downgradient Wells Trend Summary Utilizing the Previous Eight Quarters

Location	Well ID	Parameter	Sample Size	Alpha ^a	P-value ^b	S ^c	Decision
C-746-S&T Landfills	MW369	Technetium-99	8	0.05	0.452	-2	No Trend
	MW370	Sulfate	8	0.05	0.452	-3	No Trend
	MW372	Calcium	8	0.05	0.36	-4	No Trend
	MW372	Conductivity	8	0.05	0.452	3	No Trend
	MW372	Dissolved Solids	8	0.05	0.119	8	No Trend
	MW372	Magnesium	8	0.05	0.36	-5	No Trend
	MW372	Sodium	8	0.05	0.119	9	No Trend
	MW372	Sulfate	8	0.05	0.452	2	No Trend
	MW372	Technetium-99	8	0.05	0.548	0	No Trend
	MW373	Calcium	8	0.05	0.452	2	No Trend
	MW373	Conductivity	8	0.05	0	26	Increasing
	MW373	Dissolved Solids	8	0.05	0.007	20	Increasing
	MW373	Magnesium	8	0.05	0.36	5	No Trend
	MW373	Sulfate	8	0.05	0.016	19	Increasing
	MW387	Beta activity	8	0.05	0.031	16	Increasing
	MW387	Magnesium	8	0.05	0.548	0	No Trend
	MW387	Sulfate	8	0.05	0.138	10	No Trend
	MW387	Technetium-99	8	0.05	0.089	12	No Trend
	MW388	Sulfate	8	0.05	0.548	1	No Trend

^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.

Four of the 19 preliminary Type 2 exceedances in downgradient wells had an increasing trend. Specifically, the Mann-Kendall statistical test indicates increasing trends for conductivity, dissolved solids, and sulfate in LRGA well MW373. Additionally, an increasing trend was observed for beta activity in URGA well MW387 and should be considered a Type 2 exceedance.

It should be noted that over the past eight quarters, concentrations of conductivity, dissolved solids, and sulfate in URGA well MW372 are consistently lower than those shown in collocated LRGA well MW373. Because conductivity, dissolved solids, 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. Potential sources of increased beta activity in MW387 other than the C-746-S&T Landfills are present. Evaluation of beta activity, conductivity, dissolved solids, and sulfate trends through future quarterly monitoring events is recommended.

In accordance with Permit Condition GSTR0003, Special Condition 3, 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 conductivity, dissolved solids, and sulfate in MW373, and beta activity in MW387, 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 fourth 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.

Table 6. Monitoring Wells Included in Statistical Analysis^a

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)	

^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 present in downgradient wells with 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, 26 parameters, including those with MCLs, required statistical analysis in the UCRS. During the fourth 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, 27 parameters, including those with MCLs, required statistical analysis in the URGA. During the fourth 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, 26 parameters, including those with MCLs, required statistical analysis in the LRGA. During the fourth 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, and sulfate 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 assessment identified bromide in sidegradient URGA well MW384 as a potential outlier. The bromide result for MW384 is approximately 10 times the concentration observed in all samples collected from MW384 in the past five years. The bromide result for MW384 collected in the fourth quarter of 2025 was confirmed as a statistical outlier by Dixon's Outlier Test. An assessment code of "R-H" (rejected-historical) has been assigned to this result. The bromide result for sidegradient URGA well MW384 in the fourth quarter of 2025 was not used in the statistical calculations.

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, rinse 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.

With the exception of acrolein in all fourth quarter groundwater samples, data verification and validation results for this data set indicated that all data were considered usable.

The percent difference for acrolein in the continuing calibration verification (CCV) exceeded the acceptance criteria with a positive bias. Consequently, the affected data were qualified with an "R" validation code (rejected) by the data validator. All of the associated acrolein results were nondetects and a review of the C-746-S&T Landfills groundwater historical acrolein data found that acrolein has not been detected for at least the last five years. Based on the high bias from the CCV for reported nondetect results and the historical nondetect acrolein results, the current results (fourth quarter 2025) were considered representative and usable for the statistical analysis. Validation codes are shown on the data report in Appendix C.

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3. PROFESSIONAL GEOLOGIST AUTHORIZATION

DOCUMENT IDENTIFICATION: *C-746-S&T Landfills Fourth Quarter Calendar Year 2025
(October–December) Compliance Monitoring Report, Paducah
Gaseous Diffusion Plant, Paducah, Kentucky
(FRNP-RPT-0386/V4)*

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



PG113927
KD 02-19-2026

Kenneth R. Davis

Kenneth R. Davis

PG113927

February 19, 2026
Date

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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.

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APPENDIX A

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

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**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 on DWM Permit Face)

Permit No: SW07300014,
SW07300015,
SW07300045 Finds/Unit No: _____ Quarter & Year 4th Qtr. CY 2025

Please check the following as applicable:

_____ Characterization X Quarterly _____ Semiannual _____ Annual _____ Assessment

Please check applicable submittal(s): X Groundwater X Surface Water
_____ Leachate X Methane 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 Statutes 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 NOT 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 REDFIELD
(Affiliate)
Digitally signed by MYRNA
REDFIELD (Affiliate)
Date: 2026.02.23 14:39:26
-06'00'

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

APRIL LADD
Digitally signed by APRIL
LADD
Date: 2026.02.24
13:11:09 -06'00'

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

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APPENDIX B
FACILITY INFORMATION SHEET

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FACILITY INFORMATION SHEET

Sampling Date:	Groundwater: October 2025 Methane: October 2025 Surface Water: October 2025	County:	McCracken	Permit Nos.	SW07300014, SW07300015, SW07300045
Facility Name:	U.S. DOE—Paducah Gaseous Diffusion Plant (As officially shown on DWM Permit Face)				
Site Address:	5600 Hobbs Road Street	Kevil, Kentucky City/State	42053 Zip		
Phone No:	(270) 441-6800	Latitude:	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:	Myrna E. Redfield Program Manager/Chief Executive Officer		Phone No:	(270) 441-5113	
Contact Person Title:	Four Rivers Nuclear Partnership, LLC				
Mailing Address:	5600 Hobbs Road Street	Kevil, Kentucky City/State	42053 Zip		

SAMPLING PERSONNEL (IF OTHER THAN LANDFILL OR LABORATORY)

Company:	Four Rivers Nuclear Partnership, LLC				
Contact Person:	Chris Skinner	Phone No:	(270) 441-5675		
Mailing Address:	5511 Hobbs Road Street	Kevil, Kentucky City/State	42053 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 Street	Charleston, South Carolina City/State	29407 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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Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW220 UP **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8000-5201 **SAMPLE ID:** MW220SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/15/2025			EPA-300.0	=
Bromide		0.222	mg/L	0.2	10/15/2025			SW846-9056A	=
Chloride	J	19.9	mg/L	250	10/15/2025			SW846-9056A	=
Fluoride	J	0.188	mg/L	4	10/15/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.675	mg/L	10	10/15/2025			SW846-9056A	=
Sulfate		16.7	mg/L	0.4	10/15/2025			SW846-9056A	=
Barometric Pressure Reading		30.17	Inches/Hg		10/15/2025			FS	X
Conductivity		358	µmhos/cm		10/15/2025			FS	X
Depth to Water		56.78	ft		10/15/2025			FS	X
Dissolved Oxygen		5.95	mg/L		10/15/2025			FS	X
Eh (approx)		553	mV		10/15/2025			FS	X
pH		6.11	Std Unit		10/15/2025			FS	X
Temperature		66.3	deg F		10/15/2025			FS	X
Turbidity		4.11	NTU		10/15/2025			FS	X
Aluminum	U	0.05	mg/L	0.05	10/15/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/15/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Barium		0.185	mg/L	0.004	10/15/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/15/2025			SW846-6020B	=
Boron	J	0.00741	mg/L	0.015	10/15/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Calcium		20.5	mg/L	0.2	10/15/2025			SW846-6020B	=
Chromium	J	0.00329	mg/L	0.01	10/15/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Copper	J	0.00151	mg/L	0.002	10/15/2025			SW846-6020B	=
Iron	U	0.1	mg/L	0.1	10/15/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Magnesium		8.46	mg/L	0.03	10/15/2025			SW846-6020B	=
Manganese	J	0.00119	mg/L	0.005	10/15/2025			SW846-6020B	=
Molybdenum	J	0.000517	mg/L	0.001	10/15/2025			SW846-6020B	=
Nickel		0.00536	mg/L	0.002	10/15/2025			SW846-6020B	=
Potassium		7.01	mg/L	0.3	10/15/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Selenium	J	0.00159	mg/L	0.005	10/15/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Sodium		36.3	mg/L	0.25	10/15/2025			SW846-6020B	=
Tantalum	UN	0.005	mg/L	0.005	10/15/2025			SW846-6020B	UJ
Thallium	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/15/2025			SW846-6020B	=
Zinc	J	0.00482	mg/L	0.02	10/15/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/15/2025			SW846-7470A	=
Barium, Dissolved		0.193	mg/L	0.004	10/15/2025			SW846-6020B	J
Chromium, Dissolved	J	0.00339	mg/L	0.01	10/15/2025			SW846-6020B	J
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	UJ
PCB-1016	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
PCB-1221	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW220 UP **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5201 **SAMPLE ID:** MW220SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
PCB-1242	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
PCB-1248	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
PCB-1254	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
PCB-1260	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
PCB-1268	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.106	ug/L	0.106	10/15/2025			SW846-8082A	=
Radium-226	U	0.417	pCi/L	0.555	10/15/2025	0.426	0.428	AN-1418	=
Strontium-90	U	-1.11	pCi/L	7.66	10/15/2025	4.03	4.03	EPA-905.0-M	=
Tritium	U	-103	pCi/L	242	10/15/2025	112	112	EPA-906.0-M	UJ
Technetium-99	U	4.11	pCi/L	12.6	10/15/2025	7.27	7.29	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.585	pCi/L	3.3	10/15/2025	1.78	1.78	HASL 300, Th-01-RC M	=
Alpha activity		5.5	pCi/L	5.42	10/15/2025	4.25	4.35	SW846-9310	=
Beta activity		28.6	pCi/L	9.78	10/15/2025	8.29	9.49	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	10/15/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/15/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW220 UP **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5201 **SAMPLE ID:** MW220SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/15/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dissolved Solids		189	mg/L	10	10/15/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/15/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/15/2025			SW846-9012B	=
Total Organic Halides (TOX)	U	10	ug/L	10	10/15/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.544	mg/L	2	10/15/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW221 **SIDE** **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8000-5202 **SAMPLE ID:** MW221SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/15/2025			EPA-300.0	=
Bromide		0.415	mg/L	0.2	10/15/2025			SW846-9056A	=
Chloride	J	33.7	mg/L	250	10/15/2025			SW846-9056A	=
Fluoride	J	0.21	mg/L	4	10/15/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.924	mg/L	10	10/15/2025			SW846-9056A	=
Sulfate		13.7	mg/L	0.4	10/15/2025			SW846-9056A	=
Barometric Pressure Reading		30.19	Inches/Hg		10/15/2025			FS	X
Conductivity		435	µmhos/cm		10/15/2025			FS	X
Depth to Water		66.46	ft		10/15/2025			FS	X
Dissolved Oxygen		5.5	mg/L		10/15/2025			FS	X
Eh (approx)		538	mV		10/15/2025			FS	X
pH		6.14	Std Unit		10/15/2025			FS	X
Temperature		63.2	deg F		10/15/2025			FS	X
Turbidity		2.5	NTU		10/15/2025			FS	X
Aluminum	U	0.05	mg/L	0.05	10/15/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/15/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Barium		0.192	mg/L	0.004	10/15/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/15/2025			SW846-6020B	=
Boron		0.0156	mg/L	0.015	10/15/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Calcium		20.1	mg/L	0.2	10/15/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/15/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Copper	J	0.0013	mg/L	0.002	10/15/2025			SW846-6020B	=
Iron	U	0.1	mg/L	0.1	10/15/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Magnesium		8.66	mg/L	0.03	10/15/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Molybdenum		0.00153	mg/L	0.001	10/15/2025			SW846-6020B	=
Nickel		0.0102	mg/L	0.002	10/15/2025			SW846-6020B	=
Potassium		1.11	mg/L	0.3	10/15/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Sodium		44.8	mg/L	0.25	10/15/2025			SW846-6020B	=
Tantalum	UN	0.005	mg/L	0.005	10/15/2025			SW846-6020B	UJ
Thallium	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/15/2025			SW846-6020B	=
Zinc	J	0.00516	mg/L	0.02	10/15/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/15/2025			SW846-7470A	=
Barium, Dissolved		0.197	mg/L	0.004	10/15/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/15/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	UJ
PCB-1016	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
PCB-1221	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW221 **SIDE** **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8000-5202 **SAMPLE ID:** MW221SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
PCB-1242	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
PCB-1248	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
PCB-1254	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
PCB-1260	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
PCB-1268	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.103	ug/L	0.103	10/15/2025			SW846-8082A	=
Radium-226	U	0.283	pCi/L	0.756	10/15/2025	0.454	0.455	AN-1418	=
Strontium-90	U	1.38	pCi/L	3.21	10/15/2025	1.87	1.89	EPA-905.0-M	=
Tritium	U	15.8	pCi/L	210	10/15/2025	111	111	EPA-906.0-M	UJ
Technetium-99	U	1.43	pCi/L	12.4	10/15/2025	6.95	6.96	HASL 300, Tc-02-RC M	=
Thorium-230	U	3.26	pCi/L	3.91	10/15/2025	3.18	3.27	HASL 300, Th-01-RC M	=
Alpha activity	U	4.52	pCi/L	5.86	10/15/2025	4.1	4.16	SW846-9310	=
Beta activity		20.7	pCi/L	9.54	10/15/2025	7.48	8.2	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	10/15/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/15/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW221 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5202 **SAMPLE ID:** MW221SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/15/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dissolved Solids		206	mg/L	10	10/15/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/15/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/15/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	8.86	ug/L	10	10/15/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.52	mg/L	2	10/15/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW222 **SIDE** **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8000-5242 **SAMPLE ID:** MW222SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/15/2025			EPA-300.0	=
Bromide		0.378	mg/L	0.2	10/15/2025			SW846-9056A	=
Chloride	J	31.1	mg/L	250	10/15/2025			SW846-9056A	=
Fluoride	J	0.232	mg/L	4	10/15/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.912	mg/L	10	10/15/2025			SW846-9056A	=
Sulfate		12.1	mg/L	0.4	10/15/2025			SW846-9056A	=
Barometric Pressure Reading		30.19	Inches/Hg		10/15/2025			FS	X
Conductivity		388	µmhos/cm		10/15/2025			FS	X
Depth to Water		70.48	ft		10/15/2025			FS	X
Dissolved Oxygen		4.17	mg/L		10/15/2025			FS	X
Eh (approx)		513	mV		10/15/2025			FS	X
pH		6.18	Std Unit		10/15/2025			FS	X
Temperature		67.7	deg F		10/15/2025			FS	X
Turbidity		4.93	NTU		10/15/2025			FS	X
Aluminum	J	0.0201	mg/L	0.05	10/15/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/15/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Barium		0.265	mg/L	0.004	10/15/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/15/2025			SW846-6020B	=
Boron	J	0.00867	mg/L	0.015	10/15/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Calcium		18.2	mg/L	0.2	10/15/2025			SW846-6020B	=
Chromium	J	0.00552	mg/L	0.01	10/15/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Copper	J	0.00108	mg/L	0.002	10/15/2025			SW846-6020B	=
Iron	J	0.0429	mg/L	0.1	10/15/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Magnesium		8.09	mg/L	0.03	10/15/2025			SW846-6020B	=
Manganese	J	0.00223	mg/L	0.005	10/15/2025			SW846-6020B	=
Molybdenum		0.0018	mg/L	0.001	10/15/2025			SW846-6020B	=
Nickel		0.0236	mg/L	0.002	10/15/2025			SW846-6020B	=
Potassium		0.664	mg/L	0.3	10/15/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Sodium		43.9	mg/L	0.25	10/15/2025			SW846-6020B	=
Tantalum	UN	0.005	mg/L	0.005	10/15/2025			SW846-6020B	UJ
Thallium	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/15/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/15/2025			SW846-6020B	=
Mercury	J	0.000094	mg/L	0.0002	10/15/2025			SW846-7470A	=
Barium, Dissolved		0.268	mg/L	0.004	10/15/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/15/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	UJ
PCB-1016	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1221	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW222 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5242 **SAMPLE ID:** MW222SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1242	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1248	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1254	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1260	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1268	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
Radium-226	U	0.407	pCi/L	0.803	10/15/2025	0.512	0.514	AN-1418	=
Strontium-90	U	-0.868	pCi/L	6.4	10/15/2025	3.39	3.39	EPA-905.0-M	=
Tritium	U	-121	pCi/L	249	10/15/2025	112	112	EPA-906.0-M	UJ
Technetium-99	U	-0.449	pCi/L	12.2	10/15/2025	6.72	6.72	HASL 300, Tc-02-RC M	=
Thorium-230	U	1.12	pCi/L	3.5	10/15/2025	2.11	2.13	HASL 300, Th-01-RC M	=
Alpha activity	U	0.844	pCi/L	6.07	10/15/2025	2.89	2.89	SW846-9310	=
Beta activity		15.8	pCi/L	9.46	10/15/2025	6.89	7.35	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	10/15/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/15/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW222 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5242 **SAMPLE ID:** MW222SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/15/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dissolved Solids		199	mg/L	10	10/15/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	13.9	mg/L	20	10/15/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/15/2025			SW846-9012B	=
Total Organic Halides (TOX)	U	10	ug/L	10	10/15/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.508	mg/L	2	10/15/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW223 **SIDE** **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8000-5243 **SAMPLE ID:** MW223SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/15/2025			EPA-300.0	=
Bromide		0.399	mg/L	0.2	10/15/2025			SW846-9056A	=
Chloride	J	33.3	mg/L	250	10/15/2025			SW846-9056A	=
Fluoride	J	0.204	mg/L	4	10/15/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.918	mg/L	10	10/15/2025			SW846-9056A	=
Sulfate		13.8	mg/L	0.4	10/15/2025			SW846-9056A	=
Barometric Pressure Reading		30.2	Inches/Hg		10/15/2025			FS	X
Conductivity		395	µmhos/cm		10/15/2025			FS	X
Depth to Water		69.48	ft		10/15/2025			FS	X
Dissolved Oxygen		3.25	mg/L		10/15/2025			FS	X
Eh (approx)		531	mV		10/15/2025			FS	X
pH		6.14	Std Unit		10/15/2025			FS	X
Temperature		63.2	deg F		10/15/2025			FS	X
Turbidity		41.6	NTU		10/15/2025			FS	X
Aluminum	J	0.0316	mg/L	0.05	10/15/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/15/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Barium		0.233	mg/L	0.004	10/15/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/15/2025			SW846-6020B	=
Boron	J	0.00777	mg/L	0.015	10/15/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Calcium		21.1	mg/L	0.2	10/15/2025			SW846-6020B	=
Chromium		0.0582	mg/L	0.01	10/15/2025			SW846-6020B	=
Cobalt		0.0027	mg/L	0.001	10/15/2025			SW846-6020B	=
Copper		0.00267	mg/L	0.002	10/15/2025			SW846-6020B	=
Iron		0.619	mg/L	0.1	10/15/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Magnesium		8.47	mg/L	0.03	10/15/2025			SW846-6020B	=
Manganese		0.0352	mg/L	0.005	10/15/2025			SW846-6020B	=
Molybdenum		0.00739	mg/L	0.001	10/15/2025			SW846-6020B	=
Nickel		0.572	mg/L	0.002	10/15/2025			SW846-6020B	=
Potassium		1.3	mg/L	0.3	10/15/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Sodium		41.8	mg/L	0.25	10/15/2025			SW846-6020B	=
Tantalum	UN	0.005	mg/L	0.005	10/15/2025			SW846-6020B	UJ
Thallium	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/15/2025			SW846-6020B	=
Zinc	J	0.00406	mg/L	0.02	10/15/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/15/2025			SW846-7470A	=
Barium, Dissolved		0.229	mg/L	0.004	10/15/2025			SW846-6020B	J
Chromium, Dissolved		0.0102	mg/L	0.01	10/15/2025			SW846-6020B	J
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	UJ
PCB-1016	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
PCB-1221	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW223 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5243 **SAMPLE ID:** MW223SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
PCB-1242	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
PCB-1248	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
PCB-1254	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
PCB-1260	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
PCB-1268	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.102	ug/L	0.102	10/15/2025			SW846-8082A	=
Radium-226	U	0.0981	pCi/L	0.646	10/15/2025	0.337	0.337	AN-1418	=
Strontium-90	U	-1.63	pCi/L	2.9	10/15/2025	1.11	1.11	EPA-905.0-M	UJ
Tritium	U	-68.3	pCi/L	250	10/15/2025	121	121	EPA-906.0-M	UJ
Technetium-99	U	-2.49	pCi/L	12.8	10/15/2025	6.83	6.83	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.879	pCi/L	1.44	10/15/2025	1.04	1.06	HASL 300, Th-01-RC M	=
Alpha activity	U	1.31	pCi/L	6.04	10/15/2025	3.03	3.04	SW846-9310	=
Beta activity		10.7	pCi/L	10.3	10/15/2025	6.78	7	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	10/15/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/15/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW223 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5243 **SAMPLE ID:** MW223SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/15/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dissolved Solids		208	mg/L	10	10/15/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/15/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/15/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	3.38	ug/L	10	10/15/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.521	mg/L	2	10/15/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW224 **SIDE** **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8000-5244 **SAMPLE ID:** MW224SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Bromide	J	0.384	mg/L	0.8	10/20/2025			SW846-9056A	=
Chloride	J	23.9	mg/L	250	10/20/2025			SW846-9056A	=
Fluoride	J	0.268	mg/L	4	10/20/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.722	mg/L	10	10/20/2025			SW846-9056A	=
Sulfate		18	mg/L	0.4	10/20/2025			SW846-9056A	=
Barometric Pressure Reading		30.11	Inches/Hg		10/20/2025			FS	X
Conductivity		448	µmhos/cm		10/20/2025			FS	X
Depth to Water		70.8	ft		10/20/2025			FS	X
Dissolved Oxygen		4.71	mg/L		10/20/2025			FS	X
Eh (approx)		508	mV		10/20/2025			FS	X
pH		6.2	Std Unit		10/20/2025			FS	X
Temperature		57	deg F		10/20/2025			FS	X
Turbidity		4.7	NTU		10/20/2025			FS	X
Aluminum	U	0.05	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium		0.218	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron		0.0295	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium		23.9	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper		0.00221	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron	U	0.1	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium		10	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese	J	0.0018	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	J	0.000705	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel		0.00618	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium		0.974	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium		57.5	mg/L	2.5	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
Barium, Dissolved		0.227	mg/L	0.004	10/20/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	UJ
PCB-1016	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
PCB-1221	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW224 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5244 **SAMPLE ID:** MW224SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
PCB-1242	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
PCB-1248	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
PCB-1254	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
PCB-1260	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
PCB-1268	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.104	ug/L	0.104	10/20/2025			SW846-8082A	=
Radium-226	U	0.422	pCi/L	0.618	10/20/2025	0.429	0.431	AN-1418	=
Strontium-90	U	1.19	pCi/L	3.15	10/20/2025	1.81	1.82	EPA-905.0-M	=
Tritium	U	-47.5	pCi/L	246	10/20/2025	116	116	EPA-906.0-M	=
Technetium-99	U	-1.15	pCi/L	14.6	10/20/2025	8.05	8.05	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.902	pCi/L	2.5	10/20/2025	1.54	1.55	HASL 300, Th-01-RC M	=
Alpha activity	U	1.69	pCi/L	8.36	10/20/2025	4.24	4.25	SW846-9310	=
Beta activity	U	1.79	pCi/L	7.72	10/20/2025	4.27	4.28	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW224 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8000-5244 **SAMPLE ID:** MW224SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.02	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dissolved Solids		255	mg/L	10	10/20/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	11.1	mg/L	20	10/20/2025			EPA-410.4	=
Cyanide	JN	0.00193	mg/L	0.2	10/20/2025			SW846-9012B	J
Total Organic Halides (TOX)	J	7.01	ug/L	10	10/20/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.989	mg/L	2	10/20/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW369 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4820 **SAMPLE ID:** MW369UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/14/2025			EPA-300.0	=
Bromide		0.328	mg/L	0.2	10/14/2025			SW846-9056A	=
Chloride	JN	28	mg/L	250	10/14/2025			SW846-9056A	J
Fluoride	J	0.156	mg/L	4	10/14/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.12	mg/L	10	10/14/2025			SW846-9056A	=
Sulfate		8.69	mg/L	0.4	10/14/2025			SW846-9056A	=
Barometric Pressure Reading		30.18	Inches/Hg		10/14/2025			FS	X
Conductivity		360	µmhos/cm		10/14/2025			FS	X
Depth to Water		39.31	ft		10/14/2025			FS	X
Dissolved Oxygen		4.13	mg/L		10/14/2025			FS	X
Eh (approx)		492	mV		10/14/2025			FS	X
pH		5.98	Std Unit		10/14/2025			FS	X
Temperature		61.4	deg F		10/14/2025			FS	X
Turbidity		8.57	NTU		10/14/2025			FS	X
Aluminum	B	0.185	mg/L	0.05	10/14/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/14/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Barium		0.359	mg/L	0.004	10/14/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/14/2025			SW846-6020B	=
Boron		0.0198	mg/L	0.015	10/14/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Calcium	B	16.8	mg/L	0.2	10/14/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	=
Cobalt		0.00584	mg/L	0.001	10/14/2025			SW846-6020B	=
Copper	J	0.00185	mg/L	0.002	10/14/2025			SW846-6020B	=
Iron		0.239	mg/L	0.1	10/14/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Magnesium		6.46	mg/L	0.03	10/14/2025			SW846-6020B	=
Manganese		0.0263	mg/L	0.005	10/14/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Nickel		0.00311	mg/L	0.002	10/14/2025			SW846-6020B	=
Potassium		0.597	mg/L	0.3	10/14/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Selenium	J	0.00276	mg/L	0.005	10/14/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Sodium		46.5	mg/L	0.25	10/14/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/14/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/14/2025			SW846-6020B	=
Zinc	J	0.00617	mg/L	0.02	10/14/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/14/2025			SW846-7470A	=
Barium, Dissolved		0.355	mg/L	0.004	10/14/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/14/2025			SW846-6020B	UJ
PCB-1016	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	=
PCB-1221	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW369 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8004-4820 **SAMPLE ID:** MW369UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	=
PCB-1242	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	=
PCB-1248	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	=
PCB-1254	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	=
PCB-1260	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	UJ
PCB-1268	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.102	ug/L	0.102	10/14/2025			SW846-8082A	UJ
Radium-226	U	0.4	pCi/L	0.583	10/14/2025	0.429	0.431	AN-1418	=
Radium-228		6.62	pCi/L	4.85	10/14/2025	3.3	3.78	EPA-904.0-M	UJ
Strontium-90	U	-0.832	pCi/L	3.11	10/14/2025	1.75	1.75	EPA-905.0-M	=
Tritium	U	43.2	pCi/L	138	10/14/2025	77.7	78.1	EPA-906.0-M	=
Technetium-99		72.6	pCi/L	17.4	10/14/2025	13.6	15.9	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.32	pCi/L	1.82	10/14/2025	0.967	0.971	HASL 300, Th-01-RC M	=
Thorium-232	U	0.071	pCi/L	1.03	10/14/2025	0.515	0.515	HASL 300, Th-01-RC M	=
Alpha activity	U	4.36	pCi/L	7.65	10/14/2025	4.8	4.85	SW846-9310	=
Beta activity		36.6	pCi/L	15.3	10/14/2025	11.4	12.8	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	10/14/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/14/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW369 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4820 **SAMPLE ID:** MW369UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloroform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/14/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Trichloroethene	J	0.95	ug/L	1	10/14/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dissolved Solids	*	177	mg/L	10	10/14/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	11.1	mg/L	20	10/14/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/14/2025			SW846-9012B	=
Total Organic Halides (TOX)		10.6	ug/L	10	10/14/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.84	mg/L	2	10/14/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW370 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4818 **SAMPLE ID:** MW370UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/14/2025			EPA-300.0	=
Bromide		0.512	mg/L	0.2	10/14/2025			SW846-9056A	=
Chloride	JN	41.1	mg/L	250	10/14/2025			SW846-9056A	J
Fluoride	J	0.139	mg/L	4	10/14/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.15	mg/L	10	10/14/2025			SW846-9056A	=
Sulfate		19.4	mg/L	0.4	10/14/2025			SW846-9056A	=
Barometric Pressure Reading		30.2	Inches/Hg		10/14/2025			FS	X
Conductivity		438	µmhos/cm		10/14/2025			FS	X
Depth to Water		40.19	ft		10/14/2025			FS	X
Dissolved Oxygen		5.24	mg/L		10/14/2025			FS	X
Eh (approx)		505	mV		10/14/2025			FS	X
pH		6	Std Unit		10/14/2025			FS	X
Temperature		63	deg F		10/14/2025			FS	X
Turbidity		3.55	NTU		10/14/2025			FS	X
Aluminum	BJ	0.0248	mg/L	0.05	10/14/2025			SW846-6020B	U
Antimony	U	0.003	mg/L	0.003	10/14/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Barium		0.213	mg/L	0.004	10/14/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/14/2025			SW846-6020B	=
Boron		0.0695	mg/L	0.015	10/14/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Calcium	B	27	mg/L	0.2	10/14/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Copper	J	0.00108	mg/L	0.002	10/14/2025			SW846-6020B	=
Iron	J	0.0339	mg/L	0.1	10/14/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Magnesium		11	mg/L	0.03	10/14/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Nickel	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Potassium		2.42	mg/L	0.3	10/14/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Sodium		40.1	mg/L	0.25	10/14/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/14/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/14/2025			SW846-6020B	=
Zinc	J	0.0048	mg/L	0.02	10/14/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/14/2025			SW846-7470A	=
Barium, Dissolved		0.23	mg/L	0.004	10/14/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/14/2025			SW846-6020B	UJ
PCB-1016	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	=
PCB-1221	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW370 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4818 **SAMPLE ID:** MW370UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	=
PCB-1242	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	=
PCB-1248	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	=
PCB-1254	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	=
PCB-1260	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	UJ
PCB-1268	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.1	ug/L	0.1	10/14/2025			SW846-8082A	UJ
Radium-226	U	0.543	pCi/L	0.703	10/14/2025	0.513	0.515	AN-1418	=
Radium-228		5.35	pCi/L	4.77	10/14/2025	3.11	3.46	EPA-904.0-M	UJ
Strontium-90	U	0.577	pCi/L	1.97	10/14/2025	1.15	1.15	EPA-905.0-M	=
Tritium	U	32.3	pCi/L	155	10/14/2025	85.4	85.6	EPA-906.0-M	=
Technetium-99	U	9.9	pCi/L	16.7	10/14/2025	10	10.1	HASL 300, Tc-02-RC M	=
Thorium-230	U	1.03	pCi/L	1.42	10/14/2025	1.01	1.03	HASL 300, Th-01-RC M	=
Thorium-232	U	0.0213	pCi/L	0.973	10/14/2025	0.449	0.449	HASL 300, Th-01-RC M	=
Alpha activity	U	-1.62	pCi/L	8.16	10/14/2025	2.53	2.54	SW846-9310	=
Beta activity	U	6.59	pCi/L	9.3	10/14/2025	5.78	5.88	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	10/14/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/14/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW370 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4818 **SAMPLE ID:** MW370UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloroform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/14/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Trichloroethene		1.9	ug/L	1	10/14/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dissolved Solids	*	185	mg/L	10	10/14/2025			EPA-160.1	J
Chemical Oxygen Demand (COD)	J	11.1	mg/L	20	10/14/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/14/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	7.96	ug/L	10	10/14/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.827	mg/L	2	10/14/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW372 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4808 **SAMPLE ID:** MW372UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/14/2025			EPA-300.0	=
Bromide		0.468	mg/L	0.2	10/14/2025			SW846-9056A	=
Chloride	JN	36.6	mg/L	250	10/14/2025			SW846-9056A	J
Fluoride	J	0.155	mg/L	4	10/14/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.38	mg/L	10	10/14/2025			SW846-9056A	=
Sulfate		144	mg/L	4	10/14/2025			SW846-9056A	=
Barometric Pressure Reading		30.24	Inches/Hg		10/14/2025			FS	X
Conductivity		803	µmhos/cm		10/14/2025			FS	X
Depth to Water		34.47	ft		10/14/2025			FS	X
Dissolved Oxygen		1.97	mg/L		10/14/2025			FS	X
Eh (approx)		520	mV		10/14/2025			FS	X
pH		6.12	Std Unit		10/14/2025			FS	X
Temperature		64.3	deg F		10/14/2025			FS	X
Turbidity		3.55	NTU		10/14/2025			FS	X
Aluminum	BJ	0.0255	mg/L	0.05	10/14/2025			SW846-6020B	U
Antimony	U	0.003	mg/L	0.003	10/14/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Barium		0.0512	mg/L	0.004	10/14/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/14/2025			SW846-6020B	=
Boron		1.21	mg/L	0.15	10/14/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Calcium	B	63	mg/L	2	10/14/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Copper	J	0.00102	mg/L	0.002	10/14/2025			SW846-6020B	=
Iron	J	0.079	mg/L	0.1	10/14/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Magnesium		22.5	mg/L	0.03	10/14/2025			SW846-6020B	=
Manganese	J	0.00125	mg/L	0.005	10/14/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Nickel	J	0.000701	mg/L	0.002	10/14/2025			SW846-6020B	=
Potassium		2.09	mg/L	0.3	10/14/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Selenium	J	0.00322	mg/L	0.005	10/14/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Sodium		64.3	mg/L	2.5	10/14/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/14/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/14/2025			SW846-6020B	=
Zinc	J	0.0104	mg/L	0.02	10/14/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/14/2025			SW846-7470A	=
Barium, Dissolved		0.0563	mg/L	0.004	10/14/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/14/2025			SW846-6020B	UJ
PCB-1016	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	=
PCB-1221	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW372 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8004-4808 **SAMPLE ID:** MW372UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	=
PCB-1242	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	=
PCB-1248	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	=
PCB-1254	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	=
PCB-1260	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	UJ
PCB-1268	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0992	ug/L	0.0992	10/14/2025			SW846-8082A	UJ
Radium-226	U	0.217	pCi/L	0.715	10/14/2025	0.413	0.414	AN-1418	=
Radium-228	U	2.8	pCi/L	4.73	10/14/2025	2.85	2.95	EPA-904.0-M	=
Strontium-90	U	-0.801	pCi/L	2.74	10/14/2025	1.48	1.48	EPA-905.0-M	=
Tritium	U	124	pCi/L	137	10/14/2025	90.1	93.2	EPA-906.0-M	=
Technetium-99		67.1	pCi/L	16.6	10/14/2025	12.9	14.9	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.148	pCi/L	2.98	10/14/2025	1.41	1.41	HASL 300, Th-01-RC M	=
Thorium-232	U	-0.411	pCi/L	2.63	10/14/2025	0.844	0.847	HASL 300, Th-01-RC M	=
Alpha activity	U	0.637	pCi/L	6.82	10/14/2025	3.09	3.09	SW846-9310	=
Beta activity		47.8	pCi/L	10.1	10/14/2025	10.1	12.7	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	10/14/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/14/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW372 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4808 **SAMPLE ID:** MW372UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloroform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/14/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Trichloroethene	J	0.59	ug/L	1	10/14/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dissolved Solids	*	449	mg/L	10	10/14/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	13.4	mg/L	20	10/14/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/14/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	8.68	ug/L	10	10/14/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	1.09	mg/L	2	10/14/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW373 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4792 **SAMPLE ID:** MW373UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/14/2025			EPA-300.0	=
Bromide		0.436	mg/L	0.2	10/14/2025			SW846-9056A	=
Chloride	JN	29.8	mg/L	250	10/14/2025			SW846-9056A	J
Fluoride	J	0.167	mg/L	4	10/14/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.609	mg/L	10	10/14/2025			SW846-9056A	=
Sulfate		225	mg/L	8	10/14/2025			SW846-9056A	=
Barometric Pressure Reading		30.24	Inches/Hg		10/14/2025			FS	X
Conductivity		1015	µmhos/cm		10/14/2025			FS	X
Depth to Water		34.78	ft		10/14/2025			FS	X
Dissolved Oxygen		1.9	mg/L		10/14/2025			FS	X
Eh (approx)		481	mV		10/14/2025			FS	X
pH		6.04	Std Unit		10/14/2025			FS	X
Temperature		64.4	deg F		10/14/2025			FS	X
Turbidity		4.04	NTU		10/14/2025			FS	X
Aluminum	BJ	0.0227	mg/L	0.05	10/14/2025			SW846-6020B	U
Antimony	U	0.003	mg/L	0.003	10/14/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Barium		0.0271	mg/L	0.004	10/14/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/14/2025			SW846-6020B	=
Boron		2.5	mg/L	0.3	10/14/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Calcium	B	80.4	mg/L	4	10/14/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	=
Cobalt	J	0.000642	mg/L	0.001	10/14/2025			SW846-6020B	=
Copper	J	0.00112	mg/L	0.002	10/14/2025			SW846-6020B	=
Iron	J	0.0544	mg/L	0.1	10/14/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Magnesium		29.7	mg/L	0.03	10/14/2025			SW846-6020B	=
Manganese		0.0631	mg/L	0.005	10/14/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Nickel	J	0.00143	mg/L	0.002	10/14/2025			SW846-6020B	=
Potassium		2.79	mg/L	0.3	10/14/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/14/2025			SW846-6020B	=
Sodium		69.2	mg/L	5	10/14/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/14/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/14/2025			SW846-6020B	=
Uranium	J	0.000097	mg/L	0.0002	10/14/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/14/2025			SW846-6020B	=
Zinc	J	0.00469	mg/L	0.02	10/14/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/14/2025			SW846-7470A	=
Barium, Dissolved		0.031	mg/L	0.004	10/14/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/14/2025			SW846-6020B	UJ
Uranium, Dissolved	J	0.000091	mg/L	0.0002	10/14/2025			SW846-6020B	J
PCB-1016	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	=
PCB-1221	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW373 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4792 **SAMPLE ID:** MW373UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	=
PCB-1242	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	=
PCB-1248	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	=
PCB-1254	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	=
PCB-1260	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	UJ
PCB-1268	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.101	ug/L	0.101	10/14/2025			SW846-8082A	UJ
Radium-226	U	0.269	pCi/L	0.775	10/14/2025	0.455	0.455	AN-1418	=
Radium-228		7.93	pCi/L	4.77	10/14/2025	3.36	4.02	EPA-904.0-M	UJ
Strontium-90	U	-0.075	pCi/L	2.78	10/14/2025	1.59	1.59	EPA-905.0-M	=
Tritium	U	132	pCi/L	140	10/14/2025	92.2	95.7	EPA-906.0-M	=
Technetium-99	U	0.484	pCi/L	16	10/14/2025	9.04	9.04	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.0681	pCi/L	3.25	10/14/2025	1.48	1.48	HASL 300, Th-01-RC M	=
Thorium-232	U	-0.226	pCi/L	2.35	10/14/2025	0.863	0.866	HASL 300, Th-01-RC M	=
Alpha activity	U	0.705	pCi/L	8.7	10/14/2025	3.85	3.86	SW846-9310	=
Beta activity	U	4.02	pCi/L	7	10/14/2025	4.27	4.33	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	10/14/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/14/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW373 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4792 **SAMPLE ID:** MW373UG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloroform	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/14/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/14/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Trichloroethene		2.16	ug/L	1	10/14/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/14/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/14/2025			SW846-8260D	=
Dissolved Solids	*	618	mg/L	10	10/14/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	15.7	mg/L	20	10/14/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/14/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	9.53	ug/L	10	10/14/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	1.43	mg/L	2	10/14/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW384 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4809 **SAMPLE ID:** MW384SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Bromide*		2.88	mg/L	0.8	10/20/2025			SW846-9056A	=
Chloride	J	28.6	mg/L	250	10/20/2025			SW846-9056A	=
Fluoride	J	0.159	mg/L	4	10/20/2025			SW846-9056A	=
Nitrate as Nitrogen	J	2.7	mg/L	10	10/20/2025			SW846-9056A	=
Sulfate		29.5	mg/L	1.6	10/20/2025			SW846-9056A	=
Barometric Pressure Reading		30.12	Inches/Hg		10/20/2025			FS	X
Conductivity		449	µmhos/cm		10/20/2025			FS	X
Depth to Water		40.48	ft		10/20/2025			FS	X
Dissolved Oxygen		5.16	mg/L		10/20/2025			FS	X
Eh (approx)		487	mV		10/20/2025			FS	X
pH		6.12	Std Unit		10/20/2025			FS	X
Temperature		59	deg F		10/20/2025			FS	X
Turbidity		5.96	NTU		10/20/2025			FS	X
Aluminum	U	0.05	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium		0.215	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron		0.1	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium		25	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	J	0.00199	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron		0.203	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium		10.3	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese		0.00594	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel	J	0.00188	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium		1.43	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium		46.7	mg/L	0.25	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	J	0.00489	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
Barium, Dissolved		0.215	mg/L	0.004	10/20/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	UJ
PCB-1016	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
PCB-1221	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=

*This data point was rejected during data assessment.

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW384 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4809 **SAMPLE ID:** MW384SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
PCB-1242	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
PCB-1248	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
PCB-1254	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
PCB-1260	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
PCB-1268	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.103	ug/L	0.103	10/20/2025			SW846-8082A	=
Radium-226	U	0.0122	pCi/L	0.675	10/20/2025	0.322	0.322	AN-1418	=
Strontium-90	U	-0.0197	pCi/L	3.72	10/20/2025	1.94	1.94	EPA-905.0-M	=
Tritium	U	38.2	pCi/L	238	10/20/2025	128	128	EPA-906.0-M	=
Technetium-99		23.7	pCi/L	14.6	10/20/2025	9.73	10.1	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.041	pCi/L	3.52	10/20/2025	1.64	1.65	HASL 300, Th-01-RC M	=
Alpha activity	U	1.89	pCi/L	5.92	10/20/2025	3.24	3.26	SW846-9310	=
Beta activity		28.7	pCi/L	9.14	10/20/2025	7.97	9.22	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW384 SIDE **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4809 **SAMPLE ID:** MW384SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.91	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	J	0.51	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dissolved Solids		221	mg/L	10	10/20/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	11.1	mg/L	20	10/20/2025			EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	10/20/2025			SW846-9012B	UJ
Total Organic Halides (TOX)	J	6.19	ug/L	10	10/20/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	1.05	mg/L	2	10/20/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW385 **SIDE** **RGA Type:** LRGA **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8004-4810 **SAMPLE ID:** MW385SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Bromide		0.223	mg/L	0.2	10/20/2025			SW846-9056A	=
Chloride	J	18.8	mg/L	250	10/20/2025			SW846-9056A	=
Fluoride	J	0.172	mg/L	4	10/20/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.298	mg/L	10	10/20/2025			SW846-9056A	=
Sulfate		18.3	mg/L	0.4	10/20/2025			SW846-9056A	=
Barometric Pressure Reading		30.12	Inches/Hg		10/20/2025			FS	X
Conductivity		460	µmhos/cm		10/20/2025			FS	X
Depth to Water		40.86	ft		10/20/2025			FS	X
Dissolved Oxygen		2.19	mg/L		10/20/2025			FS	X
Eh (approx)		421	mV		10/20/2025			FS	X
pH		6.38	Std Unit		10/20/2025			FS	X
Temperature		59.8	deg F		10/20/2025			FS	X
Turbidity		7.5	NTU		10/20/2025			FS	X
Aluminum	U	0.05	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium		0.495	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron		0.0497	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium		33.4	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	J	0.000445	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	J	0.00183	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron	J	0.033	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium		13	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese		0.031	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	J	0.000388	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel	J	0.00124	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium		1.69	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium		33.3	mg/L	0.25	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	J	0.000117	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	J	0.00481	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
Barium, Dissolved		0.41	mg/L	0.004	10/20/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	UJ
Uranium, Dissolved	J	0.000138	mg/L	0.0002	10/20/2025			SW846-6020B	J
PCB-1016	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
PCB-1221	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW385 SIDE **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4810 **SAMPLE ID:** MW385SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
PCB-1242	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
PCB-1248	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
PCB-1254	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
PCB-1260	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
PCB-1268	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0993	ug/L	0.0993	10/20/2025			SW846-8082A	=
Radium-226	U	1.26	pCi/L	1.67	10/20/2025	1.4	1.4	AN-1418	=
Strontium-90	U	-2.16	pCi/L	3.9	10/20/2025	1.52	1.52	EPA-905.0-M	UJ
Tritium	U	-12.9	pCi/L	250	10/20/2025	125	125	EPA-906.0-M	=
Technetium-99		38.1	pCi/L	14.1	10/20/2025	10.3	11.1	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.103	pCi/L	2.68	10/20/2025	1.26	1.27	HASL 300, Th-01-RC M	=
Alpha activity	U	0.036	pCi/L	6.69	10/20/2025	2.91	2.92	SW846-9310	=
Beta activity		34.7	pCi/L	9.34	10/20/2025	8.56	10.2	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW385 SIDE **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4810 **SAMPLE ID:** MW385SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.99	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dissolved Solids		213	mg/L	10	10/20/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/20/2025			EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	10/20/2025			SW846-9012B	UJ
Total Organic Halides (TOX)	J	9.93	ug/L	10	10/20/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.928	mg/L	2	10/20/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: MW386 **SIDE** **RGA Type:** UCRS **Period:** 4th Quarter 2025

AKGWA Well Tag #: 8004-4804 **SAMPLE ID:** MW386DSG1-26 **Sample Type:** FR

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Bromide	U	0.2	mg/L	0.2	10/20/2025			SW846-9056A	=
Chloride	J	9.56	mg/L	250	10/20/2025			SW846-9056A	=
Fluoride	J	0.764	mg/L	4	10/20/2025			SW846-9056A	=
Nitrate as Nitrogen	U	10	mg/L	10	10/20/2025			SW846-9056A	=
Sulfate		34.1	mg/L	0.8	10/20/2025			SW846-9056A	=
Aluminum	U	0.05	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium		0.135	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron		0.0162	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium		19.9	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt		0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	J	0.00156	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron		0.117	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium		8.22	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese		0.503	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	J	0.000827	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel		0.00217	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium	J	0.268	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium		101	mg/L	2.5	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	J	0.00353	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
Barium, Dissolved		0.13	mg/L	0.004	10/20/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	UJ
PCB-1016	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
PCB-1221	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
PCB-1232	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
PCB-1242	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
PCB-1248	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
PCB-1254	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
PCB-1260	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
PCB-1268	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.102	ug/L	0.102	10/20/2025			SW846-8082A	=
Radium-226	U	-0.0574	pCi/L	0.928	10/20/2025	0.379	0.379	AN-1418	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW386 SIDE **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4804 **SAMPLE ID:** MW386DSG1-26 **Sample Type:** FR

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Strontium-90	U	-0.954	pCi/L	3.94	10/20/2025	1.94	1.94	EPA-905.0-M	=
Tritium	U	-28.2	pCi/L	245	10/20/2025	119	119	EPA-906.0-M	=
Technetium-99	U	-0.256	pCi/L	14.6	10/20/2025	8.1	8.1	HASL 300, Tc-02-RC M	=
Thorium-230	U	2.66	pCi/L	3.19	10/20/2025	2.37	2.41	HASL 300, Th-01-RC M	=
Alpha activity	U	-0.625	pCi/L	8.95	10/20/2025	3.88	3.89	SW846-9310	=
Beta activity	U	4.76	pCi/L	10	10/20/2025	5.92	5.97	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.96	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW386 SIDE **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4804 **SAMPLE ID:** MW386DSG1-26 **Sample Type:** FR

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dissolved Solids		350	mg/L	10	10/20/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)		22.5	mg/L	20	10/20/2025			EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	10/20/2025			SW846-9012B	UJ
Total Organic Halides (TOX)		118	ug/L	10	10/20/2025			SW846-9020B	=
Total Organic Carbon (TOC)		4.78	mg/L	2	10/20/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW386 SIDE **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4804 **SAMPLE ID:** MW386SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Bromide	U	0.2	mg/L	0.2	10/20/2025			SW846-9056A	=
Chloride	J	9.61	mg/L	250	10/20/2025			SW846-9056A	=
Fluoride	J	0.769	mg/L	4	10/20/2025			SW846-9056A	=
Nitrate as Nitrogen	U	10	mg/L	10	10/20/2025			SW846-9056A	=
Sulfate		34.3	mg/L	0.8	10/20/2025			SW846-9056A	=
Barometric Pressure Reading		30.12	Inches/Hg		10/20/2025			FS	X
Conductivity		591	µmhos/cm		10/20/2025			FS	X
Depth to Water		21.07	ft		10/20/2025			FS	X
Dissolved Oxygen		2	mg/L		10/20/2025			FS	X
Eh (approx)		428	mV		10/20/2025			FS	X
pH		6.77	Std Unit		10/20/2025			FS	X
Temperature		61.1	deg F		10/20/2025			FS	X
Turbidity		6.27	NTU		10/20/2025			FS	X
Aluminum	U	0.05	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium		0.128	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron	J	0.0142	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium		18.5	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	J	0.000932	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	J	0.00153	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron		0.105	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium		7.57	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese		0.465	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	J	0.000806	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel	J	0.00198	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium	J	0.245	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium		102	mg/L	2.5	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	J	0.00362	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
Barium, Dissolved		0.131	mg/L	0.004	10/20/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	UJ
PCB-1016	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1221	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW386 SIDE **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4804 **SAMPLE ID:** MW386SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1242	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1248	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1254	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1260	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1268	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
Radium-226	U	0.173	pCi/L	0.821	10/20/2025	0.547	0.547	AN-1418	=
Strontium-90	U	-0.915	pCi/L	3.89	10/20/2025	1.84	1.84	EPA-905.0-M	=
Tritium	U	52.3	pCi/L	240	10/20/2025	131	132	EPA-906.0-M	=
Technetium-99	U	-2.59	pCi/L	14.4	10/20/2025	7.85	7.85	HASL 300, Tc-02-RC M	=
Thorium-230	U	2.04	pCi/L	2.51	10/20/2025	1.88	1.91	HASL 300, Th-01-RC M	=
Alpha activity	U	-1.92	pCi/L	6.95	10/20/2025	1.7	1.7	SW846-9310	UJ
Beta activity	U	6.3	pCi/L	9.77	10/20/2025	5.98	6.06	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0194	ug/L	0.0194	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW386 SIDE **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4804 **SAMPLE ID:** MW386SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.93	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dissolved Solids		336	mg/L	10	10/20/2025			EPA-160.1	J
Chemical Oxygen Demand (COD)		20.2	mg/L	20	10/20/2025			EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	10/20/2025			SW846-9012B	UJ
Total Organic Halides (TOX)		119	ug/L	10	10/20/2025			SW846-9020B	=
Total Organic Carbon (TOC)		4.82	mg/L	2	10/20/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW387 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4815 **SAMPLE ID:** MW387SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Bromide		0.467	mg/L	0.2	10/20/2025			SW846-9056A	=
Chloride	J	34.9	mg/L	250	10/20/2025			SW846-9056A	=
Fluoride	J	0.947	mg/L	4	10/20/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.86	mg/L	10	10/20/2025			SW846-9056A	=
Sulfate		29.2	mg/L	1.6	10/20/2025			SW846-9056A	=
Barometric Pressure Reading		30.09	Inches/Hg		10/20/2025			FS	X
Conductivity		573	µmhos/cm		10/20/2025			FS	X
Depth to Water		38.68	ft		10/20/2025			FS	X
Dissolved Oxygen		4.96	mg/L		10/20/2025			FS	X
Eh (approx)		511	mV		10/20/2025			FS	X
pH		6.28	Std Unit		10/20/2025			FS	X
Temperature		63.5	deg F		10/20/2025			FS	X
Turbidity		5.54	NTU		10/20/2025			FS	X
Aluminum	J	0.0367	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium		0.104	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron		0.0375	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium		38.6	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	J	0.00568	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	J	0.00134	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron		0.123	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium		16.4	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese	J	0.00493	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel	J	0.00074	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium		1.81	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium		47.8	mg/L	2.5	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	J	0.00429	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
Barium, Dissolved		0.107	mg/L	0.004	10/20/2025			SW846-6020B	J
Chromium, Dissolved	J	0.00537	mg/L	0.01	10/20/2025			SW846-6020B	J
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	UJ
PCB-1016	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
PCB-1221	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW387 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4815 **SAMPLE ID:** MW387SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
PCB-1242	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
PCB-1248	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
PCB-1254	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
PCB-1260	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
PCB-1268	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0975	ug/L	0.0975	10/20/2025			SW846-8082A	=
Radium-226	U	0.277	pCi/L	0.449	10/20/2025	0.324	0.325	AN-1418	=
Strontium-90	U	3.18	pCi/L	3.18	10/20/2025	2.12	2.18	EPA-905.0-M	=
Tritium	U	-46.6	pCi/L	249	10/20/2025	118	118	EPA-906.0-M	=
Technetium-99		109	pCi/L	15	10/20/2025	14.3	18.9	HASL 300, Tc-02-RC M	=
Thorium-230	U	2.03	pCi/L	3.06	10/20/2025	2.11	2.14	HASL 300, Th-01-RC M	=
Alpha activity	U	-1.09	pCi/L	8.11	10/20/2025	3.25	3.25	SW846-9310	=
Beta activity		93.4	pCi/L	13.2	10/20/2025	13.5	20.8	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0188	ug/L	0.0188	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW387 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4815 **SAMPLE ID:** MW387SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.96	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	J	0.42	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dissolved Solids		303	mg/L	10	10/20/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	11.1	mg/L	20	10/20/2025			EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	10/20/2025			SW846-9012B	UJ
Total Organic Halides (TOX)	J	7.59	ug/L	10	10/20/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	1.09	mg/L	2	10/20/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW388 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4816 **SAMPLE ID:** MW388SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Bromide		0.396	mg/L	0.2	10/20/2025			SW846-9056A	=
Chloride	J	33	mg/L	250	10/20/2025			SW846-9056A	=
Fluoride	J	0.195	mg/L	4	10/20/2025			SW846-9056A	=
Nitrate as Nitrogen	J	0.905	mg/L	10	10/20/2025			SW846-9056A	=
Sulfate		17.3	mg/L	0.4	10/20/2025			SW846-9056A	=
Barometric Pressure Reading		30.05	Inches/Hg		10/20/2025			FS	X
Conductivity		447	µmhos/cm		10/20/2025			FS	X
Depth to Water		38.64	ft		10/20/2025			FS	X
Dissolved Oxygen		5.03	mg/L		10/20/2025			FS	X
Eh (approx)		473	mV		10/20/2025			FS	X
pH		6.11	Std Unit		10/20/2025			FS	X
Temperature		63.3	deg F		10/20/2025			FS	X
Turbidity		6.6	NTU		10/20/2025			FS	X
Aluminum	J	0.0317	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium		0.19	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron		0.025	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium		24.7	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	J	0.00112	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron		0.123	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium		10.6	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese	J	0.00125	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel	J	0.000616	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium		1.64	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium		43.2	mg/L	0.25	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	J	0.00343	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
Barium, Dissolved		0.194	mg/L	0.004	10/20/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	UJ
PCB-1016	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1221	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW388 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4816 **SAMPLE ID:** MW388SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1242	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1248	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1254	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1260	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1268	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
Radium-226	U	0.591	pCi/L	1.67	10/20/2025	1.08	1.08	AN-1418	=
Strontium-90	U	0.282	pCi/L	3.97	10/20/2025	2.14	2.14	EPA-905.0-M	=
Tritium	U	-12.4	pCi/L	234	10/20/2025	117	117	EPA-906.0-M	=
Technetium-99	U	5.91	pCi/L	15.1	10/20/2025	8.85	8.88	HASL 300, Tc-02-RC M	=
Thorium-230	U	1.05	pCi/L	3.1	10/20/2025	1.84	1.86	HASL 300, Th-01-RC M	=
Alpha activity	U	-1.63	pCi/L	7.36	10/20/2025	2.49	2.49	SW846-9310	=
Beta activity	U	4.08	pCi/L	12.8	10/20/2025	7.38	7.41	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW388 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4816 **SAMPLE ID:** MW388SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	2.08	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dissolved Solids		235	mg/L	10	10/20/2025			EPA-160.1	J
Chemical Oxygen Demand (COD)	J	11.1	mg/L	20	10/20/2025			EPA-410.4	=
Cyanide	UN	0.2	mg/L	0.2	10/20/2025			SW846-9012B	UJ
Total Organic Halides (TOX)	J	5.25	ug/L	10	10/20/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.848	mg/L	2	10/20/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW390 DOWN **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4811 **SAMPLE ID:** MW390SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/15/2025			EPA-300.0	=
Bromide		0.327	mg/L	0.2	10/15/2025			SW846-9056A	=
Chloride	J	33.6	mg/L	250	10/15/2025			SW846-9056A	=
Fluoride	J	0.306	mg/L	4	10/15/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.68	mg/L	10	10/15/2025			SW846-9056A	=
Sulfate		38.8	mg/L	1.6	10/15/2025			SW846-9056A	=
Barometric Pressure Reading		30.17	Inches/Hg		10/15/2025			FS	X
Conductivity		642	µmhos/cm		10/15/2025			FS	X
Depth to Water		35.53	ft		10/15/2025			FS	X
Dissolved Oxygen		5.44	mg/L		10/15/2025			FS	X
Eh (approx)		532	mV		10/15/2025			FS	X
pH		6.3	Std Unit		10/15/2025			FS	X
Temperature		61.6	deg F		10/15/2025			FS	X
Turbidity		4.78	NTU		10/15/2025			FS	X
Aluminum		0.0871	mg/L	0.05	10/15/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/15/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Barium		0.195	mg/L	0.004	10/15/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/15/2025			SW846-6020B	=
Boron	J	0.0145	mg/L	0.015	10/15/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Calcium		27.5	mg/L	0.2	10/15/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/15/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Copper	J	0.00113	mg/L	0.002	10/15/2025			SW846-6020B	=
Iron	J	0.0783	mg/L	0.1	10/15/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Magnesium		11.8	mg/L	0.03	10/15/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Molybdenum	J	0.00044	mg/L	0.001	10/15/2025			SW846-6020B	=
Nickel	J	0.00138	mg/L	0.002	10/15/2025			SW846-6020B	=
Potassium		0.331	mg/L	0.3	10/15/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Sodium		89.4	mg/L	5	10/15/2025			SW846-6020B	=
Tantalum	UN	0.005	mg/L	0.005	10/15/2025			SW846-6020B	UJ
Thallium	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Uranium	J	0.000177	mg/L	0.0002	10/15/2025			SW846-6020B	U
Vanadium	U	0.02	mg/L	0.02	10/15/2025			SW846-6020B	=
Zinc	J	0.00426	mg/L	0.02	10/15/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/15/2025			SW846-7470A	=
Barium, Dissolved		0.205	mg/L	0.004	10/15/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/15/2025			SW846-6020B	UJ
Uranium, Dissolved	J	0.000174	mg/L	0.0002	10/15/2025			SW846-6020B	J
PCB-1016	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
PCB-1221	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW390 DOWN **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4811 **SAMPLE ID:** MW390SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
PCB-1242	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
PCB-1248	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
PCB-1254	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
PCB-1260	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
PCB-1268	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.101	ug/L	0.101	10/15/2025			SW846-8082A	=
Radium-226	U	-0.117	pCi/L	0.813	10/15/2025	0.334	0.334	AN-1418	=
Strontium-90	U	-3.4	pCi/L	6.54	10/15/2025	2.62	2.62	EPA-905.0-M	UJ
Tritium	U	-15.1	pCi/L	220	10/15/2025	111	111	EPA-906.0-M	UJ
Technetium-99		41.4	pCi/L	12.7	10/15/2025	9.97	11	HASL 300, Tc-02-RC M	=
Thorium-230	U	-0.372	pCi/L	2.07	10/15/2025	0.728	0.728	HASL 300, Th-01-RC M	=
Alpha activity	U	2.8	pCi/L	7.61	10/15/2025	4.29	4.32	SW846-9310	=
Beta activity		38.6	pCi/L	10.6	10/15/2025	9.58	11.4	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	10/15/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/15/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW390 DOWN **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4811 **SAMPLE ID:** MW390SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/15/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dissolved Solids		374	mg/L	10	10/15/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/15/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/15/2025			SW846-9012B	=
Total Organic Halides (TOX)		12.9	ug/L	10	10/15/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	1.58	mg/L	2	10/15/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW391 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4805 **SAMPLE ID:** MW391SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/16/2025			EPA-300.0	=
Bromide		0.473	mg/L	0.2	10/16/2025			SW846-9056A	=
Chloride	J	39.3	mg/L	250	10/16/2025			SW846-9056A	=
Fluoride	J	0.129	mg/L	4	10/16/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.16	mg/L	10	10/16/2025			SW846-9056A	=
Sulfate		12.2	mg/L	0.4	10/16/2025			SW846-9056A	=
Barometric Pressure Reading		30.13	Inches/Hg		10/16/2025			FS	X
Conductivity		502	µmhos/cm		10/16/2025			FS	X
Depth to Water		41.73	ft		10/16/2025			FS	X
Dissolved Oxygen		2.88	mg/L		10/16/2025			FS	X
Eh (approx)		440	mV		10/16/2025			FS	X
pH		6.31	Std Unit		10/16/2025			FS	X
Temperature		64.2	deg F		10/16/2025			FS	X
Turbidity		6.06	NTU		10/16/2025			FS	X
Aluminum	J	0.0327	mg/L	0.05	10/16/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/16/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Barium		0.206	mg/L	0.004	10/16/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/16/2025			SW846-6020B	=
Boron		0.0246	mg/L	0.015	10/16/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Calcium		23.8	mg/L	0.2	10/16/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Copper	BJ	0.000696	mg/L	0.002	10/16/2025			SW846-6020B	U
Iron	B	0.136	mg/L	0.1	10/16/2025			SW846-6020B	J
Lead	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Magnesium		10.5	mg/L	0.03	10/16/2025			SW846-6020B	=
Manganese	J	0.00294	mg/L	0.005	10/16/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Nickel	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Potassium		1.52	mg/L	0.3	10/16/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Sodium		34.6	mg/L	0.25	10/16/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Zinc	J	0.00478	mg/L	0.02	10/16/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/16/2025			SW846-7470A	=
Barium, Dissolved		0.213	mg/L	0.004	10/16/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	UJ
PCB-1016	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
PCB-1221	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW391 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4805 **SAMPLE ID:** MW391SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
PCB-1242	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
PCB-1248	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
PCB-1254	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
PCB-1260	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
PCB-1268	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0992	ug/L	0.0992	10/16/2025			SW846-8082A	=
Radium-226	U	0.428	pCi/L	0.737	10/16/2025	0.49	0.492	AN-1418	=
Strontium-90	U	0.0887	pCi/L	3.4	10/16/2025	1.75	1.75	EPA-905.0-M	=
Tritium	U	53.4	pCi/L	168	10/16/2025	94.2	94.7	EPA-906.0-M	=
Technetium-99	U	-0.225	pCi/L	12.8	10/16/2025	7.07	7.07	HASL 300, Tc-02-RC M	=
Thorium-230	U	1.35	pCi/L	1.7	10/16/2025	1.24	1.26	HASL 300, Th-01-RC M	=
Alpha activity	U	1.29	pCi/L	7.46	10/16/2025	3.74	3.75	SW846-9310	=
Beta activity	U	10.8	pCi/L	10.8	10/16/2025	7.02	7.24	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	10/16/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/16/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW391 DOWN **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4805 **SAMPLE ID:** MW391SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/16/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Trichloroethene	J	0.61	ug/L	1	10/16/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dissolved Solids		175	mg/L	10	10/16/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/16/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/16/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	3.82	ug/L	10	10/16/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.478	mg/L	2	10/16/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW392 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4806 **SAMPLE ID:** MW392SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/16/2025			EPA-300.0	=
Bromide		0.552	mg/L	0.2	10/16/2025			SW846-9056A	=
Chloride	J	44	mg/L	250	10/16/2025			SW846-9056A	=
Fluoride	J	0.163	mg/L	4	10/16/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.26	mg/L	10	10/16/2025			SW846-9056A	=
Sulfate		7.51	mg/L	0.4	10/16/2025			SW846-9056A	=
Barometric Pressure Reading		30.1	Inches/Hg		10/16/2025			FS	X
Conductivity		378	µmhos/cm		10/16/2025			FS	X
Depth to Water		40.87	ft		10/16/2025			FS	X
Dissolved Oxygen		3.04	mg/L		10/16/2025			FS	X
Eh (approx)		524	mV		10/16/2025			FS	X
pH		6.07	Std Unit		10/16/2025			FS	X
Temperature		68.5	deg F		10/16/2025			FS	X
Turbidity		4.86	NTU		10/16/2025			FS	X
Aluminum	J	0.0322	mg/L	0.05	10/16/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/16/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Barium		0.205	mg/L	0.004	10/16/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/16/2025			SW846-6020B	=
Boron		0.0252	mg/L	0.015	10/16/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Calcium		26	mg/L	0.2	10/16/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Copper	BJ	0.00115	mg/L	0.002	10/16/2025			SW846-6020B	U
Iron	BJ	0.0614	mg/L	0.1	10/16/2025			SW846-6020B	U
Lead	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Magnesium		11.1	mg/L	0.03	10/16/2025			SW846-6020B	=
Manganese		0.0126	mg/L	0.005	10/16/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Nickel	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Potassium		1.96	mg/L	0.3	10/16/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Sodium		27.5	mg/L	0.25	10/16/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/16/2025			SW846-7470A	=
Barium, Dissolved		0.204	mg/L	0.004	10/16/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	UJ
PCB-1016	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
PCB-1221	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW392 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4806 **SAMPLE ID:** MW392SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
PCB-1242	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
PCB-1248	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
PCB-1254	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
PCB-1260	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
PCB-1268	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
Polychlorinated biphenyl	US	0.102	ug/L	0.102	10/16/2025			SW846-8082A	=
Radium-226	U	0.025	pCi/L	0.967	10/16/2025	0.445	0.446	AN-1418	=
Strontium-90	U	0.056	pCi/L	2.55	10/16/2025	1.31	1.31	EPA-905.0-M	=
Tritium	U	-8.59	pCi/L	170	10/16/2025	81.9	82	EPA-906.0-M	=
Technetium-99	U	1.59	pCi/L	13	10/16/2025	7.31	7.31	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.509	pCi/L	1.98	10/16/2025	1.1	1.11	HASL 300, Th-01-RC M	=
Alpha activity	U	-1.78	pCi/L	7.81	10/16/2025	2.87	2.88	SW846-9310	=
Beta activity	U	1.8	pCi/L	9.76	10/16/2025	5.4	5.41	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	10/16/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/16/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,2-Dichloroethene	J	0.4	ug/L	1	10/16/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW392 DOWN **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4806 **SAMPLE ID:** MW392SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/16/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Trichloroethene		3.69	ug/L	1	10/16/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dissolved Solids		183	mg/L	10	10/16/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/16/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/16/2025			SW846-9012B	=
Total Organic Halides (TOX)		10.2	ug/L	10	10/16/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.449	mg/L	2	10/16/2025			SW846-9060A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW393 DOWN **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4807 **SAMPLE ID:** MW393SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/16/2025			EPA-300.0	=
Bromide	J	0.138	mg/L	0.2	10/16/2025			SW846-9056A	=
Chloride	J	9.08	mg/L	250	10/16/2025			SW846-9056A	=
Fluoride	J	0.14	mg/L	4	10/16/2025			SW846-9056A	=
Nitrate as Nitrogen	U	10	mg/L	10	10/16/2025			SW846-9056A	=
Sulfate		19.5	mg/L	0.4	10/16/2025			SW846-9056A	=
Barometric Pressure Reading		30.08	Inches/Hg		10/16/2025			FS	X
Conductivity		409	µmhos/cm		10/16/2025			FS	X
Depth to Water		27.11	ft		10/16/2025			FS	X
Dissolved Oxygen		1.22	mg/L		10/16/2025			FS	X
Eh (approx)		471	mV		10/16/2025			FS	X
pH		6.17	Std Unit		10/16/2025			FS	X
Temperature		66.4	deg F		10/16/2025			FS	X
Turbidity		8.9	NTU		10/16/2025			FS	X
Aluminum	J	0.0335	mg/L	0.05	10/16/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/16/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Barium		0.0885	mg/L	0.004	10/16/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/16/2025			SW846-6020B	=
Boron		0.0155	mg/L	0.015	10/16/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Calcium		13.7	mg/L	0.2	10/16/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Copper	BJ	0.000942	mg/L	0.002	10/16/2025			SW846-6020B	U
Iron	B	0.488	mg/L	0.1	10/16/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Magnesium		3.97	mg/L	0.03	10/16/2025			SW846-6020B	=
Manganese		0.0328	mg/L	0.005	10/16/2025			SW846-6020B	=
Molybdenum	J	0.000225	mg/L	0.001	10/16/2025			SW846-6020B	=
Nickel	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Potassium		0.402	mg/L	0.3	10/16/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Selenium	J	0.00163	mg/L	0.005	10/16/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Sodium		78.8	mg/L	1.25	10/16/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/16/2025			SW846-7470A	=
Barium, Dissolved		0.0759	mg/L	0.004	10/16/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	UJ
PCB-1016	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1221	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW393 DOWN **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4807 **SAMPLE ID:** MW393SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1242	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1248	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1254	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1260	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1268	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
Radium-226	U	0.361	pCi/L	0.472	10/16/2025	0.379	0.38	AN-1418	=
Strontium-90	U	1.26	pCi/L	3.63	10/16/2025	2.07	2.08	EPA-905.0-M	=
Tritium	U	147	pCi/L	167	10/16/2025	110	114	EPA-906.0-M	=
Technetium-99	U	-0.957	pCi/L	12.7	10/16/2025	6.9	6.9	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.996	pCi/L	2.06	10/16/2025	1.31	1.33	HASL 300, Th-01-RC M	=
Alpha activity	U	-3.47	pCi/L	8.94	10/16/2025	2.62	2.63	SW846-9310	UJ
Beta activity	U	1.95	pCi/L	10.8	10/16/2025	5.94	5.95	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	10/16/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/16/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW393 DOWN **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4807 **SAMPLE ID:** MW393SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/16/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dissolved Solids		220	mg/L	10	10/16/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/16/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/16/2025			SW846-9012B	=
Total Organic Halides (TOX)		12.7	ug/L	10	10/16/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	1.68	mg/L	2	10/16/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW394 UP **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4802 **SAMPLE ID:** MW394SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/16/2025			EPA-300.0	=
Bromide		0.517	mg/L	0.2	10/16/2025			SW846-9056A	=
Chloride	J	41.7	mg/L	250	10/16/2025			SW846-9056A	=
Fluoride	J	0.106	mg/L	4	10/16/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.41	mg/L	10	10/16/2025			SW846-9056A	=
Sulfate		11.8	mg/L	0.4	10/16/2025			SW846-9056A	=
Barometric Pressure Reading		30.11	Inches/Hg		10/16/2025			FS	X
Conductivity		420	µmhos/cm		10/16/2025			FS	X
Depth to Water		53.17	ft		10/16/2025			FS	X
Dissolved Oxygen		6.23	mg/L		10/16/2025			FS	X
Eh (approx)		507	mV		10/16/2025			FS	X
pH		5.9	Std Unit		10/16/2025			FS	X
Temperature		61	deg F		10/16/2025			FS	X
Turbidity		5.2	NTU		10/16/2025			FS	X
Aluminum	J	0.029	mg/L	0.05	10/16/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/16/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Barium		0.228	mg/L	0.004	10/16/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/16/2025			SW846-6020B	=
Boron		0.0192	mg/L	0.015	10/16/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Calcium		25.9	mg/L	0.2	10/16/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Copper	BJ	0.00134	mg/L	0.002	10/16/2025			SW846-6020B	U
Iron	BJ	0.0779	mg/L	0.1	10/16/2025			SW846-6020B	U
Lead	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Magnesium		11.4	mg/L	0.03	10/16/2025			SW846-6020B	=
Manganese	J	0.00136	mg/L	0.005	10/16/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Nickel		0.00388	mg/L	0.002	10/16/2025			SW846-6020B	=
Potassium		1.23	mg/L	0.3	10/16/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Sodium		34.4	mg/L	0.25	10/16/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/16/2025			SW846-7470A	=
Barium, Dissolved		0.238	mg/L	0.004	10/16/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	UJ
PCB-1016	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1221	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW394 UP **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4802 **SAMPLE ID:** MW394SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1242	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1248	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1254	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1260	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
PCB-1268	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.101	ug/L	0.101	10/16/2025			SW846-8082A	=
Radium-226	U	0.273	pCi/L	0.789	10/16/2025	0.463	0.464	AN-1418	=
Strontium-90	U	-1.02	pCi/L	4.88	10/16/2025	2.42	2.42	EPA-905.0-M	=
Tritium	U	-31.1	pCi/L	167	10/16/2025	75.6	75.6	EPA-906.0-M	=
Technetium-99	U	-1.91	pCi/L	13.1	10/16/2025	7.07	7.07	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.803	pCi/L	2.1	10/16/2025	1.27	1.28	HASL 300, Th-01-RC M	=
Alpha activity	U	-2.61	pCi/L	7.29	10/16/2025	1.94	1.95	SW846-9310	UJ
Beta activity	U	2.04	pCi/L	9.57	10/16/2025	5.31	5.33	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0195	ug/L	0.0195	10/16/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/16/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW394 UP **RGA Type:** URGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4802 **SAMPLE ID:** MW394SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/16/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Trichloroethene		3.53	ug/L	1	10/16/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dissolved Solids		193	mg/L	10	10/16/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/16/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/16/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	6.65	ug/L	10	10/16/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.54	mg/L	2	10/16/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW395 UP **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4801 **SAMPLE ID:** MW395SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/16/2025			EPA-300.0	=
Bromide		0.531	mg/L	0.2	10/16/2025			SW846-9056A	=
Chloride	J	44	mg/L	250	10/16/2025			SW846-9056A	=
Fluoride	J	0.101	mg/L	4	10/16/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.56	mg/L	10	10/16/2025			SW846-9056A	=
Sulfate		11	mg/L	0.4	10/16/2025			SW846-9056A	=
Barometric Pressure Reading		30.12	Inches/Hg		10/16/2025			FS	X
Conductivity		404	µmhos/cm		10/16/2025			FS	X
Depth to Water		53.82	ft		10/16/2025			FS	X
Dissolved Oxygen		5.52	mg/L		10/16/2025			FS	X
Eh (approx)		523	mV		10/16/2025			FS	X
pH		5.96	Std Unit		10/16/2025			FS	X
Temperature		61.8	deg F		10/16/2025			FS	X
Turbidity		4.14	NTU		10/16/2025			FS	X
Aluminum	J	0.0218	mg/L	0.05	10/16/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/16/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Barium		0.267	mg/L	0.004	10/16/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/16/2025			SW846-6020B	=
Boron		0.0211	mg/L	0.015	10/16/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Calcium		28.2	mg/L	0.2	10/16/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Copper	BJ	0.00098	mg/L	0.002	10/16/2025			SW846-6020B	U
Iron	U	0.1	mg/L	0.1	10/16/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Magnesium		12.5	mg/L	0.03	10/16/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Molybdenum	J	0.000212	mg/L	0.001	10/16/2025			SW846-6020B	=
Nickel	J	0.00105	mg/L	0.002	10/16/2025			SW846-6020B	=
Potassium		1.73	mg/L	0.3	10/16/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Sodium		34.4	mg/L	0.25	10/16/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/16/2025			SW846-7470A	=
Barium, Dissolved		0.265	mg/L	0.004	10/16/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/16/2025			SW846-6020B	UJ
PCB-1016	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
PCB-1221	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW395 UP **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4801 **SAMPLE ID:** MW395SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
PCB-1242	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
PCB-1248	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
PCB-1254	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
PCB-1260	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
PCB-1268	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.1	ug/L	0.1	10/16/2025			SW846-8082A	=
Radium-226	U	0.572	pCi/L	0.695	10/16/2025	0.52	0.524	AN-1418	=
Strontium-90	U	-1.84	pCi/L	3.55	10/16/2025	1.42	1.42	EPA-905.0-M	UJ
Tritium	U	68.5	pCi/L	171	10/16/2025	98.6	99.5	EPA-906.0-M	=
Technetium-99	U	-2.62	pCi/L	12.6	10/16/2025	6.73	6.73	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.0792	pCi/L	1.93	10/16/2025	0.914	0.916	HASL 300, Th-01-RC M	=
Alpha activity	U	7.07	pCi/L	8.79	10/16/2025	6	6.11	SW846-9310	=
Beta activity	U	1.01	pCi/L	8.52	10/16/2025	4.65	4.66	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	10/16/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/16/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW395 UP **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4801 **SAMPLE ID:** MW395SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/16/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Trichloroethene		4.1	ug/L	1	10/16/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dissolved Solids		180	mg/L	10	10/16/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	U	20	mg/L	20	10/16/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/16/2025			SW846-9012B	=
Total Organic Halides (TOX)	J	8.2	ug/L	10	10/16/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.485	mg/L	2	10/16/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW396 UP **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4803 **SAMPLE ID:** MW396SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	J	0.483	mg/L	0.5	10/16/2025			EPA-300.0	=
Bromide		0.757	mg/L	0.2	10/16/2025			SW846-9056A	=
Chloride	J	48.8	mg/L	250	10/16/2025			SW846-9056A	=
Fluoride	J	0.535	mg/L	4	10/16/2025			SW846-9056A	=
Nitrate as Nitrogen	U	10	mg/L	10	10/16/2025			SW846-9056A	=
Sulfate		29.9	mg/L	4	10/16/2025			SW846-9056A	=
Barometric Pressure Reading		30.12	Inches/Hg		10/16/2025			FS	X
Conductivity		700	µmhos/cm		10/16/2025			FS	X
Depth to Water		13.52	ft		10/16/2025			FS	X
Dissolved Oxygen		1.06	mg/L		10/16/2025			FS	X
Eh (approx)		511	mV		10/16/2025			FS	X
pH		6.43	Std Unit		10/16/2025			FS	X
Temperature		61.9	deg F		10/16/2025			FS	X
Turbidity		5.9	NTU		10/16/2025			FS	X
Aluminum	U	0.05	mg/L	0.05	10/16/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/16/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Barium		0.363	mg/L	0.004	10/16/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/16/2025			SW846-6020B	=
Boron	J	0.00801	mg/L	0.015	10/16/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Calcium		31.4	mg/L	0.2	10/16/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Copper	BJ	0.0012	mg/L	0.002	10/16/2025			SW846-6020B	U
Iron	BJ	0.0894	mg/L	0.1	10/16/2025			SW846-6020B	U
Lead	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Magnesium		14.2	mg/L	0.03	10/16/2025			SW846-6020B	=
Manganese		0.193	mg/L	0.005	10/16/2025			SW846-6020B	=
Molybdenum	J	0.000465	mg/L	0.001	10/16/2025			SW846-6020B	=
Nickel	J	0.00159	mg/L	0.002	10/16/2025			SW846-6020B	=
Potassium		0.791	mg/L	0.3	10/16/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/16/2025			SW846-6020B	=
Sodium		104	mg/L	1.25	10/16/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/16/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/16/2025			SW846-6020B	=
Uranium	J	0.000086	mg/L	0.0002	10/16/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/16/2025			SW846-6020B	=
Zinc	J	0.00451	mg/L	0.02	10/16/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/16/2025			SW846-7470A	=
Barium, Dissolved		0.374	mg/L	0.004	10/16/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/16/2025			SW846-6020B	UJ
Uranium, Dissolved	J	0.000088	mg/L	0.0002	10/16/2025			SW846-6020B	J
PCB-1016	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
PCB-1221	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW396 UP **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4803 **SAMPLE ID:** MW396SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
PCB-1242	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
PCB-1248	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
PCB-1254	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
PCB-1260	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
PCB-1268	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0994	ug/L	0.0994	10/16/2025			SW846-8082A	=
Radium-226	U	0.467	pCi/L	0.573	10/16/2025	0.446	0.448	AN-1418	=
Strontium-90	U	-0.766	pCi/L	4.74	10/16/2025	2.33	2.33	EPA-905.0-M	=
Tritium	U	30.9	pCi/L	169	10/16/2025	90.2	90.4	EPA-906.0-M	=
Technetium-99	U	-0.329	pCi/L	12.8	10/16/2025	7.03	7.03	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.313	pCi/L	1.68	10/16/2025	0.917	0.922	HASL 300, Th-01-RC M	=
Alpha activity	U	2.92	pCi/L	7.39	10/16/2025	4.24	4.27	SW846-9310	=
Beta activity	U	2.78	pCi/L	10.4	10/16/2025	5.87	5.88	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	10/16/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/16/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW396 UP **RGA Type:** UCRS **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4803 **SAMPLE ID:** MW396SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/16/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dissolved Solids		386	mg/L	10	10/16/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	11.6	mg/L	20	10/16/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/16/2025			SW846-9012B	=
Total Organic Halides (TOX)		45.7	ug/L	10	10/16/2025			SW846-9020B	=
Total Organic Carbon (TOC)		3.29	mg/L	2	10/16/2025			SW846-9060A	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW397 UP **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4817 **SAMPLE ID:** MW397SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/15/2025			EPA-300.0	=
Bromide		0.38	mg/L	0.2	10/15/2025			SW846-9056A	=
Chloride	J	33	mg/L	250	10/15/2025			SW846-9056A	=
Fluoride	J	0.143	mg/L	4	10/15/2025			SW846-9056A	=
Nitrate as Nitrogen	J	1.03	mg/L	10	10/15/2025			SW846-9056A	=
Sulfate		11.4	mg/L	0.4	10/15/2025			SW846-9056A	=
Barometric Pressure Reading		30.16	Inches/Hg		10/15/2025			FS	X
Conductivity		327	µmhos/cm		10/15/2025			FS	X
Depth to Water		61.69	ft		10/15/2025			FS	X
Dissolved Oxygen		6.72	mg/L		10/15/2025			FS	X
Eh (approx)		512	mV		10/15/2025			FS	X
pH		5.88	Std Unit		10/15/2025			FS	X
Temperature		61	deg F		10/15/2025			FS	X
Turbidity		9.92	NTU		10/15/2025			FS	X
Aluminum		0.235	mg/L	0.05	10/15/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/15/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Barium		0.134	mg/L	0.004	10/15/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/15/2025			SW846-6020B	=
Boron	J	0.00842	mg/L	0.015	10/15/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Calcium		17.7	mg/L	0.2	10/15/2025			SW846-6020B	=
Chromium	J	0.0034	mg/L	0.01	10/15/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Copper	J	0.00126	mg/L	0.002	10/15/2025			SW846-6020B	=
Iron		0.463	mg/L	0.1	10/15/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Magnesium		7.33	mg/L	0.03	10/15/2025			SW846-6020B	=
Manganese		0.00781	mg/L	0.005	10/15/2025			SW846-6020B	=
Molybdenum	J	0.000381	mg/L	0.001	10/15/2025			SW846-6020B	=
Nickel		0.00207	mg/L	0.002	10/15/2025			SW846-6020B	=
Potassium		1.73	mg/L	0.3	10/15/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/15/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/15/2025			SW846-6020B	=
Sodium		31.2	mg/L	0.25	10/15/2025			SW846-6020B	=
Tantalum	UN	0.005	mg/L	0.005	10/15/2025			SW846-6020B	UJ
Thallium	U	0.002	mg/L	0.002	10/15/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/15/2025			SW846-6020B	=
Zinc	J	0.00518	mg/L	0.02	10/15/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/15/2025			SW846-7470A	=
Barium, Dissolved		0.136	mg/L	0.004	10/15/2025			SW846-6020B	J
Chromium, Dissolved	U	0.01	mg/L	0.01	10/15/2025			SW846-6020B	UJ
Uranium, Dissolved	U	0.0002	mg/L	0.0002	10/15/2025			SW846-6020B	UJ
PCB-1016	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1221	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW397 UP **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4817 **SAMPLE ID:** MW397SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
PCB-1232	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1242	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1248	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1254	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1260	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
PCB-1268	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.1	ug/L	0.1	10/15/2025			SW846-8082A	=
Radium-226	U	0.663	pCi/L	0.669	10/15/2025	0.537	0.541	AN-1418	=
Strontium-90	U	-1.36	pCi/L	5.51	10/15/2025	2.73	2.73	EPA-905.0-M	=
Tritium	U	-48.6	pCi/L	220	10/15/2025	105	105	EPA-906.0-M	UJ
Technetium-99	U	3.37	pCi/L	13.4	10/15/2025	7.66	7.67	HASL 300, Tc-02-RC M	=
Thorium-230	U	0.676	pCi/L	2.03	10/15/2025	1.22	1.23	HASL 300, Th-01-RC M	=
Alpha activity	U	-3.22	pCi/L	8.39	10/15/2025	2.56	2.57	SW846-9310	UJ
Beta activity		16.7	pCi/L	10.5	10/15/2025	7.5	7.97	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0193	ug/L	0.0193	10/15/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/15/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: MW397 UP **RGA Type:** LRGA **Period:** 4th Quarter 2025
AKGWA Well Tag #: 8004-4817 **SAMPLE ID:** MW397SG1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
cis-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/15/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dissolved Solids		167	mg/L	10	10/15/2025			EPA-160.1	=
Chemical Oxygen Demand (COD)	J	9.28	mg/L	20	10/15/2025			EPA-410.4	=
Cyanide	U	0.2	mg/L	0.2	10/15/2025			SW846-9012B	=
Total Organic Halides (TOX)	U	10	ug/L	10	10/15/2025			SW846-9020B	=
Total Organic Carbon (TOC)	J	0.449	mg/L	2	10/15/2025			SW846-9060A	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** FB1SG1-26 **Sample Type:** FB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Aluminum	U	0.05	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium	U	0.004	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron	U	0.015	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium	U	0.2	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron	U	0.1	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium	U	0.03	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium	U	0.3	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium	U	0.25	mg/L	0.25	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
PCB-1016	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1221	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1232	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1242	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1248	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1254	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1260	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
PCB-1268	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.101	ug/L	0.101	10/20/2025			SW846-8082A	=
Radium-226	U	0.261	pCi/L	0.316	10/20/2025	0.255	0.256	AN-1418	=
Strontium-90	U	0.218	pCi/L	3.65	10/20/2025	1.92	1.92	EPA-905.0-M	=
Tritium	U	-21.6	pCi/L	247	10/20/2025	122	122	EPA-906.0-M	=
Technetium-99	U	-4.97	pCi/L	15.2	10/20/2025	8.08	8.08	HASL 300, Tc-02-RC M	=
Thorium-230	U	1.4	pCi/L	3.13	10/20/2025	1.98	1.99	HASL 300, Th-01-RC M	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: QC **Period:** 4th Quarter 2025

AKGWA Well Tag #: N/A **SAMPLE ID:** FB1SG1-26 **Sample Type:** FB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Alpha activity	U	-1.45	pCi/L	8.04	10/20/2025	3.09	3.1	SW846-9310	=
Beta activity	U	3.37	pCi/L	10.8	10/20/2025	6.16	6.19	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.02	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** FB1SG1-26 **Sample Type:** FB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: QC **Period:** 4th Quarter 2025

AKGWA Well Tag #: N/A **SAMPLE ID:** RI1SG1-26 **Sample Type:** RI

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Iodide	U	0.5	mg/L	0.5	10/20/2025			EPA-300.0	=
Aluminum	U	0.05	mg/L	0.05	10/20/2025			SW846-6020B	=
Antimony	U	0.003	mg/L	0.003	10/20/2025			SW846-6020B	=
Arsenic	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Barium	U	0.004	mg/L	0.004	10/20/2025			SW846-6020B	=
Beryllium	U	0.0005	mg/L	0.0005	10/20/2025			SW846-6020B	=
Boron	U	0.015	mg/L	0.015	10/20/2025			SW846-6020B	=
Cadmium	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Calcium	U	0.2	mg/L	0.2	10/20/2025			SW846-6020B	=
Chromium	U	0.01	mg/L	0.01	10/20/2025			SW846-6020B	=
Cobalt	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Copper	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Iron	U	0.1	mg/L	0.1	10/20/2025			SW846-6020B	=
Lead	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Magnesium	U	0.03	mg/L	0.03	10/20/2025			SW846-6020B	=
Manganese	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Molybdenum	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Nickel	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Potassium	U	0.3	mg/L	0.3	10/20/2025			SW846-6020B	=
Rhodium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Selenium	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Silver	U	0.001	mg/L	0.001	10/20/2025			SW846-6020B	=
Sodium	U	0.25	mg/L	0.25	10/20/2025			SW846-6020B	=
Tantalum	U	0.005	mg/L	0.005	10/20/2025			SW846-6020B	=
Thallium	U	0.002	mg/L	0.002	10/20/2025			SW846-6020B	=
Uranium	U	0.0002	mg/L	0.0002	10/20/2025			SW846-6020B	=
Vanadium	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Zinc	U	0.02	mg/L	0.02	10/20/2025			SW846-6020B	=
Mercury	U	0.0002	mg/L	0.0002	10/20/2025			SW846-7470A	=
PCB-1016	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
PCB-1221	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
PCB-1232	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
PCB-1242	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
PCB-1248	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
PCB-1254	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
PCB-1260	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
PCB-1268	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
Polychlorinated biphenyl	U	0.0994	ug/L	0.0994	10/20/2025			SW846-8082A	=
Radium-226	U	0.402	pCi/L	1.51	10/20/2025	0.94	0.941	AN-1418	=
Strontium-90	U	-2.62	pCi/L	5.92	10/20/2025	2.88	2.88	EPA-905.0-M	=
Tritium	U	-40.4	pCi/L	246	10/20/2025	118	118	EPA-906.0-M	=
Technetium-99	U	0.86	pCi/L	14.7	10/20/2025	8.27	8.27	HASL 300, Tc-02-RC M	=
Thorium-230	U	1.34	pCi/L	3.58	10/20/2025	2.14	2.15	HASL 300, Th-01-RC M	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** RI1SG1-26 **Sample Type:** RI

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Alpha activity	U	-1.01	pCi/L	7.35	10/20/2025	2.9	2.91	SW846-9310	=
Beta activity	U	0.798	pCi/L	10.8	10/20/2025	5.85	5.85	SW846-9310	=
1,2-Dibromo-3-chloropropane	U	0.0192	ug/L	0.0192	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	2.2	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** RI1SG1-26 **Sample Type:** RI

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** TB1SG1-26 **Sample Type:** TB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
1,2-Dibromo-3-chloropropane	U	0.0191	ug/L	0.0191	10/15/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/15/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/15/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/15/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** TB1SG1-26 **Sample Type:** TB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/15/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/15/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/15/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045

Sampling Point: QC **Period:** 4th Quarter 2025

AKGWA Well Tag #: N/A **SAMPLE ID:** TB2SG1-26 **Sample Type:** TB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	10/16/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Acrolein	ULY1	5	ug/L	5	10/16/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Methylene chloride	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Styrene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/16/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/16/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** TB2SG1-26 **Sample Type:** TB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/16/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/16/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/16/2025			SW846-8260D	=

Paducah OREIS
GROUNDWATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** TB3SG1-26 **Sample Type:** TB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
1,2-Dibromo-3-chloropropane	U	0.019	ug/L	0.019	10/20/2025			SW846-8011	=
1,1,1,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,1-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2,2-Tetrachloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1,2-Trichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,1-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2,3-Trichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dibromoethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,2-Dichloropropane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
1,4-Dichlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
2-Butanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
2-Hexanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
4-Methyl-2-pentanone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acetone	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Acrolein	U	5	ug/L	5	10/20/2025			SW846-8260D	R
Acrylonitrile	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Benzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromodichloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromoform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Bromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Carbon disulfide	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Carbon tetrachloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chlorobenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloroform	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Chloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
cis-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromochloromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Dibromomethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Ethylbenzene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Iodomethane	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Methylene chloride	BJ	1.24	ug/L	5	10/20/2025			SW846-8260D	UJ
Styrene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Tetrachloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Toluene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Total Xylene	U	3	ug/L	3	10/20/2025			SW846-8260D	=
trans-1,2-Dichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
trans-1,3-Dichloropropene	U	1	ug/L	1	10/20/2025			SW846-8260D	=

**Paducah OREIS
GROUNDWATER MONITORING REPORT**

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
AKGWA Well Tag #: N/A **SAMPLE ID:** TB3SG1-26 **Sample Type:** TB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
trans-1,4-Dichloro-2-butene	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Trichloroethene	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Trichlorofluoromethane	U	1	ug/L	1	10/20/2025			SW846-8260D	=
Vinyl acetate	U	5	ug/L	5	10/20/2025			SW846-8260D	=
Vinyl chloride	U	1	ug/L	1	10/20/2025			SW846-8260D	=

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

Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW369UG1-26
Sample ID: 747587001
Matrix: WG
Collect Date: 14-OCT-25
Receive Date: 15-OCT-25
Collector: Client

Project: FRNP00714
Client ID: FRNP007

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	0.400	+/-0.429	0.583	+/-0.431	5.00	pCi/L			JD3	11/02/25	1236	2887472	1

Th-01-RC M, Th Isotopes, Liquid "As Received"

Thorium-230	U	0.320	+/-0.967	1.82	+/-0.971	50.0	pCi/L			CM4	11/01/25	0811	2887470	2

Thorium-232	U	0.0710	+/-0.515	1.03	+/-0.515		pCi/L							

Rad Gas Flow Proportional Counting

904.0Mod, Ra228, Liquid "As Received"

Radium-228		6.62	+/-3.30	4.85	+/-3.78	4.99	pCi/L			DH1	11/10/25	0824	2894304	3

905.0Mod, Sr90, liquid "As Received"

Strontium-90	U	-0.832	+/-1.75	3.11	+/-1.75	8.00	pCi/L			JE1	11/06/25	1757	2893344	4

9310, Alpha/Beta Activity, liquid "As Received"

Alpha	U	4.36	+/-4.80	7.65	+/-4.85	15.0	pCi/L			CH7	10/29/25	1426	2881482	5

Beta		36.6	+/-11.4	15.3	+/-12.8	50.0	pCi/L							

Rad Liquid Scintillation Analysis

906.0M, Tritium Dist, Liquid "As Received"

Tritium	U	43.2	+/-77.7	138	+/-78.1	300	pCi/L			MG6	10/23/25	1628	2881183	6

Tc-02-RC-MOD, Tc99, Liquid "As Received"

Technetium-99		72.6	+/-13.6	17.4	+/-15.9	25.0	pCi/L			BB3	10/28/25	1749	2884376	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%	Acceptable Limits
Barium-133 Tracer	AN-1418 AlphaSpec Ra226, Liquid "As Received"	2887472	98.1	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	78.3	(30%-110%)
Barium-133 Tracer	904.0Mod, Ra228, Liquid "As Received"	2894304	75.5	(30%-110%)
Strontium Carrier	905.0Mod, Sr90, liquid "As Received"	2893344	49.7	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884376	95.6	(30%-110%)

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW369UG1-26

Sample ID: 747587001

Project: FRNP00714

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

DL: Detection Limit

Lc/LC: Critical Level

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Mtd.: Method

PF: Prep Factor

RL: Reporting Limit

TPU: Total Propagated Uncertainty

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW370UG1-26

Project: FRNP00714

Sample ID: 747587003

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25

Receive Date: 15-OCT-25

Collector: Client

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	0.543	+/-0.513	0.703	+/-0.515	5.00	pCi/L			JD3	11/02/25	1236	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	1.03	+/-1.01	1.42	+/-1.03	50.0	pCi/L			CM4	11/01/25	0811	2887470	2
Thorium-232	U	0.0213	+/-0.449	0.973	+/-0.449		pCi/L							

Rad Gas Flow Proportional Counting

904.0Mod, Ra228, Liquid "As Received"

Radium-228		5.35	+/-3.11	4.77	+/-3.46	4.99	pCi/L			DH1	11/10/25	0824	2894304	3
<i>905.0Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	0.577	+/-1.15	1.97	+/-1.15	8.00	pCi/L			JE1	11/06/25	1757	2893344	4
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-1.62	+/-2.53	8.16	+/-2.54	15.0	pCi/L			CH7	10/30/25	1235	2881482	5
Beta	U	6.59	+/-5.78	9.30	+/-5.88	50.0	pCi/L							

Rad Liquid Scintillation Analysis

906.0M, Tritium Dist, Liquid "As Received"

Tritium	U	32.3	+/-85.4	155	+/-85.6	300	pCi/L			MG6	10/25/25	1646	2881183	6
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	9.90	+/-10.0	16.7	+/-10.1	25.0	pCi/L			BB3	10/28/25	1806	2884376	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%	Acceptable Limits
Barium-133 Tracer	AN-1418 AlphaSpec Ra226, Liquid "As Received"	2887472	98.3	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	88.8	(30%-110%)
Barium-133 Tracer	904.0Mod, Ra228, Liquid "As Received"	2894304	70.1	(30%-110%)
Strontium Carrier	905.0Mod, Sr90, liquid "As Received"	2893344	65.5	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884376	99	(30%-110%)

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW370UG1-26

Project: FRNP00714

Sample ID: 747587003

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW372UG1-26

Project: FRNP00714

Sample ID: 747587007

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25

Receive Date: 15-OCT-25

Collector: Client

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	0.217	+/-0.413	0.715	+/-0.414	5.00	pCi/L			JD3	11/02/25	1236	2887472	1

Th-01-RC M, Th Isotopes, Liquid "As Received"

Thorium-230	U	0.148	+/-1.41	2.98	+/-1.41	50.0	pCi/L			CM4	11/05/25	0838	2887470	2

Thorium-232	U	-0.411	+/-0.844	2.63	+/-0.847		pCi/L							

Rad Gas Flow Proportional Counting

904.0Mod, Ra228, Liquid "As Received"

Radium-228	U	2.80	+/-2.85	4.73	+/-2.95	4.99	pCi/L			DH1	11/10/25	0824	2894304	3

905.0Mod, Sr90, liquid "As Received"

Strontium-90	U	-0.801	+/-1.48	2.74	+/-1.48	8.00	pCi/L			JE1	11/06/25	1757	2893344	4

9310, Alpha/Beta Activity, liquid "As Received"

Alpha	U	0.637	+/-3.09	6.82	+/-3.09	15.0	pCi/L			CH7	10/29/25	1426	2881482	5

Beta		47.8	+/-10.1	10.1	+/-12.7	50.0	pCi/L							

Rad Liquid Scintillation Analysis

906.0M, Tritium Dist, Liquid "As Received"

Tritium	U	124	+/-90.1	137	+/-93.2	300	pCi/L			MG6	10/23/25	1803	2881183	6

Tc-02-RC-MOD, Tc99, Liquid "As Received"

Technetium-99		67.1	+/-12.9	16.6	+/-14.9	25.0	pCi/L			BB3	10/28/25	1839	2884376	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%	Acceptable Limits
Barium-133 Tracer	AN-1418 AlphaSpec Ra226, Liquid "As Received"	2887472	95.3	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	89	(30%-110%)
Barium-133 Tracer	904.0Mod, Ra228, Liquid "As Received"	2894304	80.4	(30%-110%)
Strontium Carrier	905.0Mod, Sr90, liquid "As Received"	2893344	36.2	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884376	101	(30%-110%)

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Certificate of Analysis

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW372UG1-26

Project: FRNP00714

Sample ID: 747587007

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW373UG1-26

Project: FRNP00714

Sample ID: 747587009

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25

Receive Date: 15-OCT-25

Collector: Client

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	0.269	+/-0.455	0.775	+/-0.455	5.00	pCi/L			JD3	11/02/25	1236	2887472	1

Th-01-RC M, Th Isotopes, Liquid "As Received"

Thorium-230	U	0.0681	+/-1.48	3.25	+/-1.48	50.0	pCi/L			CM4	11/05/25	0839	2887470	2

Thorium-232	U	-0.226	+/-0.863	2.35	+/-0.866		pCi/L							

Rad Gas Flow Proportional Counting

904.0Mod, Ra228, Liquid "As Received"

Radium-228		7.93	+/-3.36	4.77	+/-4.02	4.99	pCi/L			DH1	11/10/25	0824	2894304	3

905.0Mod, Sr90, liquid "As Received"

Strontium-90	U	-0.0750	+/-1.59	2.78	+/-1.59	8.00	pCi/L			JE1	11/06/25	1757	2893344	4

9310, Alpha/Beta Activity, liquid "As Received"

Alpha	U	0.705	+/-3.85	8.70	+/-3.86	15.0	pCi/L			CH7	10/30/25	1235	2881482	5

Beta	U	4.02	+/-4.27	7.00	+/-4.33	50.0	pCi/L							

Rad Liquid Scintillation Analysis

906.0M, Tritium Dist, Liquid "As Received"

Tritium	U	132	+/-92.2	140	+/-95.7	300	pCi/L			MG6	10/23/25	1835	2881183	6

Tc-02-RC-MOD, Tc99, Liquid "As Received"

Technetium-99	U	0.484	+/-9.04	16.0	+/-9.04	25.0	pCi/L			BB3	10/28/25	1856	2884376	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%	Acceptable Limits
Barium-133 Tracer	AN-1418 AlphaSpec Ra226, Liquid "As Received"	2887472	100	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	82.2	(30%-110%)
Barium-133 Tracer	904.0Mod, Ra228, Liquid "As Received"	2894304	74.5	(30%-110%)
Strontium Carrier	905.0Mod, Sr90, liquid "As Received"	2893344	49.7	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884376	101	(30%-110%)

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW373UG1-26

Project: FRNP00714

Sample ID: 747587009

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW369UG1-26

Project: FRNP00714

Sample ID: 747587001

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25 06:46

Receive Date: 15-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011 VOA- 1,2-Dibromo-3-chloropropane "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0192	0.00862	0.0192	ug/L	0.958	1	BM1	10/20/25	0058	2880579	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.840	0.330	2.00	mg/L		1	KB3	10/17/25	0758	2881621	2
Flow Injection Analysis												
9012B, Cyanide, Total "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/17/25	1019	2881268	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens		10.6	3.33	10.0	ug/L		1	JW2	10/22/25	1700	2884440	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	1822	2883458	5
SW846 9056A Anions (5 elements) "As Received"												
Bromide		0.328	0.0670	0.200	mg/L		1	CH6	10/15/25	1416	2880692	6
Fluoride	J	0.156	0.0330	4.00	mg/L		1					
Sulfate		8.69	0.133	0.400	mg/L		1					
Chloride	JN	28.0	0.268	250	mg/L		4	CH6	10/15/25	2058	2880692	7
Nitrate-N	J	1.12	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/29/25	1015	2888210	8
Metals Analysis-ICP-MS												
6020, Metals (15+ elements) "As Received"												
Aluminum	B	0.185	0.0193	0.0500	mg/L	1.00	1	PRB	11/09/25	1721	2881335	9
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		0.359	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		0.00584	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00185	0.000300	0.00200	mg/L	1.00	1					
Iron		0.239	0.0330	0.100	mg/L	1.00	1					

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project: FRNP00714
Client ID: FRNP007

C1-12

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

C1-13

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

8260D, Volatiles- full suite "As Received"

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	ES3	10/17/25	1500	2881693
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/16/25	1512	2881264
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/10/25	1034	2895676
SW846 8011 PREP	8011 Prep	LL2	10/17/25	1034	2880577
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/28/25	1055	2888208

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project: FRNP00714

Client ID: FRNP007

The following Analytical Methods were performed:

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011 VOA- 1,2-Dibromo-3-chloropropane "As Received"	6.31 ug/L	6.84	92	(56%-149%)
4cmx	8082A, PCB Liquids "As Received"	0.155 ug/L	0.204	76	(26%-108%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.108 ug/L	0.204	53	(30%-135%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	47.4 ug/L	50.0	95	(85%-114%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	49.4 ug/L	50.0	99	(89%-112%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	48.8 ug/L	50.0	98	(81%-118%)

Column headers are defined as follows:

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW369UG1-26

Project: FRNP00714

Sample ID: 747587002

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25 06:46

Receive Date: 15-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.355	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	1853	2881050	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/17/25	0925	2881049
EPA 160	Laboratory Filtration	LF1	10/15/25	1330	2880934

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Client Sample ID:	MW370UG1-26
Sample ID:	747587003
Matrix:	WG
Collect Date:	14-OCT-25 07:36
Receive Date:	15-OCT-25
Collector:	Client

Project:	FRNP00714
Client ID:	FRNP007

C1-17

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

C1-18

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

C1-19

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

8260D, Volatiles- full suite "As Received"

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	LL2	10/17/25	1034	2880577
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/16/25	1512	2881264
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/28/25	1055	2888208
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/10/25	1034	2895676
SW846 3005A	ICP-MS 3005A PREP	ES3	10/17/25	1500	2881693

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

The following Analytical Methods were performed:

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011 VOA- 1,2-Dibromo-3-chloropropane "As Received"	6.25 ug/L	6.80	92	(56%-149%)
4cmx	8082A, PCB Liquids "As Received"	0.181 ug/L	0.200	90	(26%-108%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.224 ug/L	0.200	112	(30%-135%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	46.3 ug/L	50.0	93	(85%-114%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.6 ug/L	50.0	97	(89%-112%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	50.2 ug/L	50.0	100	(81%-118%)

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW370UG1-26

Project: FRNP00714

Sample ID: 747587004

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25 07:36

Receive Date: 15-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.230	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	1901	2881050	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/15/25	1330	2880934
SW846 3005A	ICP-MS 3005A PREP	HC1	10/17/25	0925	2881049

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	SW846 3005A/6020B		

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW372UG1-26

Project: FRNP00714

Sample ID: 747587007

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25 09:24

Receive Date: 15-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011 VOA- 1,2-Dibromo-3-chloropropane "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0190	0.00855	0.0190	ug/L	0.950	1	BM1	10/20/25	0430	2880579	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	1.09	0.330	2.00	mg/L		1	KB3	10/17/25	1037	2881621	2
Flow Injection Analysis												
9012B, Cyanide, Total "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/17/25	1030	2881268	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	8.68	3.33	10.0	ug/L		1	JW2	10/22/25	1831	2884440	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	1926	2883458	5
SW846 9056A Anions (5 elements) "As Received"												
Bromide		0.468	0.0670	0.200	mg/L		1	CH6	10/15/25	1651	2880692	6
Fluoride	J	0.155	0.0330	4.00	mg/L		1					
Chloride	JN	36.6	0.670	250	mg/L		10	CH6	10/16/25	0034	2880692	7
Nitrate-N	J	1.38	0.330	10.0	mg/L		10					
Sulfate		144	1.33	4.00	mg/L		10					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/29/25	1024	2888210	8
Metals Analysis-ICP-MS												
6020, Metals (15+ elements) "As Received"												
Aluminum	BJ	0.0255	0.0193	0.0500	mg/L	1.00	1	PRB	11/09/25	1749	2881335	9
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		0.0512	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	0.00102	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0790	0.0330	0.100	mg/L	1.00	1					

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

C1-24

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

C1-25

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

8260D, Volatiles- full suite "As Received"

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/28/25	1055	2888208
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/10/25	1034	2895676
SW846 3005A	ICP-MS 3005A PREP	ES3	10/17/25	1500	2881693
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/16/25	1512	2881264
SW846 8011 PREP	8011 Prep	LL2	10/17/25	1034	2880577

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-U Landfill Quarterly(UG26-01)

Project: FRNP00714
Client ID: FRNP007

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011 VOA- 1,2-Dibromo-3-chloropropane "As Received"	7.95 ug/L	6.78	117	(56%-149%)
4cmx	8082A, PCB Liquids "As Received"	0.171 ug/L	0.198	86	(26%-108%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.218 ug/L	0.198	110	(30%-135%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	47.1 ug/L	50.0	94	(85%-114%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	49.6 ug/L	50.0	99	(89%-112%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	50.8 ug/L	50.0	102	(81%-118%)

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW372UG1-26

Project: FRNP00714

Sample ID: 747587008

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25 09:24

Receive Date: 15-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.0563	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	1925	2881050	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/17/25	0925	2881049
EPA 160	Laboratory Filtration	LF1	10/15/25	1330	2880934

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	SW846 3005A/6020B		

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW373UG1-26

Project: FRNP00714

Sample ID: 747587009

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25 10:14

Receive Date: 15-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011 VOA- 1,2-Dibromo-3-chloropropane "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0191	0.00861	0.0191	ug/L	0.957	1	BM1	10/20/25	0504	2880579	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	1.43	0.330	2.00	mg/L		1	KB3	10/17/25	1108	2881621	3
Flow Injection Analysis												
9012B, Cyanide, Total "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/17/25	1031	2881268	4
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	9.53	3.33	10.0	ug/L		1	JW2	10/23/25	1546	2885441	5
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	1939	2883458	6
SW846 9056A Anions (5 elements) "As Received"												
Bromide		0.436	0.0670	0.200	mg/L		1	CH6	10/15/25	1721	2880692	7
Fluoride	J	0.167	0.0330	4.00	mg/L		1					
Chloride	JN	29.8	0.268	250	mg/L		4	CH6	10/16/25	0104	2880692	8
Nitrate-N	J	0.609	0.132	10.0	mg/L		4					
Sulfate		225	2.66	8.00	mg/L		20	CH6	10/16/25	0308	2880692	9
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/29/25	1026	2888210	10
Metals Analysis-ICP-MS												
6020, Metals (15+ elements) "As Received"												
Aluminum	BJ	0.0227	0.0193	0.0500	mg/L	1.00	1	PRB	11/09/25	1752	2881335	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		0.0271	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	J	0.000642	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00112	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0544	0.0330	0.100	mg/L	1.00	1					

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

C1-30

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW373UG1-26

Project: FRNP00714

Sample ID: 747587009

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	J	15.7	8.95	20.0	mg/L		1	BR2	10/24/25	1458	2885546	17
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	AXH5	10/21/25	1253	2884203	18
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	ULY1	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					

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project: FRNP00714
Client ID: FRNP007

8260D, Volatiles- full suite "As Received"

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/10/25	1034	2895676
SW846 8011 PREP	8011 Prep	LL2	10/17/25	1034	2880577
SW846 3005A	ICP-MS 3005A PREP	ES3	10/17/25	1500	2881693
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/16/25	1512	2881264
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/28/25	1055	2888208

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Project:	FRNP00714
Client ID:	FRNP007

Notes:

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW373UG1-26

Sample ID: 747587009

Project: FRNP00714

Client ID: FRNP007

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

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Quarterly(UG26-01)

Client Sample ID: MW373UG1-26

Project: FRNP00714

Sample ID: 747587010

Client ID: FRNP007

Matrix: WG

Collect Date: 14-OCT-25 10:14

Receive Date: 15-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.0310	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	1928	2881050	1
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					
Uranium	J	0.0000910	0.0000670	0.000200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/17/25	0925	2881049
EPA 160	Laboratory Filtration	LF1	10/15/25	1330	2880934

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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ATTACHMENT C2

GEL LABORATORIES CERTIFICATE OF ANALYSIS

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GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW220SG1-26
Sample ID: 747884001
Matrix: WG
Collect Date: 15-OCT-25
Receive Date: 16-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.

Rad Alpha Spec Analysis

AlphaSpec Ra226, Liquid "As Received"

Radium-226	U	0.417	+/-0.426	0.555	+/-0.428	5.00	pCi/L			JD3	11/02/25	1236	2887472	1

Th-01-RC M, Th Isotopes, Liquid "As Received"

Thorium-230	U	0.585	+/-1.78	3.30	+/-1.78	50.0	pCi/L			CM4	11/05/25	0839	2887470	2

Rad Gas Flow Proportional Counting

905.0 Mod, Sr90, liquid "As Received"

Strontium-90	U	-1.11	+/-4.03	7.66	+/-4.03	8.00	pCi/L			CH7	11/03/25	1930	2882231	3

9310, Alpha/Beta Activity, liquid "As Received"

Alpha		5.50	+/-4.25	5.42	+/-4.35	15.0	pCi/L			CH7	10/29/25	1557	2883324	4

Beta		28.6	+/-8.29	9.78	+/-9.49	50.0	pCi/L							

Rad Liquid Scintillation Analysis

906.0 Mod, Tritium Dist, Liquid "As Received"

Tritium	U	-103	+/-112	242	+/-112	300	pCi/L			IT1	10/23/25	1100	2881817	5

Tc-02-RC-MOD, Tc99, Liquid "As Received"

Technetium-99	U	4.11	+/-7.27	12.6	+/-7.29	25.0	pCi/L			BB3	11/11/25	1358	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	92.5	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	80.9	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2882231	69	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	95	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW220SG1-26

Project: FRNP00715

Sample ID: 747884001

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26

Project: FRNP00715

Sample ID: 747884003

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.283	+/-0.454	0.756	+/-0.455	5.00	pCi/L			JD3	11/02/25	1236	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	3.26	+/-3.18	3.91	+/-3.27	50.0	pCi/L			CM4	11/05/25	0839	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	1.38	+/-1.87	3.21	+/-1.89	8.00	pCi/L			CH7	11/03/25	1930	2882231	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	4.52	+/-4.10	5.86	+/-4.16	15.0	pCi/L			CH7	10/29/25	1557	2883324	4
Beta		20.7	+/-7.48	9.54	+/-8.20	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	15.8	+/-111	210	+/-111	300	pCi/L			IT1	10/25/25	1126	2881817	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	1.43	+/-6.95	12.4	+/-6.96	25.0	pCi/L			BB3	11/11/25	1415	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	92.7	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	63.6	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2882231	103	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	96.7	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26

Project: FRNP00715

Sample ID: 747884003

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26

Project: FRNP00715

Sample ID: 747884005

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.407	+/-0.512	0.803	+/-0.514	5.00	pCi/L			JD3	11/02/25	1236	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	1.12	+/-2.11	3.50	+/-2.13	50.0	pCi/L			CM4	11/05/25	0839	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-0.868	+/-3.39	6.40	+/-3.39	8.00	pCi/L			CH7	11/03/25	1930	2882231	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	0.844	+/-2.89	6.07	+/-2.89	15.0	pCi/L			CH7	10/29/25	1557	2883324	4
Beta		15.8	+/-6.89	9.46	+/-7.35	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-121	+/-112	249	+/-112	300	pCi/L			IT1	10/23/25	1143	2881817	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-0.449	+/-6.72	12.2	+/-6.72	25.0	pCi/L			BB3	11/11/25	1431	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	93.3	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	77.7	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2882231	82.8	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	99	(30%-110%)

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5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26

Project: FRNP00715

Sample ID: 747884005

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW223SG1-26

Project: FRNP00715

Sample ID: 747884007

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.0981	+/-0.337	0.646	+/-0.337	5.00	pCi/L			JD3	11/03/25	1549	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.879	+/-1.04	1.44	+/-1.06	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-1.63	+/-1.11	2.90	+/-1.11	8.00	pCi/L			CH7	11/04/25	1103	2882231	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	1.31	+/-3.03	6.04	+/-3.04	15.0	pCi/L			CH7	10/29/25	1557	2883324	4
Beta		10.7	+/-6.78	10.3	+/-7.00	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-68.3	+/-121	250	+/-121	300	pCi/L			IT1	10/23/25	1205	2881817	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-2.49	+/-6.83	12.8	+/-6.83	25.0	pCi/L			BB3	11/11/25	1448	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	97.1	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	90.9	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2882231	87.4	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	94.9	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW223SG1-26

Project: FRNP00715

Sample ID: 747884007

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Company : Four Rivers Nuclear Partnership,
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5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26

Sample ID: 747884009

Matrix: WG

Collect Date: 15-OCT-25

Receive Date: 16-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	-0.117	+/-0.334	0.813	+/-0.334	5.00	pCi/L			JD3	11/03/25	1125	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	-0.372	+/-0.728	2.07	+/-0.728	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-3.40	+/-2.62	6.54	+/-2.62	8.00	pCi/L			CH7	11/03/25	1930	2882231	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	2.80	+/-4.29	7.61	+/-4.32	15.0	pCi/L			CH7	10/29/25	1557	2883324	4
Beta		38.6	+/-9.58	10.6	+/-11.4	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-15.1	+/-111	220	+/-111	300	pCi/L			IT1	10/25/25	1148	2881817	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99		41.4	+/-9.97	12.7	+/-11.0	25.0	pCi/L			BB3	11/11/25	1505	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	95.5	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	72.5	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2882231	50.6	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	95	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26

Project: FRNP00715

Sample ID: 747884009

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW397SG1-26

Sample ID: 747884011

Matrix: WG

Collect Date: 15-OCT-25

Receive Date: 16-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.663	+/-0.537	0.669	+/-0.541	5.00	pCi/L			JD3	11/03/25	1125	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.676	+/-1.22	2.03	+/-1.23	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-1.36	+/-2.73	5.51	+/-2.73	8.00	pCi/L			CH7	11/03/25	1930	2882231	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-3.22	+/-2.56	8.39	+/-2.57	15.0	pCi/L			CH7	10/29/25	1557	2883324	4
Beta		16.7	+/-7.50	10.5	+/-7.97	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-48.6	+/-105	220	+/-105	300	pCi/L			IT1	10/25/25	1209	2881817	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	3.37	+/-7.66	13.4	+/-7.67	25.0	pCi/L			BB3	11/11/25	1521	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	93.4	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	73.5	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2882231	75.9	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	91.5	(30%-110%)

GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW397SG1-26

Project: FRNP00715

Sample ID: 747884011

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW220SG1-26
Sample ID: 747884001
Matrix: WG
Collect Date: 15-OCT-25 12:41
Receive Date: 16-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0193	0.00867	0.0193	ug/L	0.963	1	BM1	10/20/25	1319	2881941	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.544	0.330	2.00	mg/L		1	KB3	10/17/25	0021	2881806	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1041	2882679	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	U	10.0	3.33	10.0	ug/L		1	RMJ	10/25/25	0614	2886512	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2109	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.222	0.0670	0.200	mg/L		1	CH6	10/16/25	1416	2881760	6
Fluoride	J	0.188	0.0330	4.00	mg/L		1					
Sulfate		16.7	0.133	0.400	mg/L		1					
Chloride	J	19.9	0.134	250	mg/L		2	CH6	10/16/25	1959	2881760	7
Nitrate-N	J	0.675	0.0660	10.0	mg/L		2					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0933	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	10/31/25	1926	2882700	9
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		0.185	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		20.5	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00329	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW220SG1-26
Sample ID: 747884001

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00151	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		8.46	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00119	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000517	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.00536	0.000600	0.00200	mg/L	1.00	1					
Potassium		7.01	0.0800	0.300	mg/L	1.00	1					
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Selenium	J	0.00159	0.00150	0.00500	mg/L	1.00	1					
Silver	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Sodium		36.3	0.0800	0.250	mg/L	1.00	1					
Tantalum	UN	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					
Boron	J	0.00741	0.00520	0.0150	mg/L	1.00	1	BAJ	11/04/25	1358	2882700	10
Zinc	J	0.00482	0.00330	0.0200	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.106	0.0352	0.106	ug/L	0.00106	1	JXM	11/12/25	1201	2896525	11
Aroclor-1221	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Aroclor-1232	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Aroclor-1242	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Aroclor-1248	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Aroclor-1254	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Aroclor-1260	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Aroclor-1268	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Aroclor-Total	U	0.106	0.0352	0.106	ug/L	0.00106	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		189	2.38	10.0	mg/L			SC1	10/21/25	1555	2883411	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-S&T Landfill Quarterly(SG26-01)

Project: FRNP00715
Client ID: FRNP007

C2-17

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Volatile Organics											
8260D, Volatiles- full suite "As Received"											
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/11/25	1123	2896521
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 8011 PREP	8011 Prep	BM1	10/17/25	1257	2881940
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882699

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW220SG1-26
Sample ID: 747884001

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.97 ug/L	6.88	101	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.249 ug/L	0.211	118	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.207 ug/L	0.211	98	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.9 ug/L	50.0	100	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	55.1 ug/L	50.0	110	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.8 ug/L	50.0	98	(89%-112%)

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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Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW220SG1-26

Project: FRNP00715

Sample ID: 747884002

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25 12:41

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.193	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	1951	2881976	1
Chromium	J	0.00339	0.00300	0.0100	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2881975
EPA 160	Laboratory Filtration	LF1	10/16/25	1430	2881882

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26 Project: FRNP00715
Sample ID: 747884003 Client ID: FRNP007
Matrix: WG
Collect Date: 15-OCT-25 08:45
Receive Date: 16-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0192	0.00864	0.0192	ug/L	0.960	1	BM1	10/20/25	1353	2881941	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.520	0.330	2.00	mg/L		1	KB3	10/17/25	0052	2881806	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1042	2882679	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	8.86	3.33	10.0	ug/L		1	JW2	10/29/25	1242	2888537	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2121	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.415	0.0670	0.200	mg/L		1	CH6	10/16/25	1447	2881760	6
Fluoride	J	0.210	0.0330	4.00	mg/L		1					
Sulfate		13.7	0.133	0.400	mg/L		1					
Chloride	J	33.7	0.268	250	mg/L		4	CH6	10/16/25	2029	2881760	7
Nitrate-N	J	0.924	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0934	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	10/31/25	1929	2882700	9
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		0.192	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		20.1	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					

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26
Sample ID: 747884003

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00130	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		8.66	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00153	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.0102	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.11	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		44.8	0.0800	0.250	mg/L	1.00	1					
Tantalum	UN	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					
Boron		0.0156	0.00520	0.0150	mg/L	1.00	1	BAJ	11/04/25	1359	2882700	10
Zinc	J	0.00516	0.00330	0.0200	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.103	0.0341	0.103	ug/L	0.00103	1	JXM	11/12/25	1216	2896525	11
Aroclor-1221	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Aroclor-1232	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Aroclor-1242	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Aroclor-1248	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Aroclor-1254	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Aroclor-1260	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Aroclor-1268	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Aroclor-Total	U	0.103	0.0341	0.103	ug/L	0.00103	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		206	2.38	10.0	mg/L			SC1	10/21/25	1555	2883411	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26
Sample ID: 747884003

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	U	20.0	8.95	20.0	mg/L		1	BR2	11/10/25	1502	2887953	13
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	JEB	10/22/25	1347	2885142	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					
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	ULY1	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					

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26

Project: FRNP00715

Sample ID: 747884003

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882699
SW846 8011 PREP	8011 Prep	BM1	10/17/25	1257	2881940
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/11/25	1123	2896521
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826

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Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26
Sample ID: 747884003

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.97 ug/L	6.86	102	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.220 ug/L	0.205	107	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.172 ug/L	0.205	84	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	50.2 ug/L	50.0	100	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	54.4 ug/L	50.0	109	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	49.7 ug/L	50.0	99	(89%-112%)

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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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW221SG1-26 Project: FRNP00715
Sample ID: 747884004 Client ID: FRNP007
Matrix: WG
Collect Date: 15-OCT-25 08:45
Receive Date: 16-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.197	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	1954	2881976	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/16/25	1430	2881882
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2881975

The following Analytical Methods were performed:

Method	Description	Analyst Comments
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
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26
Sample ID: 747884005
Matrix: WG
Collect Date: 15-OCT-25 10:27
Receive Date: 16-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0192	0.00863	0.0192	ug/L	0.959	1	BM1	10/20/25	1427	2881941	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.508	0.330	2.00	mg/L		1	KB3	10/17/25	0124	2881806	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1043	2882679	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	U	10.0	3.33	10.0	ug/L		1	JW2	10/29/25	1402	2888537	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2134	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.378	0.0670	0.200	mg/L		1	CH6	10/16/25	1517	2881760	6
Fluoride	J	0.232	0.0330	4.00	mg/L		1					
Sulfate		12.1	0.133	0.400	mg/L		1					
Chloride	J	31.1	0.268	250	mg/L		4	CH6	10/16/25	2100	2881760	7
Nitrate-N	J	0.912	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	J	0.0000940	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0936	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0201	0.0193	0.0500	mg/L	1.00	1	PRB	10/31/25	1932	2882700	9
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		0.265	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		18.2	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00552	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26
Sample ID: 747884005

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00108	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0429	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		8.09	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00223	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00180	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.0236	0.000600	0.00200	mg/L	1.00	1					
Potassium		0.664	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		43.9	0.0800	0.250	mg/L	1.00	1					
Tantalum	UN	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					
Boron	J	0.00867	0.00520	0.0150	mg/L	1.00	1	BAJ	11/04/25	1401	2882700	10
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.100	0.0334	0.100	ug/L	0.00100	1	JXM	11/12/25	1231	2896525	11
Aroclor-1221	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Aroclor-1232	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Aroclor-1242	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Aroclor-1248	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Aroclor-1254	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Aroclor-1260	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Aroclor-1268	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Aroclor-Total	U	0.100	0.0334	0.100	ug/L	0.00100	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		199	2.38	10.0	mg/L			SC1	10/21/25	1555	2883411	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26
Sample ID: 747884005

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	J	13.9	8.95	20.0	mg/L		1	BR2	11/10/25	1502	2887953	13
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	JEB	10/22/25	1411	2885142	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					
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	ULY1	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					

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Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26

Project: FRNP00715

Sample ID: 747884005

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 8011 PREP	8011 Prep	BM1	10/17/25	1257	2881940
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882699
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/11/25	1123	2896521

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26
Sample ID: 747884005

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.74 ug/L	6.85	98	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.232 ug/L	0.201	116	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.187 ug/L	0.201	93	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.9 ug/L	50.0	100	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.8 ug/L	50.0	108	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.0 ug/L	50.0	100	(89%-112%)

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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Company : Four Rivers Nuclear Partnership, LLC
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Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW222SG1-26

Project: FRNP00715

Sample ID: 747884006

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25 10:27

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.268	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	1957	2881976	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2881975
EPA 160	Laboratory Filtration	LF1	10/16/25	1430	2881882

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW223SG1-26
Sample ID: 747884007
Matrix: WG
Collect Date: 15-OCT-25 09:36
Receive Date: 16-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0191	0.00858	0.0191	ug/L	0.954	1	BM1	10/20/25	1501	2881941	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.521	0.330	2.00	mg/L		1	KB3	10/17/25	0155	2881806	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1050	2882679	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	3.38	3.33	10.0	ug/L		1	JW2	10/29/25	1451	2888537	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2147	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.399	0.0670	0.200	mg/L		1	CH6	10/16/25	1548	2881760	6
Fluoride	J	0.204	0.0330	4.00	mg/L		1					
Sulfate		13.8	0.133	0.400	mg/L		1					
Chloride	J	33.3	0.268	250	mg/L		4	CH6	10/16/25	2131	2881760	7
Nitrate-N	J	0.918	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0938	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0316	0.0193	0.0500	mg/L	1.00	1	PRB	10/31/25	1935	2882700	9
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		0.233	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		21.1	0.0800	0.200	mg/L	1.00	1					
Chromium		0.0582	0.00300	0.0100	mg/L	1.00	1					
Cobalt		0.00270	0.000300	0.00100	mg/L	1.00	1					

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Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW223SG1-26
Sample ID: 747884007

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper		0.00267	0.000300	0.00200	mg/L	1.00	1					
Iron		0.619	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		8.47	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.0352	0.00100	0.00500	mg/L	1.00	1					
Molybdenum		0.00739	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.572	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.30	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		41.8	0.0800	0.250	mg/L	1.00	1					
Tantalum	UN	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					
Boron	J	0.00777	0.00520	0.0150	mg/L	1.00	1	BAJ	11/04/25	1402	2882700	10
Zinc	J	0.00406	0.00330	0.0200	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.102	0.0339	0.102	ug/L	0.00102	1	JXM	11/12/25	1247	2896525	11
Aroclor-1221	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Aroclor-1232	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Aroclor-1242	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Aroclor-1248	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Aroclor-1254	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Aroclor-1260	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Aroclor-1268	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Aroclor-Total	U	0.102	0.0339	0.102	ug/L	0.00102	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		208	2.38	10.0	mg/L			SC1	10/22/25	1458	2883413	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C2-35

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW223SG1-26 Project: FRNP00715
Sample ID: 747884007 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826
SW846 8011 PREP	8011 Prep	BM1	10/17/25	1257	2881940
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882699
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/11/25	1123	2896521

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW223SG1-26
Sample ID: 747884007

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.51 ug/L	6.81	95	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.226 ug/L	0.203	111	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.185 ug/L	0.203	91	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.6 ug/L	50.0	99	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	55.4 ug/L	50.0	111	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	49.3 ug/L	50.0	99	(89%-112%)

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW223SG1-26

Project: FRNP00715

Sample ID: 747884008

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25 09:36

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.229	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	2000	2881976	1
Chromium		0.0102	0.00300	0.0100	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2881975
EPA 160	Laboratory Filtration	LF1	10/16/25	1430	2881882

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26 Project: FRNP00715
Sample ID: 747884009 Client ID: FRNP007
Matrix: WG
Collect Date: 15-OCT-25 07:52
Receive Date: 16-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0190	0.00855	0.0190	ug/L	0.950	1	BM1	10/20/25	1535	2881941	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	1.58	0.330	2.00	mg/L		1	KB3	10/17/25	0227	2881806	3
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1051	2882679	4
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens		12.9	3.33	10.0	ug/L		1	JW2	10/29/25	1522	2888537	5
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2200	2883459	6
SW846 9056A Anions (5) "As Received"												
Bromide		0.327	0.0670	0.200	mg/L		1	CH6	10/16/25	1619	2881760	7
Fluoride	J	0.306	0.0330	4.00	mg/L		1					
Chloride	J	33.6	0.268	250	mg/L		4	CH6	10/16/25	2202	2881760	8
Nitrate-N	J	1.68	0.132	10.0	mg/L		4					
Sulfate		38.8	0.532	1.60	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0943	2888842	9
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum		0.0871	0.0193	0.0500	mg/L	1.00	1	PRB	10/31/25	1938	2882700	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		0.195	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		27.5	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					

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26
Sample ID: 747884009

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00113	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0783	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		11.8	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000440	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.00138	0.000600	0.00200	mg/L	1.00	1					
Potassium		0.331	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	UN	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	J	0.000177	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Boron	J	0.0145	0.00520	0.0150	mg/L	1.00	1	BAJ	11/04/25	1403	2882700	11
Zinc	J	0.00426	0.00330	0.0200	mg/L	1.00	1					
Sodium		89.4	1.60	5.00	mg/L	1.00	20	PRB	11/05/25	1639	2882700	12
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.101	0.0335	0.101	ug/L	0.00101	1	JXM	11/12/25	1302	2896525	13
Aroclor-1221	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Aroclor-1232	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Aroclor-1242	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Aroclor-1248	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Aroclor-1254	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Aroclor-1260	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Aroclor-1268	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Aroclor-Total	U	0.101	0.0335	0.101	ug/L	0.00101	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		374	2.38	10.0	mg/L			SC1	10/22/25	1458	2883413	14
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26
Sample ID: 747884009

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	U	20.0	8.95	20.0	mg/L		1	BR2	11/10/25	1502	2887953	15
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	JEB	10/22/25	1500	2885142	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	ULY1	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					

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26

Project: FRNP00715

Sample ID: 747884009

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882699
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/11/25	1123	2896521
SW846 8011 PREP	8011 Prep	BM1	10/17/25	1257	2881940
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26
Sample ID: 747884009

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical 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 7470A	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3005A/6020B	
13	SW846 3535A/8082A	
14	EPA 160.1	
15	EPA 410.4	
16	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.77 ug/L	6.79	100	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.233 ug/L	0.201	116	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.189 ug/L	0.201	94	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	47.7 ug/L	50.0	95	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.6 ug/L	50.0	107	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.9 ug/L	50.0	98	(89%-112%)

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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Company : Four Rivers Nuclear Partnership, LLC
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Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW390SG1-26

Project: FRNP00715

Sample ID: 747884010

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25 07:52

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.205	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	2003	2881976	1
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					
Uranium	J	0.000174	0.0000670	0.000200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2881975
EPA 160	Laboratory Filtration	LF1	10/16/25	1430	2881882

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW397SG1-26 Project: FRNP00715
Sample ID: 747884011 Client ID: FRNP007
Matrix: WG
Collect Date: 15-OCT-25 06:48
Receive Date: 16-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0193	0.00868	0.0193	ug/L	0.964	1	BM1	10/20/25	1609	2881941	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.449	0.330	2.00	mg/L		1	KB3	10/17/25	0404	2881806	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1052	2882679	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	U	10.0	3.33	10.0	ug/L		1	RMJ	10/24/25	2356	2886512	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2213	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.380	0.0670	0.200	mg/L		1	CH6	10/16/25	1650	2881760	6
Fluoride	J	0.143	0.0330	4.00	mg/L		1					
Sulfate		11.4	0.133	0.400	mg/L		1					
Chloride	J	33.0	0.268	250	mg/L		4	CH6	10/16/25	2233	2881760	7
Nitrate-N	J	1.03	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0944	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum		0.235	0.0193	0.0500	mg/L	1.00	1	PRB	10/31/25	1947	2882700	9
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		0.134	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		17.7	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00340	0.00300	0.0100	mg/L	1.00	1					
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW397SG1-26
Sample ID: 747884011

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00126	0.000300	0.00200	mg/L	1.00	1					
Iron		0.463	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		7.33	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.00781	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000381	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.00207	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.73	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		31.2	0.0800	0.250	mg/L	1.00	1					
Tantalum	UN	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					
Boron	J	0.00842	0.00520	0.0150	mg/L	1.00	1	BAJ	11/04/25	1407	2882700	10
Zinc	J	0.00518	0.00330	0.0200	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.100	0.0333	0.100	ug/L	0.00100	1	JXM	11/12/25	1318	2896525	11
Aroclor-1221	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1232	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1242	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1248	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1254	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1260	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1268	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-Total	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		167	2.38	10.0	mg/L			SC1	10/22/25	1458	2883413	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW397SG1-26
Sample ID: 747884011

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	J	9.28	8.95	20.0	mg/L		1	BR2	11/10/25	1502	2887953	13
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	JEB	10/22/25	1524	2885142	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					
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	ULY1	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					

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Client Sample ID: MW397SG1-26

Project: FRNP00715

Sample ID: 747884011

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882699
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/11/25	1123	2896521
SW846 8011 PREP	8011 Prep	BM1	10/17/25	1257	2881940
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826

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Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW397SG1-26
Sample ID: 747884011

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.79 ug/L	6.89	99	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.226 ug/L	0.200	113	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.186 ug/L	0.200	93	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.3 ug/L	50.0	99	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	55.9 ug/L	50.0	112	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.2 ug/L	50.0	100	(89%-112%)

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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Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW397SG1-26

Project: FRNP00715

Sample ID: 747884012

Client ID: FRNP007

Matrix: WG

Collect Date: 15-OCT-25 06:48

Receive Date: 16-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.136	0.000670	0.00400	mg/L	1.00	1	BB2	10/24/25	2012	2881976	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2881975
EPA 160	Laboratory Filtration	LF1	10/16/25	1430	2881882

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: TB1SG1-26 Project: FRNP00715
Sample ID: 747884013 Client ID: FRNP007
Matrix: WATER
Collect Date: 15-OCT-25 06:05
Receive Date: 16-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0191	0.00860	0.0191	ug/L	0.956	1	BM1	10/20/25	1751	2881941	1
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	JEB	10/22/25	1548	2885142	2
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	ULY1	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					

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Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/17/25	1257	2881940

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.48 ug/L	6.83	95	(56%-149%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	46.9 ug/L	50.0	94	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.4 ug/L	50.0	107	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.3 ug/L	50.0	97	(89%-112%)

Notes:

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Report Date: January 21, 2026

Client Sample ID: TB1SG1-26
Sample ID: 747884013

Project:	FRNP00715
Client ID:	FRNP007

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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ATTACHMENT C3

GEL LABORATORIES CERTIFICATE OF ANALYSIS

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GEL LABORATORIES LLC

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26
Sample ID: 748060001
Matrix: WG
Collect Date: 16-OCT-25
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.428	+/-0.490	0.737	+/-0.492	5.00	pCi/L			JD3	11/03/25	1125	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	1.35	+/-1.24	1.70	+/-1.26	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	0.0887	+/-1.75	3.40	+/-1.75	8.00	pCi/L			CH7	11/03/25	1726	2883284	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	1.29	+/-3.74	7.46	+/-3.75	15.0	pCi/L			CH7	11/05/25	1240	2892350	4
Beta	U	10.8	+/-7.02	10.8	+/-7.24	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	53.4	+/-94.2	168	+/-94.7	300	pCi/L			IT1	10/23/25	1458	2882630	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-0.225	+/-7.07	12.8	+/-7.07	25.0	pCi/L			BB3	11/11/25	1538	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	95.2	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	99.1	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2883284	94.3	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	93.6	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26

Project: FRNP00715

Sample ID: 748060001

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery		Test						Batch ID	Recovery%	Acceptable Limits				

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

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW392SG1-26

Project: FRNP00715

Sample ID: 748060003

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.0250	+/-0.445	0.967	+/-0.446	5.00	pCi/L			JD3	11/05/25	0837	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.509	+/-1.10	1.98	+/-1.11	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	0.0560	+/-1.31	2.55	+/-1.31	8.00	pCi/L			CH7	11/04/25	1112	2883284	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-1.78	+/-2.87	7.81	+/-2.88	15.0	pCi/L			CH7	11/05/25	1240	2892350	4
Beta	U	1.80	+/-5.40	9.76	+/-5.41	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-8.59	+/-81.9	170	+/-82.0	300	pCi/L			IT1	10/23/25	1520	2882630	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	1.59	+/-7.31	13.0	+/-7.31	25.0	pCi/L			BB3	11/11/25	1554	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	93	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	94.4	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2883284	108	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	93	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW392SG1-26

Project: FRNP00715

Sample ID: 748060003

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery		Test						Batch ID	Recovery%	Acceptable Limits				

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

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Lc/LC: Critical Level

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TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

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Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW393SG1-26

Project: FRNP00715

Sample ID: 748060005

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.361	+/-0.379	0.472	+/-0.380	5.00	pCi/L			JD3	11/03/25	1125	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.996	+/-1.31	2.06	+/-1.33	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	1.26	+/-2.07	3.63	+/-2.08	8.00	pCi/L			CH7	11/03/25	1726	2883284	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-3.47	+/-2.62	8.94	+/-2.63	15.0	pCi/L			CH7	11/05/25	1240	2892350	4
Beta	U	1.95	+/-5.94	10.8	+/-5.95	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	147	+/-110	167	+/-114	300	pCi/L			IT1	10/23/25	1542	2882630	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-0.957	+/-6.90	12.7	+/-6.90	25.0	pCi/L			BB3	11/11/25	1611	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	100	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	83.4	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2883284	87.4	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	96.2	(30%-110%)

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Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW393SG1-26

Project: FRNP00715

Sample ID: 748060005

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

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Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW394SG1-26

Project: FRNP00715

Sample ID: 748060007

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.273	+/-0.463	0.789	+/-0.464	5.00	pCi/L			JD3	11/03/25	1125	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.803	+/-1.27	2.10	+/-1.28	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-1.02	+/-2.42	4.88	+/-2.42	8.00	pCi/L			CH7	11/03/25	1726	2883284	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-2.61	+/-1.94	7.29	+/-1.95	15.0	pCi/L			CH7	11/05/25	1240	2892350	4
Beta	U	2.04	+/-5.31	9.57	+/-5.33	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-31.1	+/-75.6	167	+/-75.6	300	pCi/L			IT1	10/23/25	1603	2882630	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-1.91	+/-7.07	13.1	+/-7.07	25.0	pCi/L			BB3	11/11/25	1628	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	96.9	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	81.8	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2883284	75.9	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	92	(30%-110%)

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Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW394SG1-26

Project: FRNP00715

Sample ID: 748060007

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW395SG1-26

Project: FRNP00715

Sample ID: 748060009

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.572	+/-0.520	0.695	+/-0.524	5.00	pCi/L			JD3	11/03/25	1125	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.0792	+/-0.914	1.93	+/-0.916	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-1.84	+/-1.42	3.55	+/-1.42	8.00	pCi/L			CH7	11/04/25	1112	2883284	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	7.07	+/-6.00	8.79	+/-6.11	15.0	pCi/L			CH7	11/06/25	1216	2892350	4
Beta	U	1.01	+/-4.65	8.52	+/-4.66	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	68.5	+/-98.6	171	+/-99.5	300	pCi/L			IT1	10/23/25	1625	2882630	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-2.62	+/-6.73	12.6	+/-6.73	25.0	pCi/L			BB3	11/11/25	1644	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	93.1	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	81.2	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2883284	80.5	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	96.5	(30%-110%)

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW395SG1-26

Project: FRNP00715

Sample ID: 748060009

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW396SG1-26

Project: FRNP00715

Sample ID: 748060011

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.467	+/-0.446	0.573	+/-0.448	5.00	pCi/L			JD3	11/03/25	1125	2887472	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.313	+/-0.917	1.68	+/-0.922	50.0	pCi/L			CM4	11/01/25	0815	2887470	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-0.766	+/-2.33	4.74	+/-2.33	8.00	pCi/L			CH7	11/03/25	1726	2883284	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	2.92	+/-4.24	7.39	+/-4.27	15.0	pCi/L			CH7	11/05/25	1240	2892350	4
Beta	U	2.78	+/-5.87	10.4	+/-5.88	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	30.9	+/-90.2	169	+/-90.4	300	pCi/L			IT1	10/23/25	1646	2882630	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-0.329	+/-7.03	12.8	+/-7.03	25.0	pCi/L			BB3	11/11/25	1701	2884405	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2887472	99.7	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2887470	78.1	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2883284	75.9	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884405	93.8	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW396SG1-26

Project: FRNP00715

Sample ID: 748060011

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26
Sample ID: 748060001
Matrix: WG
Collect Date: 16-OCT-25 10:02
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0191	0.00861	0.0191	ug/L	0.957	1	BM1	10/20/25	2015	2882605	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.478	0.330	2.00	mg/L		1	KB3	10/21/25	1703	2882385	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1110	2882679	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	3.82	3.33	10.0	ug/L		1	JW2	10/29/25	1613	2888537	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2252	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.473	0.0670	0.200	mg/L		1	CH6	10/17/25	1310	2882409	6
Fluoride	J	0.129	0.0330	4.00	mg/L		1					
Sulfate		12.2	0.133	0.400	mg/L		1					
Chloride	J	39.3	0.335	250	mg/L		5	CH6	10/17/25	1818	2882409	7
Nitrate-N	J	1.16	0.165	10.0	mg/L		5					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0951	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0327	0.0193	0.0500	mg/L	1.00	1	RM4	11/05/25	1703	2882720	9
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		0.206	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		23.8	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					

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26
Sample ID: 748060001

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.000696	0.000300	0.00200	mg/L	1.00	1					
Iron		0.136	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		10.5	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00294	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		1.52	0.0800	0.300	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		34.6	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	0.00478	0.00330	0.0200	mg/L	1.00	1					
Boron		0.0246	0.00520	0.0150	mg/L	1.00	1	RM4	11/06/25	1053	2882720	10
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.0992	0.0330	0.0992	ug/L	0.000992	1	JXM	11/13/25	2033	2897523	11
Aroclor-1221	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Aroclor-1232	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Aroclor-1242	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Aroclor-1248	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Aroclor-1254	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Aroclor-1260	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Aroclor-1268	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Aroclor-Total	U	0.0992	0.0330	0.0992	ug/L	0.000992	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		175	2.38	10.0	mg/L			SC1	10/22/25	1841	2884765	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26
Sample ID: 748060001

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	U	20.0	8.95	20.0	mg/L		1	BR2	11/10/25	1502	2887953	13
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	10/22/25	1315	2885189	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					
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	ULY1	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					

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Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26

Project: FRNP00715

Sample ID: 748060001

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	0.610	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/13/25	1050	2897522
SW846 8011 PREP	8011 Prep	BM1	10/20/25	1106	2882604
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882719
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26
Sample ID: 748060001

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.62 ug/L	6.83	97	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.237 ug/L	0.198	119	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.168 ug/L	0.198	85	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	50.6 ug/L	50.0	101	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	50.3 ug/L	50.0	101	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.8 ug/L	50.0	102	(89%-112%)

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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Address : 5600 Hobbs Road
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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW391SG1-26
Sample ID: 748060002
Matrix: WG
Collect Date: 16-OCT-25 10:02
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.213	0.000670	0.00400	mg/L	1.00	1	BB2	10/22/25	1843	2882615	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/21/25	0910	2882614
EPA 160	Laboratory Filtration	LF1	10/17/25	1330	2882521

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration

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

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW392SG1-26
Sample ID: 748060003
Matrix: WG
Collect Date: 16-OCT-25 12:12
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0192	0.00864	0.0192	ug/L	0.960	1	BM1	10/20/25	2049	2882605	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.449	0.330	2.00	mg/L		1	KB3	10/21/25	1735	2882385	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1111	2882679	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens		10.2	3.33	10.0	ug/L		1	JW2	10/29/25	1644	2888537	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2330	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.552	0.0670	0.200	mg/L		1	CH6	10/17/25	1341	2882409	6
Fluoride	J	0.163	0.0330	4.00	mg/L		1					
Sulfate		7.51	0.133	0.400	mg/L		1					
Chloride	J	44.0	0.670	250	mg/L		10	CH6	10/17/25	1849	2882409	7
Nitrate-N	J	1.26	0.330	10.0	mg/L		10					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0952	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0322	0.0193	0.0500	mg/L	1.00	1	RM4	11/05/25	1706	2882720	9
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		0.205	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		26.0	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					

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-S&T Landfill Quarterly(SG26-01)

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00115	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0614	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		11.1	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.0126	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		1.96	0.0800	0.300	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		27.5	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	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Boron		0.0252	0.00520	0.0150	mg/L	1.00	1	RM4	11/06/25	1055	2882720	10
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					

8082A, PCB Liquids "As Received"

Aroclor-1016	US	0.102	0.0338	0.102	ug/L	0.00102	1	JXM	11/13/25	2048	2897523	11
Aroclor-1221	US	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1232	US	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1242	US	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1248	US	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1254	US	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1260	US	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1268	US	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-Total	US	0.102	0.0338	0.102	ug/L	0.00102	1					

160.1, Dissolved Solids "As Received"

Total Dissolved Solids	183	2.38	10.0	mg/L	SC1	10/22/25	1841	2884765	12

410.4, Chem. Oxygen Demand "As Received"

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Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW392SG1-26
Sample ID: 748060003

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	U	20.0	8.95	20.0	mg/L		1	BR2	11/10/25	1502	2887953	13
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	10/22/25	1341	2885189	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					
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	ULY1	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					

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Certificate of Analysis

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Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW392SG1-26
Sample ID: 748060003

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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		3.69	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	J	0.400	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882657
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/13/25	1050	2897522
SW846 8011 PREP	8011 Prep	BM1	10/20/25	1106	2882604
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882719
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826

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Company : Four Rivers Nuclear Partnership, LLC
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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW392SG1-26
Sample ID: 748060003

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.62 ug/L	6.86	96	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.278 ug/L	0.203	137*	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.201 ug/L	0.203	99	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	51.8 ug/L	50.0	104	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	49.0 ug/L	50.0	98	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.6 ug/L	50.0	101	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW392SG1-26 Project: FRNP00715
Sample ID: 748060004 Client ID: FRNP007
Matrix: WG
Collect Date: 16-OCT-25 12:12
Receive Date: 17-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.204	0.000670	0.00400	mg/L	1.00	1	BB2	10/22/25	1846	2882615	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/21/25	0910	2882614
EPA 160	Laboratory Filtration	LF1	10/17/25	1330	2882521

The following Analytical Methods were performed:

Method	Description	Analyst Comments
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
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW393SG1-26
Sample ID: 748060005
Matrix: WG
Collect Date: 16-OCT-25 12:58
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0193	0.00868	0.0193	ug/L	0.964	1	BM1	10/20/25	2123	2882605	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	1.68	0.330	2.00	mg/L		1	KB3	10/21/25	1840	2882385	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1124	2882847	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens		12.7	3.33	10.0	ug/L		1	JW2	11/03/25	1331	2891006	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2343	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide	J	0.138	0.0670	0.200	mg/L		1	CH6	10/17/25	1411	2882409	6
Chloride	J	9.08	0.0670	250	mg/L		1					
Fluoride	J	0.140	0.0330	4.00	mg/L		1					
Nitrate-N	U	10.0	0.0330	10.0	mg/L		1					
Sulfate		19.5	0.133	0.400	mg/L		1					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0954	2888842	7
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0335	0.0193	0.0500	mg/L	1.00	1	RM4	11/05/25	1709	2882720	8
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		0.0885	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		13.7	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					

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C3-28

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C3-29

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Volatile Organics											
8260D, Volatiles- full suite "As Received"											
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/13/25	1050	2897522
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882719
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882846
SW846 8011 PREP	8011 Prep	BM1	10/20/25	1106	2882604

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW393SG1-26
Sample ID: 748060005

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 7470A	
8	SW846 3005A/6020B	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.85 ug/L	6.89	99	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.196 ug/L	0.203	97	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.169 ug/L	0.203	83	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	51.3 ug/L	50.0	103	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	49.0 ug/L	50.0	98	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	49.4 ug/L	50.0	99	(89%-112%)

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW393SG1-26

Project: FRNP00715

Sample ID: 748060006

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25 12:58

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.0759	0.000670	0.00400	mg/L	1.00	1	BB2	10/22/25	1849	2882615	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/17/25	1330	2882521
SW846 3005A	ICP-MS 3005A PREP	HC1	10/21/25	0910	2882614

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW394SG1-26
Sample ID: 748060007
Matrix: WG
Collect Date: 16-OCT-25 07:17
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0195	0.00876	0.0195	ug/L	0.973	1	BM1	10/20/25	2157	2882605	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.540	0.330	2.00	mg/L		1	KB3	10/21/25	1912	2882385	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1125	2882847	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	6.65	3.33	10.0	ug/L		1	JW2	11/03/25	1422	2891006	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/20/25	2356	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.517	0.0670	0.200	mg/L		1	CH6	10/17/25	1442	2882409	6
Fluoride	J	0.106	0.0330	4.00	mg/L		1					
Sulfate		11.8	0.133	0.400	mg/L		1					
Chloride	J	41.7	0.670	250	mg/L		10	CH6	10/17/25	1920	2882409	7
Nitrate-N	J	1.41	0.330	10.0	mg/L		10					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0956	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0290	0.0193	0.0500	mg/L	1.00	1	RM4	11/05/25	1712	2882720	9
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		0.228	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		25.9	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					

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW394SG1-26
Sample ID: 748060007

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00134	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0779	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		11.4	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00136	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.00388	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.23	0.0800	0.300	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		34.4	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	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Boron		0.0192	0.00520	0.0150	mg/L	1.00	1	RM4	11/06/25	1058	2882720	10
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.101	0.0338	0.101	ug/L	0.00101	1	JXM	11/13/25	2119	2897523	11
Aroclor-1221	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Aroclor-1232	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Aroclor-1242	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Aroclor-1248	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Aroclor-1254	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Aroclor-1260	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Aroclor-1268	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Aroclor-Total	U	0.101	0.0338	0.101	ug/L	0.00101	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		193	2.38	10.0	mg/L			SC1	10/22/25	1841	2884765	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW394SG1-26
Sample ID: 748060007

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												
COD	U	20.0	8.95	20.0	mg/L		1	BR2	11/10/25	1502	2887953	13
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	10/22/25	1433	2885189	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					
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	ULY1	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					

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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		3.53	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/13/25	1050	2897522
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882719
SW846 8011 PREP	8011 Prep	BM1	10/20/25	1106	2882604
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882846

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Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW394SG1-26
Sample ID: 748060007

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.49 ug/L	6.95	93	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.266 ug/L	0.203	131	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.178 ug/L	0.203	88	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	52.4 ug/L	50.0	105	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	49.7 ug/L	50.0	99	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.4 ug/L	50.0	101	(89%-112%)

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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Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW394SG1-26

Project: FRNP00715

Sample ID: 748060008

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25 07:17

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.238	0.000670	0.00400	mg/L	1.00	1	BB2	10/22/25	1852	2882615	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/21/25	0910	2882614
EPA 160	Laboratory Filtration	LF1	10/17/25	1330	2882521

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW395SG1-26 Project: FRNP00715
Sample ID: 748060009 Client ID: FRNP007
Matrix: WG
Collect Date: 16-OCT-25 08:07
Receive Date: 17-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0193	0.00868	0.0193	ug/L	0.964	1	BM1	10/20/25	2231	2882605	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.485	0.330	2.00	mg/L		1	KB3	10/21/25	1943	2882385	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1126	2882847	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	8.20	3.33	10.0	ug/L		1	JW2	11/03/25	1151	2891006	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	0009	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.531	0.0670	0.200	mg/L		1	CH6	10/17/25	1615	2882409	6
Fluoride	J	0.101	0.0330	4.00	mg/L		1					
Sulfate		11.0	0.133	0.400	mg/L		1					
Chloride	J	44.0	0.670	250	mg/L		10	CH6	10/17/25	1951	2882409	7
Nitrate-N	J	1.56	0.330	10.0	mg/L		10					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	0957	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0218	0.0193	0.0500	mg/L	1.00	1	RM4	11/05/25	1721	2882720	9
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		0.267	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		28.2	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					

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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW395SG1-26
Sample ID: 748060009

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.000980	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		12.5	0.0100	0.0300	mg/L	1.00	1					
Manganese	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000212	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.00105	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.73	0.0800	0.300	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		34.4	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	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Boron		0.0211	0.00520	0.0150	mg/L	1.00	1	RM4	11/06/25	1102	2882720	10
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.100	0.0333	0.100	ug/L	0.00100	1	JXM	11/13/25	2134	2897523	11
Aroclor-1221	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1232	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1242	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1248	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1254	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1260	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-1268	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Aroclor-Total	U	0.100	0.0333	0.100	ug/L	0.00100	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		180	2.38	10.0	mg/L			SC1	10/22/25	1841	2884765	12
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C3-41

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Volatile Organics											
8260D, Volatiles- full suite "As Received"											
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		4.10	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826
SW846 8011 PREP	8011 Prep	BM1	10/20/25	1106	2882604
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882719
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882846
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/13/25	1050	2897522

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW395SG1-26
Sample ID: 748060009

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3535A/8082A	
12	EPA 160.1	
13	EPA 410.4	
14	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.82 ug/L	6.89	99	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.261 ug/L	0.200	131	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.198 ug/L	0.200	99	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	52.1 ug/L	50.0	104	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	49.0 ug/L	50.0	98	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.7 ug/L	50.0	101	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW395SG1-26

Project: FRNP00715

Sample ID: 748060010

Client ID: FRNP007

Matrix: WG

Collect Date: 16-OCT-25 08:07

Receive Date: 17-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.265	0.000670	0.00400	mg/L	1.00	1	BB2	10/22/25	1900	2882615	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/21/25	0910	2882614
EPA 160	Laboratory Filtration	LF1	10/17/25	1330	2882521

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW396SG1-26
Sample ID: 748060011
Matrix: WG
Collect Date: 16-OCT-25 09:09
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0191	0.00859	0.0191	ug/L	0.954	1	BM1	10/21/25	0013	2882605	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average		3.29	0.330	2.00	mg/L		1	KB3	10/21/25	2118	2882385	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	U	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/22/25	1129	2882847	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens		45.7	3.33	10.0	ug/L		1	JW2	11/03/25	1455	2891006	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	J	0.483	0.167	0.500	mg/L		1	CH6	10/21/25	0707	2883459	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.757	0.0670	0.200	mg/L		1	CH6	10/17/25	1646	2882409	6
Fluoride	J	0.535	0.0330	4.00	mg/L		1					
Nitrate-N	U	10.0	0.0330	10.0	mg/L		1					
Chloride	J	48.8	0.670	250	mg/L		10	CH6	10/18/25	0303	2882409	7
Sulfate		29.9	1.33	4.00	mg/L		10					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JP2	10/30/25	1007	2888842	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	RM4	11/05/25	1736	2882720	9
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		0.363	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		31.4	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					

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW396SG1-26
Sample ID: 748060011

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Copper	J	0.00120	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0894	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		14.2	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.193	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000465	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.00159	0.000600	0.00200	mg/L	1.00	1					
Potassium		0.791	0.0800	0.300	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					
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1					
Uranium	J	0.0000860	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Zinc	J	0.00451	0.00330	0.0200	mg/L	1.00	1					
Boron	J	0.00801	0.00520	0.0150	mg/L	1.00	1	RM4	11/06/25	1110	2882720	10
Rhodium	U	0.00500	0.00160	0.00500	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Sodium		104	0.400	1.25	mg/L	1.00	5	RM4	11/06/25	1114	2882720	11
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.0994	0.0331	0.0994	ug/L	0.000994	1	JXM	11/13/25	2220	2897523	12
Aroclor-1221	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1232	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1242	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1248	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1254	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1260	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1268	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-Total	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		386	2.38	10.0	mg/L			SC1	10/22/25	1841	2884765	13
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C3-47

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW396SG1-26
Sample ID: 748060011

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/20/25	1106	2882604
SW846 3535A	SW3535A PCB SPE Extraction	DG3	11/13/25	1050	2897522
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/21/25	1604	2882846
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/29/25	1200	2888826
SW846 3005A	ICP-MS 3005A PREP	HC1	10/18/25	1045	2882719

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW396SG1-26
Sample ID: 748060011

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3535A/8082A	
13	EPA 160.1	
14	EPA 410.4	
15	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.60 ug/L	6.82	97	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.213 ug/L	0.199	107	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.164 ug/L	0.199	83	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	53.0 ug/L	50.0	106	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.1 ug/L	50.0	106	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.9 ug/L	50.0	102	(89%-112%)

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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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID:	MW396SG1-26	Project:	FRNP00715
Sample ID:	748060012	Client ID:	FRNP007
Matrix:	WG		
Collect Date:	16-OCT-25 09:09		
Receive Date:	17-OCT-25		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.374	0.000670	0.00400	mg/L	1.00	1	BB2	10/22/25	1915	2882615	1
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					
Uranium	J	0.0000880	0.0000670	0.000200	mg/L	1.00	1	BB2	10/23/25	0835	2882615	2

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/17/25	1330	2882521
SW846 3005A	ICP-MS 3005A PREP	HC1	10/21/25	0910	2882614

Method	Description	Analyst Comments
1	SW846 3005A/6020B	
2	SW846 3005A/6020B	

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

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: TB2SG1-26
Sample ID: 748060013
Matrix: WATER
Collect Date: 16-OCT-25 06:05
Receive Date: 17-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0190	0.00854	0.0190	ug/L	0.949	1	BM1	10/21/25	0047	2882605	1
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	PXY1	10/22/25	1550	2885189	2
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	ULY1	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					

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: TB2SG1-26 Project: FRNP00715
Sample ID: 748060013 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/20/25	1106	2882604

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	SW846 8011		
2	SW846 8260D		

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.65 ug/L	6.78	98	(56%-149%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	50.5 ug/L	50.0	101	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	50.1 ug/L	50.0	100	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	50.4 ug/L	50.0	101	(89%-112%)

Notes:

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: TB2SG1-26
Sample ID: 748060013

Project: FRNP00715
Client ID: FRNP007

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

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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ATTACHMENT C4

GEL LABORATORIES CERTIFICATE OF ANALYSIS

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW224SG1-26
Sample ID: 748461001
Matrix: WG
Collect Date: 20-OCT-25
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.

Rad Alpha Spec Analysis

AlphaSpec Ra226, Liquid "As Received"

Radium-226	U	0.422	+/-0.429	0.618	+/-0.431	5.00	pCi/L			JD3	10/29/25	0818	2886151	1

Th-01-RC M, Th Isotopes, Liquid "As Received"

Thorium-230	U	0.902	+/-1.54	2.50	+/-1.55	50.0	pCi/L			JD3	10/28/25	0917	2886153	2

Rad Gas Flow Proportional Counting

905.0 Mod, Sr90, liquid "As Received"

Strontium-90	U	1.19	+/-1.81	3.15	+/-1.82	8.00	pCi/L			HH3	11/02/25	2033	2884968	3

9310, Alpha/Beta Activity, liquid "As Received"

Alpha	U	1.69	+/-4.24	8.36	+/-4.25	15.0	pCi/L			CH7	10/30/25	1240	2884958	4

Beta	U	1.79	+/-4.27	7.72	+/-4.28	50.0	pCi/L							

Rad Liquid Scintillation Analysis

906.0 Mod, Tritium Dist, Liquid "As Received"

Tritium	U	-47.5	+/-116	246	+/-116	300	pCi/L			MG6	10/25/25	0320	2884625	5

Tc-02-RC-MOD, Tc99, Liquid "As Received"

Technetium-99	U	-1.15	+/-8.05	14.6	+/-8.05	25.0	pCi/L			BB3	11/09/25	0926	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	94.7	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	82.6	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	96.6	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	97.4	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW224SG1-26

Project: FRNP00715

Sample ID: 748461001

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery		Test						Batch ID	Recovery%		Acceptable Limits			

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

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Certificate of Analysis

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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW384SG1-26

Project: FRNP00715

Sample ID: 748461003

Client ID: FRNP007

Matrix: WG

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.0122	+/-0.322	0.675	+/-0.322	5.00	pCi/L			JD3	10/29/25	0818	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.0410	+/-1.64	3.52	+/-1.65	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-0.0197	+/-1.94	3.72	+/-1.94	8.00	pCi/L			HH3	11/02/25	2034	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	1.89	+/-3.24	5.92	+/-3.26	15.0	pCi/L			CH7	10/28/25	1641	2884958	4
Beta		28.7	+/-7.97	9.14	+/-9.22	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	38.2	+/-128	238	+/-128	300	pCi/L			MG6	10/25/25	0342	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99		23.7	+/-9.73	14.6	+/-10.1	25.0	pCi/L			BB3	11/09/25	0942	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	96.2	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	79.6	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	96.6	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	96.3	(30%-110%)

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Certificate of Analysis

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5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW384SG1-26

Project: FRNP00715

Sample ID: 748461003

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

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Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW385SG1-26

Project: FRNP00715

Sample ID: 748461005

Client ID: FRNP007

Matrix: WG

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	1.26	+/-1.40	1.67	+/-1.40	5.00	pCi/L			JD3	11/03/25	1125	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	0.103	+/-1.26	2.68	+/-1.27	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-2.16	+/-1.52	3.90	+/-1.52	8.00	pCi/L			HH3	11/02/25	2034	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	0.0360	+/-2.91	6.69	+/-2.92	15.0	pCi/L			CH7	10/28/25	1641	2884958	4
Beta		34.7	+/-8.56	9.34	+/-10.2	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-12.9	+/-125	250	+/-125	300	pCi/L			MG6	10/25/25	0403	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99		38.1	+/-10.3	14.1	+/-11.1	25.0	pCi/L			BB3	11/09/25	0959	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	97.2	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	82.2	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	78.2	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	99.1	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW385SG1-26

Project: FRNP00715

Sample ID: 748461005

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386DSG1-26

Sample ID: 748461007

Matrix: WG

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	-0.0574	+/-0.379	0.928	+/-0.379	5.00	pCi/L			JD3	10/30/25	1215	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	2.66	+/-2.37	3.19	+/-2.41	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-0.954	+/-1.94	3.94	+/-1.94	8.00	pCi/L			HH3	11/02/25	2034	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-0.625	+/-3.88	8.95	+/-3.89	15.0	pCi/L			CH7	10/28/25	1641	2884958	4
Beta	U	4.76	+/-5.92	10.0	+/-5.97	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-28.2	+/-119	245	+/-119	300	pCi/L			MG6	10/25/25	0425	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-0.256	+/-8.10	14.6	+/-8.10	25.0	pCi/L			BB3	11/09/25	1016	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	98.5	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	76	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	94.3	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	97.5	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386DSG1-26

Project: FRNP00715

Sample ID: 748461007

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386SG1-26

Sample ID: 748461009

Matrix: WG

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.173	+/-0.547	0.821	+/-0.547	5.00	pCi/L			JD3	10/30/25	1215	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	2.04	+/-1.88	2.51	+/-1.91	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-0.915	+/-1.84	3.89	+/-1.84	8.00	pCi/L			HH3	11/02/25	2034	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-1.92	+/-1.70	6.95	+/-1.70	15.0	pCi/L			CH7	10/28/25	1641	2884958	4
Beta	U	6.30	+/-5.98	9.77	+/-6.06	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	52.3	+/-131	240	+/-132	300	pCi/L			MG6	10/25/25	0447	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-2.59	+/-7.85	14.4	+/-7.85	25.0	pCi/L			BB3	11/09/25	1032	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	97.4	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	85.5	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	82.8	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	98.2	(30%-110%)

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386SG1-26

Project: FRNP00715

Sample ID: 748461009

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Company : Four Rivers Nuclear Partnership,
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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW387SG1-26

Sample ID: 748461011

Matrix: WG

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.277	+/-0.324	0.449	+/-0.325	5.00	pCi/L			JD3	10/29/25	0818	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	2.03	+/-2.11	3.06	+/-2.14	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	3.18	+/-2.12	3.18	+/-2.18	8.00	pCi/L			HH3	11/02/25	2034	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-1.09	+/-3.25	8.11	+/-3.25	15.0	pCi/L			CH7	10/30/25	1240	2884958	4
Beta		93.4	+/-13.5	13.2	+/-20.8	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-46.6	+/-118	249	+/-118	300	pCi/L			MG6	10/25/25	0509	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99		109	+/-14.3	15.0	+/-18.9	25.0	pCi/L			BB3	11/09/25	1049	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	98	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	75.5	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	94.3	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	94.7	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW387SG1-26

Project: FRNP00715

Sample ID: 748461011

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
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5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW388SG1-26

Sample ID: 748461013

Matrix: WG

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.591	+/-1.08	1.67	+/-1.08	5.00	pCi/L			JD3	11/03/25	1125	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	1.05	+/-1.84	3.10	+/-1.86	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	0.282	+/-2.14	3.97	+/-2.14	8.00	pCi/L			HH3	11/02/25	2034	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-1.63	+/-2.49	7.36	+/-2.49	15.0	pCi/L			CH7	10/28/25	1641	2884958	4
Beta	U	4.08	+/-7.38	12.8	+/-7.41	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-12.4	+/-117	234	+/-117	300	pCi/L			MG6	10/25/25	0530	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	5.91	+/-8.85	15.1	+/-8.88	25.0	pCi/L			BB3	11/09/25	1106	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	97.9	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	70.7	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	98.9	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	93.3	(30%-110%)

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Certificate of Analysis

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW388SG1-26

Project: FRNP00715

Sample ID: 748461013

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Company : Four Rivers Nuclear Partnership,
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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: RI1SG1-26

Sample ID: 748461015

Matrix: WATER

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.402	+/-0.940	1.51	+/-0.941	5.00	pCi/L			JD3	11/03/25	1125	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	1.34	+/-2.14	3.58	+/-2.15	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	-2.62	+/-2.88	5.92	+/-2.88	8.00	pCi/L			HH3	11/03/25	1327	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-1.01	+/-2.90	7.35	+/-2.91	15.0	pCi/L			CH7	10/28/25	1641	2884958	4
Beta	U	0.798	+/-5.85	10.8	+/-5.85	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-40.4	+/-118	246	+/-118	300	pCi/L			MG6	10/25/25	0552	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	0.860	+/-8.27	14.7	+/-8.27	25.0	pCi/L			BB3	11/09/25	1122	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	103	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	76.7	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	69	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	96.4	(30%-110%)

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Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: RI1SG1-26

Project: FRNP00715

Sample ID: 748461015

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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Certificate of Analysis

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Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: FB1SG1-26

Sample ID: 748461017

Matrix: WATER

Collect Date: 20-OCT-25

Receive Date: 21-OCT-25

Collector: Client

Project: FRNP00715

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Alpha Spec Analysis														
<i>AlphaSpec Ra226, Liquid "As Received"</i>														
Radium-226	U	0.261	+/-0.255	0.316	+/-0.256	5.00	pCi/L			JD3	10/29/25	0820	2886151	1
<i>Th-01-RC M, Th Isotopes, Liquid "As Received"</i>														
Thorium-230	U	1.40	+/-1.98	3.13	+/-1.99	50.0	pCi/L			JD3	10/28/25	0917	2886153	2
Rad Gas Flow Proportional Counting														
<i>905.0 Mod, Sr90, liquid "As Received"</i>														
Strontium-90	U	0.218	+/-1.92	3.65	+/-1.92	8.00	pCi/L			HH3	11/02/25	2034	2884968	3
<i>9310, Alpha/Beta Activity, liquid "As Received"</i>														
Alpha	U	-1.45	+/-3.09	8.04	+/-3.10	15.0	pCi/L			CH7	10/28/25	1641	2884958	4
Beta	U	3.37	+/-6.16	10.8	+/-6.19	50.0	pCi/L							
Rad Liquid Scintillation Analysis														
<i>906.0 Mod, Tritium Dist, Liquid "As Received"</i>														
Tritium	U	-21.6	+/-122	247	+/-122	300	pCi/L			MG6	10/25/25	0614	2884625	5
<i>Tc-02-RC-MOD, Tc99, Liquid "As Received"</i>														
Technetium-99	U	-4.97	+/-8.08	15.2	+/-8.08	25.0	pCi/L			BB3	11/09/25	1139	2884676	6

The following Analytical Methods were performed

Method	Description
1	Eichrom Industries, AN-1418
2	DOE EML HASL-300, Th-01-RC Modified
3	EPA 905.0 Modified/DOE RP501 Rev. 1 Modified
4	EPA 900.0/SW846 9310
5	EPA 906.0 Modified
6	DOE EML HASL-300, Tc-02-RC Modified

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits
Barium-133 Tracer	AlphaSpec Ra226, Liquid "As Received"	2886151	103	(30%-110%)
Thorium-229 Tracer	Th-01-RC M, Th Isotopes, Liquid "As Received"	2886153	75.6	(30%-110%)
Strontium Carrier	905.0 Mod, Sr90, liquid "As Received"	2884968	89.7	(30%-110%)
Technetium-99m Tracer	Tc-02-RC-MOD, Tc99, Liquid "As Received"	2884676	93.2	(30%-110%)

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Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: FB1SG1-26

Project: FRNP00715

Sample ID: 748461017

Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Surrogate/Tracer Recovery	Test							Batch ID	Recovery%	Acceptable Limits				

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

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PF: Prep Factor

Lc/LC: Critical Level

RL: Reporting Limit

MDA: Minimum Detectable Activity

TPU: Total Propagated Uncertainty

MDC: Minimum Detectable Concentration

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW224SG1-26 Project: FRNP00715
Sample ID: 748461001 Client ID: FRNP007
Matrix: WG
Collect Date: 20-OCT-25 06:57
Receive Date: 21-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0192	0.00864	0.0192	ug/L	0.960	1	LL2	10/22/25	1722	2884519	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.989	0.330	2.00	mg/L		1	KB3	10/22/25	2302	2884377	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	JN	0.00193	0.00167	0.200	mg/L	1.00	1	KLP1	10/24/25	1306	2884771	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	7.01	3.33	10.0	ug/L		1	JW2	10/23/25	1246	2885441	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1344	2884431	5
SW846 9056A Anions (5) "As Received"												
Fluoride	J	0.268	0.0330	4.00	mg/L		1	CH6	10/21/25	1311	2884367	6
Sulfate		18.0	0.133	0.400	mg/L		1					
Bromide	J	0.384	0.268	0.800	mg/L		4	CH6	10/21/25	2124	2884367	7
Chloride	J	23.9	0.268	250	mg/L		4					
Nitrate-N	J	0.722	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0750	2885903	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	1958	2884460	9
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		0.218	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0295	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		23.9	0.0800	0.200	mg/L	1.00	1					
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW224SG1-26
Sample ID: 748461001

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Copper		0.00221	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		10.0	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00180	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000705	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.00618	0.000600	0.00200	mg/L	1.00	1					
Potassium		0.974	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	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	PRB	11/05/25	1750	2884460	10
Sodium		57.5	0.800	2.50	mg/L	1.00	10	PRB	11/03/25	1359	2884460	11
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1108	2884460	12
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.104	0.0347	0.104	ug/L	0.00104	1	NS2	11/08/25	0153	2894228	13
Aroclor-1221	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Aroclor-1232	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Aroclor-1242	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Aroclor-1248	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Aroclor-1254	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Aroclor-1260	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Aroclor-1268	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Aroclor-Total	U	0.104	0.0347	0.104	ug/L	0.00104	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		255	2.38	10.0	mg/L			SC1	10/23/25	1529	2885594	14
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C4-23

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
Methylene chloride	BJ	1.02	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/23/25	1551	2884770
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW224SG1-26
Sample ID: 748461001

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3005A/6020B	
13	SW846 3535A/8082A	
14	EPA 160.1	
15	EPA 410.4	
16	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.98 ug/L	6.86	102	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.225 ug/L	0.208	108	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.184 ug/L	0.208	88	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	51.0 ug/L	50.0	102	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	52.3 ug/L	50.0	105	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	49.1 ug/L	50.0	98	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW224SG1-26

Project: FRNP00715

Sample ID: 748461002

Client ID: FRNP007

Matrix: WG

Collect Date: 20-OCT-25 06:57

Receive Date: 21-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.227	0.000670	0.00400	mg/L	1.00	1	PRB	11/02/25	1907	2885414	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/22/25	1330	2884956
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/25	0940	2885412

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW384SG1-26
Sample ID: 748461003
Matrix: WG
Collect Date: 20-OCT-25 08:03
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0190	0.00854	0.0190	ug/L	0.949	1	LL2	10/22/25	1905	2884519	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	1.05	0.330	2.00	mg/L		1	KB3	10/23/25	0037	2884377	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	UN	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/24/25	1309	2884771	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	6.19	3.33	10.0	ug/L		1	JW2	10/23/25	1452	2885441	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1422	2884431	5
SW846 9056A Anions (5) "As Received"												
Fluoride	J	0.159	0.0330	4.00	mg/L		1	CH6	10/21/25	1341	2884367	6
Bromide		2.88	0.268	0.800	mg/L		4	CH6	10/21/25	2358	2884367	7
Chloride	J	28.6	0.268	250	mg/L		4					
Nitrate-N	J	2.70	0.132	10.0	mg/L		4					
Sulfate		29.5	0.532	1.60	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0757	2885903	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2019	2884460	9
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		0.215	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Boron		0.100	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		25.0	0.0800	0.200	mg/L	1.00	1					
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW384SG1-26
Sample ID: 748461003

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00199	0.000300	0.00200	mg/L	1.00	1					
Iron		0.203	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		10.3	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.00594	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.00188	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.43	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		46.7	0.0800	0.250	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					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Zinc	J	0.00489	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1759	2884460	10
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1128	2884460	11
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.103	0.0343	0.103	ug/L	0.00103	1	NS2	11/08/25	0205	2894228	12
Aroclor-1221	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Aroclor-1232	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Aroclor-1242	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Aroclor-1248	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Aroclor-1254	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Aroclor-1260	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Aroclor-1268	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Aroclor-Total	U	0.103	0.0343	0.103	ug/L	0.00103	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		221	2.38	10.0	mg/L			SC1	10/23/25	1529	2885594	13
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C4-29

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW384SG1-26

Project: FRNP00715

Sample ID: 748461003

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
Methylene chloride	BJ	1.91	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	0.510	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/23/25	1551	2884770
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW384SG1-26
Sample ID: 748461003

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3535A/8082A	
13	EPA 160.1	
14	EPA 410.4	
15	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.52 ug/L	6.78	96	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.222 ug/L	0.206	108	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.181 ug/L	0.206	88	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	51.0 ug/L	50.0	102	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.4 ug/L	50.0	107	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.2 ug/L	50.0	96	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW384SG1-26 Project: FRNP00715
Sample ID: 748461004 Client ID: FRNP007
Matrix: WG
Collect Date: 20-OCT-25 08:03
Receive Date: 21-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.215	0.000670	0.00400	mg/L	1.00	1	PRB	11/02/25	1928	2885414	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/25	0940	2885412
EPA 160	Laboratory Filtration	LF1	10/22/25	1330	2884956

The following Analytical Methods were performed:

Method	Description	Analyst Comments
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
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Project: FRNP00715
Client ID: FRNP007

Client Sample ID: MW385SG1-26
Sample ID: 748461005
Matrix: WG
Collect Date: 20-OCT-25 08:54
Receive Date: 21-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0193	0.00870	0.0193	ug/L	0.966	1	LL2	10/22/25	1939	2884519	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.928	0.330	2.00	mg/L		1	KB3	10/23/25	0143	2884377	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	UN	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/24/25	1310	2884771	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	9.93	3.33	10.0	ug/L		1	JW2	10/27/25	1345	2887542	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1435	2884431	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.223	0.0670	0.200	mg/L		1	CH6	10/21/25	1412	2884367	6
Fluoride	J	0.172	0.0330	4.00	mg/L		1					
Sulfate		18.3	0.133	0.400	mg/L		1					
Chloride	J	18.8	0.268	250	mg/L		4	CH6	10/22/25	0029	2884367	7
Nitrate-N	J	0.298	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0758	2885903	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2022	2884460	9
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		0.495	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0497	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		33.4	0.0800	0.200	mg/L	1.00	1					
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW385SG1-26 Project: FRNP00715
Sample ID: 748461005 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Cobalt	J	0.000445	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00183	0.000300	0.00200	mg/L	1.00	1					
Iron	J	0.0330	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		13.0	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.0310	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000388	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.00124	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.69	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		33.3	0.0800	0.250	mg/L	1.00	1					
Tantalum	U	0.00500	0.00100	0.00500	mg/L	1.00	1					
Uranium	J	0.000117	0.0000670	0.000200	mg/L	1.00	1					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Zinc	J	0.00481	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1800	2884460	10
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1131	2884460	11
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.0993	0.0331	0.0993	ug/L	0.000993	1	NS2	11/08/25	0218	2894228	12
Aroclor-1221	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Aroclor-1232	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Aroclor-1242	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Aroclor-1248	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Aroclor-1254	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Aroclor-1260	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Aroclor-1268	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Aroclor-Total	U	0.0993	0.0331	0.0993	ug/L	0.000993	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		213	2.38	10.0	mg/L			SC1	10/23/25	1529	2885594	13
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C4-35

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW385SG1-26 Project: FRNP00715
Sample ID: 748461005 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
Methylene chloride	BJ	1.99	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/23/25	1551	2884770
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW385SG1-26
Sample ID: 748461005

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3535A/8082A	
13	EPA 160.1	
14	EPA 410.4	
15	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.47 ug/L	6.90	94	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.195 ug/L	0.199	98	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.170 ug/L	0.199	86	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.4 ug/L	50.0	99	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.6 ug/L	50.0	107	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	47.5 ug/L	50.0	95	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW385SG1-26

Project: FRNP00715

Sample ID: 748461006

Client ID: FRNP007

Matrix: WG

Collect Date: 20-OCT-25 08:54

Receive Date: 21-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.410	0.000670	0.00400	mg/L	1.00	1	PRB	11/02/25	1931	2885414	1
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					
Uranium	J	0.000138	0.0000670	0.000200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/22/25	1330	2884956
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/25	0940	2885412

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386DSG1-26
Sample ID: 748461007
Matrix: WG
Collect Date: 20-OCT-25 09:40
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0190	0.00855	0.0190	ug/L	0.950	1	LL2	10/22/25	2013	2884519	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average		4.78	0.330	2.00	mg/L		1	KB3	10/23/25	0215	2884377	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	UN	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/24/25	1311	2884771	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens		118	3.33	10.0	ug/L		1	JW2	10/27/25	1532	2887542	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1448	2884431	5
SW846 9056A Anions (5) "As Received"												
Bromide	U	0.200	0.0670	0.200	mg/L		1	CH6	10/21/25	1443	2884367	6
Fluoride	J	0.764	0.0330	4.00	mg/L		1					
Chloride	J	9.56	0.134	250	mg/L		2	CH6	10/22/25	0100	2884367	7
Nitrate-N	U	10.0	0.0660	10.0	mg/L		2					
Sulfate		34.1	0.266	0.800	mg/L		2					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0800	2885903	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2025	2884460	9
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		0.135	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0162	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		19.9	0.0800	0.200	mg/L	1.00	1					
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					

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Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386DSG1-26
Sample ID: 748461007

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Cobalt		0.00100	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00156	0.000300	0.00200	mg/L	1.00	1					
Iron		0.117	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		8.22	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.503	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000827	0.000200	0.00100	mg/L	1.00	1					
Nickel		0.00217	0.000600	0.00200	mg/L	1.00	1					
Potassium	J	0.268	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	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	0.00353	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1801	2884460	10
Sodium		101	0.800	2.50	mg/L	1.00	10	PRB	11/03/25	1407	2884460	11
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1134	2884460	12
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.102	0.0338	0.102	ug/L	0.00102	1	NS2	11/08/25	0230	2894228	13
Aroclor-1221	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1232	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1242	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1248	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1254	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1260	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-1268	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Aroclor-Total	U	0.102	0.0338	0.102	ug/L	0.00102	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		350	2.38	10.0	mg/L			SC1	10/23/25	1529	2885594	14
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C4-41

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386DSG1-26

Project: FRNP00715

Sample ID: 748461007

Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
Methylene chloride	BJ	1.96	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/23/25	1551	2884770
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901

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Contact: Ms. Jaime Morrow
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Client Sample ID: MW386DSG1-26
Sample ID: 748461007

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3005A/6020B	
13	SW846 3535A/8082A	
14	EPA 160.1	
15	EPA 410.4	
16	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	7.05 ug/L	6.79	104	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.130 ug/L	0.203	64	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.185 ug/L	0.203	91	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.6 ug/L	50.0	99	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.5 ug/L	50.0	107	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	47.0 ug/L	50.0	94	(89%-112%)

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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Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386DSG1-26

Project: FRNP00715

Sample ID: 748461008

Client ID: FRNP007

Matrix: WG

Collect Date: 20-OCT-25 09:40

Receive Date: 21-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.130	0.000670	0.00400	mg/L	1.00	1	PRB	11/02/25	1934	2885414	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/25	0940	2885412
EPA 160	Laboratory Filtration	LF1	10/22/25	1330	2884956

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386SG1-26
Sample ID: 748461009
Matrix: WG
Collect Date: 20-OCT-25 09:40
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0194	0.00875	0.0194	ug/L	0.972	1	LL2	10/22/25	2047	2884519	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average		4.82	0.330	2.00	mg/L		1	KB3	10/23/25	0247	2884377	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	UN	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/24/25	1312	2884771	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens		119	3.33	10.0	ug/L		1	JW2	10/27/25	1639	2887542	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1501	2884431	5
SW846 9056A Anions (5) "As Received"												
Bromide	U	0.200	0.0670	0.200	mg/L		1	CH6	10/21/25	1514	2884367	6
Fluoride	J	0.769	0.0330	4.00	mg/L		1					
Chloride	J	9.61	0.134	250	mg/L		2	CH6	10/22/25	0131	2884367	7
Nitrate-N	U	10.0	0.0660	10.0	mg/L		2					
Sulfate		34.3	0.266	0.800	mg/L		2					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0801	2885903	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2028	2884460	9
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		0.128	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Boron	J	0.0142	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		18.5	0.0800	0.200	mg/L	1.00	1					
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386SG1-26
Sample ID: 748461009

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Cobalt	J	0.000932	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00153	0.000300	0.00200	mg/L	1.00	1					
Iron		0.105	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		7.57	0.0100	0.0300	mg/L	1.00	1					
Manganese		0.465	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	J	0.000806	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.00198	0.000600	0.00200	mg/L	1.00	1					
Potassium	J	0.245	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	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	0.00362	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1803	2884460	10
Sodium		102	0.800	2.50	mg/L	1.00	10	PRB	11/03/25	1409	2884460	11
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1137	2884460	12
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.101	0.0336	0.101	ug/L	0.00101	1	NS2	11/08/25	0242	2894228	13
Aroclor-1221	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1232	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1242	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1248	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1254	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1260	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1268	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-Total	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		336	2.38	10.0	mg/L			SC1	10/23/25	1529	2885594	14
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C4-47

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Volatile Organics											
8260D, Volatiles- full suite "As Received"											
Methylene chloride	BJ	1.93	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/23/25	1551	2884770
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386SG1-26
Sample ID: 748461009

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3005A/6020B	
13	SW846 3535A/8082A	
14	EPA 160.1	
15	EPA 410.4	
16	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.73 ug/L	6.94	97	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.155 ug/L	0.202	77	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.182 ug/L	0.202	90	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	52.4 ug/L	50.0	105	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	54.5 ug/L	50.0	109	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.7 ug/L	50.0	97	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW386SG1-26

Project: FRNP00715

Sample ID: 748461010

Client ID: FRNP007

Matrix: WG

Collect Date: 20-OCT-25 09:40

Receive Date: 21-OCT-25

Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.131	0.000670	0.00400	mg/L	1.00	1	PRB	11/02/25	1937	2885414	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/22/25	1330	2884956
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/25	0940	2885412

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor

DL: Detection Limit

MDA: Minimum Detectable Activity

MDC: Minimum Detectable Concentration

Lc/LC: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW387SG1-26
Sample ID: 748461011
Matrix: WG
Collect Date: 20-OCT-25 12:25
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0188	0.00846	0.0188	ug/L	0.940	1	LL2	10/22/25	2121	2884519	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	1.09	0.330	2.00	mg/L		1	KB3	10/23/25	0319	2884377	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	UN	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/24/25	1313	2884771	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	7.59	3.33	10.0	ug/L		1	JW2	10/27/25	1712	2887542	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1514	2884431	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.467	0.0670	0.200	mg/L		1	CH6	10/21/25	1544	2884367	6
Fluoride	J	0.947	0.0330	4.00	mg/L		1					
Chloride	J	34.9	0.268	250	mg/L		4	CH6	10/22/25	0202	2884367	7
Nitrate-N	J	0.860	0.132	10.0	mg/L		4					
Sulfate		29.2	0.532	1.60	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0829	2885903	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0367	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2031	2884460	9
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		0.104	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0375	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		38.6	0.0800	0.200	mg/L	1.00	1					
Chromium	J	0.00568	0.00300	0.0100	mg/L	1.00	1					

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Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW387SG1-26
Sample ID: 748461011

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00134	0.000300	0.00200	mg/L	1.00	1					
Iron		0.123	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		16.4	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00493	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.000740	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.81	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	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	0.00429	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1804	2884460	10
Sodium		47.8	0.800	2.50	mg/L	1.00	10	PRB	11/03/25	1411	2884460	11
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1139	2884460	12
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.0975	0.0325	0.0975	ug/L	0.000975	1	NS2	11/08/25	0319	2894228	13
Aroclor-1221	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Aroclor-1232	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Aroclor-1242	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Aroclor-1248	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Aroclor-1254	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Aroclor-1260	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Aroclor-1268	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Aroclor-Total	U	0.0975	0.0325	0.0975	ug/L	0.000975	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		303	2.38	10.0	mg/L			SC1	10/23/25	1529	2885594	14
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C4-53

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time Batch	Method
Volatile Organics											
8260D, Volatiles- full suite "As Received"											
Methylene chloride	BJ	1.96	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	0.420	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/23/25	1551	2884770
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW387SG1-26
Sample ID: 748461011

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3005A/6020B	
13	SW846 3535A/8082A	
14	EPA 160.1	
15	EPA 410.4	
16	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.28 ug/L	6.72	93	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.232 ug/L	0.195	119	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.188 ug/L	0.195	97	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	52.5 ug/L	50.0	105	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	54.5 ug/L	50.0	109	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.8 ug/L	50.0	98	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW387SG1-26 Project: FRNP00715
Sample ID: 748461012 Client ID: FRNP007
Matrix: WG
Collect Date: 20-OCT-25 12:25
Receive Date: 21-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.107	0.000670	0.00400	mg/L	1.00	1	PRB	11/02/25	1940	2885414	1
Chromium	J	0.00537	0.00300	0.0100	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/25	0940	2885412
EPA 160	Laboratory Filtration	LF1	10/22/25	1330	2884956

The following Analytical Methods were performed:

Method	Description	Analyst Comments
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
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW388SG1-26
Sample ID: 748461013
Matrix: WG
Collect Date: 20-OCT-25 13:16
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0193	0.00869	0.0193	ug/L	0.966	1	LL2	10/22/25	2237	2884519	1
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average	J	0.848	0.330	2.00	mg/L		1	KB3	10/23/25	0351	2884377	2
Flow Injection Analysis												
9012B, Total Cyanide "As Received"												
Cyanide, Total	UN	0.200	0.00167	0.200	mg/L	1.00	1	KLP1	10/24/25	1320	2884771	3
Halogen Analysis												
9020B, TOX (Organic Halogen) "As Received"												
Total Organic Halogens	J	5.25	3.33	10.0	ug/L		1	JW2	10/27/25	1800	2887542	4
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1552	2884431	5
SW846 9056A Anions (5) "As Received"												
Bromide		0.396	0.0670	0.200	mg/L		1	CH6	10/21/25	1615	2884367	6
Fluoride	J	0.195	0.0330	4.00	mg/L		1					
Sulfate		17.3	0.133	0.400	mg/L		1					
Chloride	J	33.0	0.268	250	mg/L		4	CH6	10/22/25	0233	2884367	7
Nitrate-N	J	0.905	0.132	10.0	mg/L		4					
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0831	2885903	8
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	J	0.0317	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2034	2884460	9
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		0.190	0.000670	0.00400	mg/L	1.00	1					
Beryllium	U	0.000500	0.000200	0.000500	mg/L	1.00	1					
Boron		0.0250	0.00520	0.0150	mg/L	1.00	1					
Cadmium	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Calcium		24.7	0.0800	0.200	mg/L	1.00	1					
Chromium	U	0.0100	0.00300	0.0100	mg/L	1.00	1					

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Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW388SG1-26 Project: FRNP00715
Sample ID: 748461013 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Cobalt	U	0.00100	0.000300	0.00100	mg/L	1.00	1					
Copper	J	0.00112	0.000300	0.00200	mg/L	1.00	1					
Iron		0.123	0.0330	0.100	mg/L	1.00	1					
Lead	U	0.00200	0.000500	0.00200	mg/L	1.00	1					
Magnesium		10.6	0.0100	0.0300	mg/L	1.00	1					
Manganese	J	0.00125	0.00100	0.00500	mg/L	1.00	1					
Molybdenum	U	0.00100	0.000200	0.00100	mg/L	1.00	1					
Nickel	J	0.000616	0.000600	0.00200	mg/L	1.00	1					
Potassium		1.64	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		43.2	0.0800	0.250	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					
Vanadium	U	0.0200	0.00330	0.0200	mg/L	1.00	1					
Zinc	J	0.00343	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1805	2884460	10
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1142	2884460	11
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.101	0.0336	0.101	ug/L	0.00101	1	NS2	11/08/25	0332	2894228	12
Aroclor-1221	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1232	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1242	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1248	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1254	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1260	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-1268	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Aroclor-Total	U	0.101	0.0336	0.101	ug/L	0.00101	1					
Solids Analysis												
160.1, Dissolved Solids "As Received"												
Total Dissolved Solids		235	2.38	10.0	mg/L			SC1	10/23/25	1529	2885594	13
Spectrometric Analysis												
410.4, Chem. Oxygen Demand "As Received"												

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Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-S&T Landfill Quarterly(SG26-01)

Project:	FRNP00715
Client ID:	FRNP007

C4-59

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW388SG1-26 Project: FRNP00715
Sample ID: 748461013 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
Methylene chloride	BJ	2.08	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518
SW846 9010C Distillation	SW846 9010C Prep	CH9	10/23/25	1551	2884770
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW388SG1-26
Sample ID: 748461013

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	SW846 9060A	
3	SW846 9012B	
4	SW846 9020B	
5	EPA 300.0	
6	SW846 9056A	
7	SW846 9056A	
8	SW846 7470A	
9	SW846 3005A/6020B	
10	SW846 3005A/6020B	
11	SW846 3005A/6020B	
12	SW846 3535A/8082A	
13	EPA 160.1	
14	EPA 410.4	
15	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	7.05 ug/L	6.90	102	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.205 ug/L	0.202	102	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.181 ug/L	0.202	90	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.4 ug/L	50.0	99	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	51.8 ug/L	50.0	104	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.9 ug/L	50.0	98	(89%-112%)

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

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: MW388SG1-26
Sample ID: 748461014
Matrix: WG
Collect Date: 20-OCT-25 13:16
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Dissolved Metals (3 Elements) "As Received"												
Barium		0.194	0.000670	0.00400	mg/L	1.00	1	PRB	11/02/25	1943	2885414	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 following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 160	Laboratory Filtration	LF1	10/22/25	1330	2884956
SW846 3005A	ICP-MS 3005A PREP	EM2	10/24/25	0940	2885412

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 3005A/6020B	

Notes:

Column headers are defined as follows:

DF: Dilution Factor
DL: Detection Limit
MDA: Minimum Detectable Activity
MDC: Minimum Detectable Concentration

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

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: RI1SG1-26 Project: FRNP00715
Sample ID: 748461015 Client ID: FRNP007
Matrix: WATER
Collect Date: 20-OCT-25 06:15
Receive Date: 21-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0192	0.00864	0.0192	ug/L	0.960	1	LL2	10/22/25	2311	2884519	1
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1605	2884431	2
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0832	2885903	3
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2037	2884460	4
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	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					
Boron	U	0.0150	0.00520	0.0150	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					
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	0.000300	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	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					
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	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					
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					

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Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: RI1SG1-26
Sample ID: 748461015

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1806	2884460	5
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1145	2884460	6
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.0994	0.0331	0.0994	ug/L	0.000994	1	NS2	11/08/25	0344	2894228	7
Aroclor-1221	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1232	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1242	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1248	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1254	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1260	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-1268	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Aroclor-Total	U	0.0994	0.0331	0.0994	ug/L	0.000994	1					
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	CO1	10/23/25	1652	2886198	8
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					

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: RI1SG1-26
Sample ID: 748461015

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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					
Methylene chloride	BJ	2.20	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220

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Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: RI1SG1-26
Sample ID: 748461015

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3535A/8082A	
8	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	7.54 ug/L	6.86	110	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.208 ug/L	0.199	105	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.177 ug/L	0.199	89	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.4 ug/L	50.0	99	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	53.2 ug/L	50.0	106	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	47.9 ug/L	50.0	96	(89%-112%)

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: TB3SG1-26
Sample ID: 748461016
Matrix: WATER
Collect Date: 20-OCT-25 06:10
Receive Date: 21-OCT-25
Collector: Client

Project: FRNP00715
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0190	0.00854	0.0190	ug/L	0.949	1	LL2	10/22/25	2345	2884519	1
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	CO1	10/27/25	1227	2886198	2
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					

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: TB3SG1-26 Project: FRNP00715
Sample ID: 748461016 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
Methylene chloride	BJ	1.24	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
1	SW846 8011		
2	SW846 8260D		

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	7.05 ug/L	6.78	104	(56%-149%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	49.5 ug/L	50.0	99	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	51.5 ug/L	50.0	103	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	47.8 ug/L	50.0	96	(89%-112%)

Notes:

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Report Date: January 21, 2026

Client Sample ID: TB3SG1-26
Sample ID: 748461016

Project:	FRNP00715
Client ID:	FRNP007

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

GEL LABORATORIES LLC

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Kevil, Kentucky 42053

Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID:	FB1SG1-26	Project:	FRNP00715
Sample ID:	748461017	Client ID:	FRNP007
Matrix:	WATER		
Collect Date:	20-OCT-25 09:45		
Receive Date:	21-OCT-25		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
504.1/8011 Analysis of EDB/DBCP												
8011, VOA Compounds Liquid "As Received"												
1,2-Dibromo-3-chloropropane	U	0.0192	0.00863	0.0192	ug/L	0.958	1	LL2	10/23/25	0019	2884519	1
Ion Chromatography												
300.0, Iodide in Liquid "As Received"												
Iodide	U	0.500	0.167	0.500	mg/L		1	CH6	10/21/25	1618	2884431	2
Mercury Analysis-CVAA												
7470, Mercury Liquid "As Received"												
Mercury	U	0.000200	0.0000670	0.000200	mg/L	1.00	1	JM13	10/24/25	0834	2885903	3
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Aluminum	U	0.0500	0.0193	0.0500	mg/L	1.00	1	PRB	11/02/25	2040	2884460	4
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	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					
Boron	U	0.0150	0.00520	0.0150	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					
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	0.000300	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	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					
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	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					
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					

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Company : Four Rivers Nuclear Partnership, LLC
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Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: FB1SG1-26 Project: FRNP00715
Sample ID: 748461017 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Metals Analysis-ICP-MS												
6020, Metals (15+) "As Received"												
Zinc	U	0.0200	0.00330	0.0200	mg/L	1.00	1	PRB	11/05/25	1807	2884460	5
Thallium	U	0.00200	0.000600	0.00200	mg/L	1.00	1	PRB	11/09/25	1148	2884460	6
Semi-Volatiles-PCB												
8082A, PCB Liquids "As Received"												
Aroclor-1016	U	0.101	0.0337	0.101	ug/L	0.00101	1	NS2	11/08/25	0356	2894228	7
Aroclor-1221	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Aroclor-1232	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Aroclor-1242	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Aroclor-1248	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Aroclor-1254	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Aroclor-1260	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Aroclor-1268	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Aroclor-Total	U	0.101	0.0337	0.101	ug/L	0.00101	1					
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
1,1,1,2-Tetrachloroethane	U	1.00	0.333	1.00	ug/L		1	CO1	10/27/25	1254	2886198	8
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					

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Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: FB1SG1-26 Project: FRNP00715
Sample ID: 748461017 Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Volatile Organics												
8260D, Volatiles- full suite "As Received"												
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					
Methylene chloride	BJ	1.02	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	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 Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
SW846 8011 PREP	8011 Prep	BM1	10/22/25	1027	2884518
SW846 3535A	SW3535A PCB SPE Extraction	DXF4	11/07/25	0515	2894220
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	PB1	10/23/25	1150	2885901
SW846 3005A	ICP-MS 3005A PREP	HC1	10/22/25	0925	2884459

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road
Kevil, Kentucky 42053
Contact: Ms. Jaime Morrow
Project: C-746-S&T Landfill Quarterly(SG26-01)

Client Sample ID: FB1SG1-26
Sample ID: 748461017

Project: FRNP00715
Client ID: FRNP007

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

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	SW846 8011	
2	EPA 300.0	
3	SW846 7470A	
4	SW846 3005A/6020B	
5	SW846 3005A/6020B	
6	SW846 3005A/6020B	
7	SW846 3535A/8082A	
8	SW846 8260D	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
1-Chloro-2-fluorobenzene	8011, VOA Compounds Liquid "As Received"	6.94 ug/L	6.85	101	(56%-149%)
Decachlorobiphenyl	8082A, PCB Liquids "As Received"	0.222 ug/L	0.203	110	(30%-135%)
4cmx	8082A, PCB Liquids "As Received"	0.170 ug/L	0.203	84	(26%-108%)
Bromofluorobenzene	8260D, Volatiles- full suite "As Received"	50.3 ug/L	50.0	101	(85%-114%)
1,2-Dichloroethane-d4	8260D, Volatiles- full suite "As Received"	52.0 ug/L	50.0	104	(81%-118%)
Toluene-d8	8260D, Volatiles- full suite "As Received"	48.6 ug/L	50.0	97	(89%-112%)

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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APPENDIX D

**STATISTICAL ANALYSES AND
QUALIFICATION STATEMENT**

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GROUNDWATER STATISTICAL COMMENTS

Introduction

The statistical analyses conducted on the fourth 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 fourth quarter 2025 data used to conduct the statistical analyses were collected in October 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 (current background), 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.

**Exhibit D.1. Station Identification for Monitoring
Wells Analyzed**

Station	Type	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

^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 $CV \leq 1.0$, 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 URGAs, 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, fourth 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.

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

$$LTL = X - (K \times S)$$

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

Parameters
Aluminum
Beta Activity
Boron
Bromide
Calcium
Chemical Oxygen Demand (COD)
Chloride
<i>cis</i> -1,2-Dichloroethene
Cobalt
Conductivity
Copper
Cyanide
Dissolved Oxygen
Dissolved Solids
Iodide
Iron
Magnesium
Manganese
Molybdenum
Nickel
Oxidation-Reduction Potential ^a
pH ^b
Potassium
Sodium
Sulfate
Technetium-99
Total Organic Carbon (TOC)
Total Organic Halides (TOX)
Zinc

^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.

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

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	2	2	Yes
Antimony	4	4	0	No
Beryllium	4	4	0	No
Boron	4	0	4	Yes
Bromide	4	1	3	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	2	2	Yes
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
<i>cis</i> -1,2-Dichloroethene	4	4	0	No
<i>cis</i> -1,3-Dichloropropene	4	4	0	No
Cobalt	4	3	1	Yes
Conductivity	4	0	4	Yes
Copper	4	2	2	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 (Continued)

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
Iodomethane	4	4	0	No
Iron	4	1	3	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
PCB, Total	4	4	0	No
PCB-1016	4	4	0	No
PCB-1221	4	4	0	No
PCB-1232	4	4	0	No
PCB-1242	4	4	0	No
PCB-1248	4	4	0	No
PCB-1254	4	4	0	No
PCB-1260	4	4	0	No
PCB-1268	4	4	0	No
pH	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
Total Organic Carbon (TOC)	4	0	4	Yes
Total Organic Halides (TOX)	4	0	4	Yes
<i>trans</i> -1,2-Dichloroethene	4	4	0	No
<i>trans</i> -1,3-Dichloropropene	4	4	0	No
<i>trans</i> -1,4-Dichloro-2-Butene	4	4	0	No
Trichlorofluoromethane	4	4	0	No
Vanadium	4	4	0	No
Vinyl Acetate	4	4	0	No
Zinc	4	1	3	Yes

Bold denotes parameters with at least one uncensored observation.

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

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	5	6	Yes
Antimony	11	11	0	No
Beryllium	11	11	0	No
Beta activity	11	3	8	Yes
Boron	11	0	11	Yes
Bromide	10	0	10	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
Chemical Oxygen Demand (COD)	11	5	6	Yes
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
<i>cis</i> -1,2-Dichloroethene	11	11	0	No
<i>cis</i> -1,3-Dichloropropene	11	11	0	No
Cobalt	11	9	2	Yes
Conductivity	11	0	11	Yes
Copper	11	2	9	Yes
Cyanide	11	10	1	Yes
Dibromochloromethane	11	11	0	No
Dibromomethane	11	11	0	No
Dimethylbenzene, Total	11	11	0	No
Dissolved Oxygen	11	0	11	Yes
Dissolved Solids	11	0	11	Yes
Ethylbenzene	11	11	0	No

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

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
Iodide	11	11	0	No
Iodomethane	11	11	0	No
Iron	11	4	7	Yes
Magnesium	11	0	11	Yes
Manganese	11	1	10	Yes
Methylene chloride	11	11	0	No
Molybdenum	11	6	5	Yes
Nickel	11	1	10	Yes
Oxidation-Reduction Potential	11	0	11	Yes
PCB, Total	11	11	0	No
PCB-1016	11	11	0	No
PCB-1221	11	11	0	No
PCB-1232	11	11	0	No
PCB-1242	11	11	0	No
PCB-1248	11	11	0	No
PCB-1254	11	11	0	No
PCB-1260	11	11	0	No
PCB-1268	11	11	0	No
pH	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	7	4	Yes
Tetrachloroethene	11	11	0	No
Thallium	11	11	0	No
Thorium-230	11	11	0	No
Toluene	11	11	0	No
Total Organic Carbon (TOC)	11	0	11	Yes
Total Organic Halides (TOX)	11	2	9	Yes
<i>trans</i> -1,2-Dichloroethene	11	11	0	No
<i>trans</i> -1,3-Dichloropropene	11	11	0	No
<i>trans</i> -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	3	8	Yes

Bold denotes parameters with at least one uncensored observation.

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

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
1,1,1,2-Tetrachloroethane	7	7	0	No
1,1,2,2-Tetrachloroethane	7	7	0	No
1,1,2-Trichloroethane	7	7	0	No
1,1-Dichloroethane	7	7	0	No
1,2,3-Trichloropropane	7	7	0	No
1,2-Dibromo-3-chloropropane	7	7	0	No
1,2-Dibromoethane	7	7	0	No
1,2-Dichlorobenzene	7	7	0	No
1,2-Dichloropropane	7	7	0	No
2-Butanone	7	7	0	No
2-Hexanone	7	7	0	No
4-Methyl-2-pentanone	7	7	0	No
Acetone	7	7	0	No
Acrolein	7	7	0	No
Acrylonitrile	7	7	0	No
Aluminum	7	3	4	Yes
Antimony	7	7	0	No
Beryllium	7	7	0	No
Boron	7	0	7	Yes
Bromide	7	0	7	Yes
Bromochloromethane	7	7	0	No
Bromodichloromethane	7	7	0	No
Bromoform	7	7	0	No
Bromomethane	7	7	0	No
Calcium	7	0	7	Yes
Carbon disulfide	7	7	0	No
Chemical Oxygen Demand (COD)	7	3	4	Yes
Chloride	7	0	7	Yes
Chlorobenzene	7	7	0	No
Chloroethane	7	7	0	No
Chloroform	7	7	0	No
Chloromethane	7	7	0	No
cis-1,2-Dichloroethene	7	6	1	Yes
cis-1,3-Dichloropropene	7	7	0	No
Cobalt	7	5	2	Yes
Conductivity	7	0	7	Yes
Copper	7	2	5	Yes
Cyanide	7	7	0	No
Dibromochloromethane	7	7	0	No
Dibromomethane	7	7	0	No
Dimethylbenzene, Total	7	7	0	No
Dissolved Oxygen	7	0	7	Yes
Dissolved Solids	7	0	7	Yes
Ethylbenzene	7	7	0	No
Iodide	7	7	0	No
Iodomethane	7	7	0	No
Iron	7	2	5	Yes
Magnesium	7	0	7	Yes

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

Parameters	Observations	Censored Observation	Uncensored Observation	Statistical Analysis?
Manganese	7	2	5	Yes
Methylene chloride	7	7	0	No
Molybdenum	7	4	3	Yes
Nickel	7	2	5	Yes
Oxidation-Reduction Potential	7	0	7	Yes
PCB, Total	7	7	0	No
PCB-1016	7	7	0	No
PCB-1221	7	7	0	No
PCB-1232	7	7	0	No
PCB-1242	7	7	0	No
PCB-1248	7	7	0	No
PCB-1254	7	7	0	No
PCB-1260	7	7	0	No
PCB-1268	7	7	0	No
pH	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	6	1	Yes
Tetrachloroethene	7	7	0	No
Thallium	7	7	0	No
Thorium-230	7	7	0	No
Toluene	7	7	0	No
Total Organic Carbon (TOC)	7	0	7	Yes
Total Organic Halides (TOX)	7	1	6	Yes
<i>trans</i> -1,2-Dichloroethene	7	7	0	No
<i>trans</i> -1,3-Dichloropropene	7	7	0	No
<i>trans</i> -1,4-Dichloro-2-Butene	7	7	0	No
Trichlorofluoromethane	7	7	0	No
Vanadium	7	7	0	No
Vinyl Acetate	7	7	0	No
Zinc	7	2	5	Yes

Bold denotes parameters with at least one uncensored observation.

Discussion of Results from Historical Background Comparison

For the UCRS, URGAs, 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, URGAs, and LRGA, the test was applied to 26, 27, and 26 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.

URGA

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 URGAs, and in the LRGA are presented in Exhibit D.7, Exhibit D.8, and Exhibit D.9, respectively.

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

UCRS	URGA	LRGA
MW386: Oxidation-reduction potential*	MW220: Oxidation-reduction potential*	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,* sodium, and sulfate
MW393: Oxidation-reduction potential*	MW222: Oxidation-reduction potential*	MW385: Oxidation-reduction potential,* sulfate, and technetium-99
MW396: Oxidation-reduction potential*	MW223: Oxidation-reduction potential*	MW388: Oxidation-reduction potential* and sulfate
	MW224: Oxidation-reduction potential* and sulfate	MW392: Oxidation-reduction potential*
	MW369: Oxidation-reduction potential* and technetium-99	MW395: Oxidation-reduction potential*
	MW372: Calcium, conductivity, dissolved solids, magnesium, oxidation-reduction potential,* sodium, sulfate, and technetium-99	
	MW384: Oxidation-reduction potential,* and sulfate	MW397: Oxidation-reduction potential*
	MW387: Beta activity, dissolved solids, magnesium, oxidation-reduction potential,* sulfate, and technetium-99	
	MW391: Oxidation-reduction potential*	
	MW394: Oxidation-reduction potential*	

*Oxidation-reduction potential calibrated as Eh.

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

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.
COD	Tolerance Interval	0.02	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.
pH	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 (Continued)

Parameter	Performed Test	CV Normality Test^a	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.
TOC	Tolerance Interval	0.47	No exceedance of statistically derived historical background concentration.
TOX	Tolerance Interval	0.38	No exceedance of statistically derived historical background concentration.
Zinc	Tolerance Interval	0.79	No exceedance of statistically derived historical background concentration.

CV: coefficient of variation

^aIf CV > 1.0, used log-transformed data.

^bOxidation-reduction potential calibrated as Eh.

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

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 concentrations 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.
COD	Tolerance Interval	0.00	No exceedance of statistically derived historical background concentration.
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.
Cyanide	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 and MW387.
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, MW387, MW391, and MW394.
pH	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 MW372.

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 MW224, MW372, MW384, and MW387.
Technetium-99	Tolerance Interval	0.99	Current results exceed statistically derived historical background concentration in MW369, MW372, and MW387.
TOC	Tolerance Interval	0.49	No exceedance of statistically derived historical background concentration.
TOX	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.

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
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.
COD	Tolerance Interval	0.04	No exceedance of statistically derived historical background concentration.
Chloride	Tolerance Interval	0.22	No exceedance of statistically derived historical background concentration.
<i>cis</i> -1,2-Dichloroethene	Tolerance Interval	0.00	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.
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.
pH	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 (Continued)

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.
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.
TOC	Tolerance Interval	0.55	No exceedance of statistically derived historical background concentration.
TOX	Tolerance Interval	0.59	No exceedance of statistically derived historical background concentration.
Zinc	Tolerance Interval	0.76	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.

Discussion of Results from Current Background Comparison

For concentrations in wells in the UCRS, URGAs, 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, URGAs, 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.

URGA

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

LRGA

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

Statistical Summary

Summaries of the statistical tests conducted on data obtained from wells in the UCRS, the URGAs, 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, sulfate, and technetium-99	MW373: Calcium, conductivity, dissolved solids, magnesium, and sulfate
MW387: Beta activity, magnesium, sulfate, and technetium-99	MW388: Sulfate

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	0.18	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	-6.19	MW390 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.

CV: coefficient of variation

^a If CV > 1.0, used log-transformed data.

^b Oxidation-reduction potential calibrated as Eh.

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

Parameter	Performed Test	CV Normality Test^a	Results of Tolerance Interval Test Conducted
Beta Activity	Tolerance Interval	0.67	MW387 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Calcium	Tolerance Interval	0.11	MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Conductivity	Tolerance Interval	0.10	MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Dissolved Solids	Tolerance Interval	0.29	MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Magnesium	Tolerance Interval	0.11	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	0.14	MW372 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Sulfate	Tolerance Interval	0.26	MW372, MW384, and MW387 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Technetium-99	Tolerance Interval	0.78	MW369, MW372, and MW387 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.

CV: coefficient of variation

^a If CV > 1.0, used log-transformed data.

^b Oxidation-reduction potential calibrated as Eh.

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

Parameter	Performed Test	CV Normality Test^a	Results of Tolerance Interval Test Conducted
Calcium	Tolerance Interval	0.21	MW373 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Conductivity	Tolerance Interval	0.11	MW373 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Dissolved Solids	Tolerance Interval	0.12	MW373 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Magnesium	Tolerance Interval	0.22	MW373 exceeded the UTL, which is evidence of elevated concentration with respect to current background data.
Oxidation-Reduction Potential ^b	Tolerance Interval	0.14	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	0.47	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.
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	0.70	MW385 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.

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 Fourth 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 Background Data X= -1.259 S= 0.503 CV(2)=-0.400 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

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	Downgradient	Yes	8.71E-02	NO	-2.44E+00	N/A
MW393	Downgradient	Yes	3.35E-02	NO	-3.40E+00	N/A
MW396	Upgradient	No	5.00E-02	N/A	-3.00E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= -1.034 S= 1.066 CV(2)=-1.031 K factor**= 3.188 TL(2)= 2.36E+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	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	1.62E-02	N/A	-4.12E+00	NO
MW390	Downgradient	Yes	1.45E-02	N/A	-4.23E+00	NO
MW393	Downgradient	Yes	1.55E-02	N/A	-4.17E+00	NO
MW396	Upgradient	Yes	8.01E-03	N/A	-4.83E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= 0.301 S= 0.252 CV(2)=0.838 K factor**= 3.188 TL(2)= 1.10E+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	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	Downgradient	Yes	3.27E-01	NO	-1.12E+00	N/A
MW393	Downgradient	Yes	1.38E-01	NO	-1.98E+00	N/A
MW396	Upgradient	Yes	7.57E-01	NO	-2.78E-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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= 3.711 S= 0.241 CV(2)=0.065 K factor**= 3.188 TL(2)= 4.48E+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	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	1.99E+01	NO	2.99E+00	N/A
MW390	Downgradient	Yes	2.75E+01	NO	3.31E+00	N/A
MW393	Downgradient	Yes	1.37E+01	NO	2.62E+00	N/A
MW396	Upgradient	Yes	3.14E+01	NO	3.45E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Chemical Oxygen Demand (COD) 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= 35.375 S= 0.744 CV(1)=0.021 K factor**= 3.188 TL(1)= 3.77E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 3.566 S= 0.021 CV(2)=0.006 K factor**= 3.188 TL(2)= 3.63E+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	3.60E+01	3.58E+00
9/16/2002	3.50E+01	3.56E+00
10/16/2002	3.70E+01	3.61E+00
1/13/2003	3.50E+01	3.56E+00
4/8/2003	3.50E+01	3.56E+00
7/16/2003	3.50E+01	3.56E+00
10/14/2003	3.50E+01	3.56E+00
1/14/2004	3.50E+01	3.56E+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	2.25E+01	NO	3.11E+00	N/A
MW390	Downgradient	No	2.00E+01	N/A	3.00E+00	N/A
MW393	Downgradient	No	2.00E+01	N/A	3.00E+00	N/A
MW396	Upgradient	Yes	1.16E+01	NO	2.45E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= 4.621 S= 0.053 CV(2)=0.011 K factor**= 3.188 TL(2)= 4.79E+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	9.16E+01	4.52E+00
9/16/2002	9.83E+01	4.59E+00
10/16/2002	1.01E+02	4.62E+00
1/13/2003	1.08E+02	4.68E+00
4/8/2003	1.01E+02	4.61E+00
7/16/2003	1.03E+02	4.63E+00
10/14/2003	1.07E+02	4.67E+00
1/14/2004	1.04E+02	4.65E+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	9.61E+00	NO	2.26E+00	N/A
MW390	Downgradient	Yes	3.36E+01	NO	3.51E+00	N/A
MW393	Downgradient	Yes	9.08E+00	NO	2.21E+00	N/A
MW396	Upgradient	Yes	4.88E+01	NO	3.89E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= -5.645 S= 1.339 CV(2)=-0.237 K factor**= 3.188 TL(2)= -1.38E+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	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	1.00E-03	N/A	-6.91E+00	NO
MW390	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW393	Downgradient	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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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.

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

Statistics-Transformed Background Data X= 6.822 S= 0.111 CV(2)=0.016 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	5.91E+02	NO	6.38E+00	N/A
MW390	Downgradient	Yes	6.42E+02	NO	6.46E+00	N/A
MW393	Downgradient	Yes	4.09E+02	NO	6.01E+00	N/A
MW396	Upgradient	Yes	7.00E+02	NO	6.55E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data 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 Result

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	1.56E-03	NO	-6.46E+00	N/A
MW390	Downgradient	Yes	1.13E-03	NO	-6.79E+00	N/A
MW393	Downgradient	No	9.42E-04	N/A	-6.97E+00	N/A
MW396	Upgradient	No	1.20E-03	N/A	-6.73E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= -0.043 S= 0.814 CV(2)=-18.867 K factor**= 3.188 TL(2)= 2.55E+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	5.45E+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	2.00E+00	N/A	6.93E-01	NO
MW390	Downgradient	Yes	5.44E+00	N/A	1.69E+00	NO
MW393	Downgradient	Yes	1.22E+00	N/A	1.99E-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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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.

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

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

Historical Background Data from Upgradient Wells 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	3.50E+02	NO	5.86E+00	N/A
MW390	Downgradient	Yes	3.74E+02	NO	5.92E+00	N/A
MW393	Downgradient	Yes	2.20E+02	NO	5.39E+00	N/A
MW396	Upgradient	Yes	3.86E+02	NO	5.96E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Iodide

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= 2.150 S= 0.283 CV(1)=0.132 K factor**= 3.188 TL(1)= 3.05E+00 LL(1)=N/A

Statistics-Transformed Background Data X= 0.759 S= 0.123 CV(2)=0.162 K factor**= 3.188 TL(2)= 1.15E+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	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	Downgradient	No	5.00E-01	N/A	-6.93E-01	N/A
MW393	Downgradient	No	5.00E-01	N/A	-6.93E-01	N/A
MW396	Upgradient	Yes	4.83E-01	NO	-7.28E-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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Iron

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= 7.796 S= 3.723 CV(1)=0.478 K factor**= 3.188 TL(1)= 1.97E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 1.880 S= 0.723 CV(2)=0.384 K factor**= 3.188 TL(2)= 4.18E+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	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	1.17E-01	NO	-2.15E+00	N/A
MW390	Downgradient	Yes	7.83E-02	NO	-2.55E+00	N/A
MW393	Downgradient	Yes	4.88E-01	NO	-7.17E-01	N/A
MW396	Upgradient	No	8.94E-02	N/A	-2.41E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= 2.804 S= 0.240 CV(2)=0.086 K factor**= 3.188 TL(2)= 3.57E+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	1.55E+01	2.74E+00
9/16/2002	1.73E+01	2.85E+00
10/16/2002	1.78E+01	2.88E+00
1/13/2003	1.92E+01	2.95E+00
4/8/2003	1.78E+01	2.88E+00
7/16/2003	1.78E+01	2.88E+00
10/14/2003	2.02E+01	3.01E+00
1/14/2004	9.41E+00	2.24E+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	8.22E+00	NO	2.11E+00	N/A
MW390	Downgradient	Yes	1.18E+01	NO	2.47E+00	N/A
MW393	Downgradient	Yes	3.97E+00	NO	1.38E+00	N/A
MW396	Upgradient	Yes	1.42E+01	NO	2.65E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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.

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

Statistics-Transformed Background Data X= -0.566 S= 1.192 CV(2)=-2.105 K factor**= 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
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	5.03E-01	NO	-6.87E-01	N/A
MW390	Downgradient	No	5.00E-03	N/A	-5.30E+00	N/A
MW393	Downgradient	Yes	3.28E-02	NO	-3.42E+00	N/A
MW396	Upgradient	Yes	1.93E-01	NO	-1.65E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= -5.928 S= 1.420 CV(2)=-0.240 K factor**= 3.188 TL(2)= -1.40E+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	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	8.27E-04	N/A	-7.10E+00	NO
MW390	Downgradient	Yes	4.40E-04	N/A	-7.73E+00	NO
MW393	Downgradient	Yes	2.25E-04	N/A	-8.40E+00	NO
MW396	Upgradient	Yes	4.65E-04	N/A	-7.67E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= -4.706 S= 1.057 CV(2)=-0.225 K factor**= 3.188 TL(2)= -1.34E+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	5.00E-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	2.17E-03	N/A	-6.13E+00	NO
MW390	Downgradient	Yes	1.38E-03	N/A	-6.59E+00	NO
MW393	Downgradient	No	2.00E-03	N/A	-6.21E+00	N/A
MW396	Upgradient	Yes	1.59E-03	N/A	-6.44E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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 Background Data **X=**4.364 **S=** 0.333 **CV(2)=**0.076 **K factor**=** 3.188 **TL(2)=**4.74E+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	6.00E+01	4.09E+00
4/8/2003	7.10E+01	4.26E+00
7/16/2003	-5.60E+01	#Func!
10/14/2003	-5.40E+01	#Func!
1/14/2004	-2.20E+01	#Func!
4/12/2004	-6.00E+00	#Func!
7/20/2004	-3.00E+00	#Func!
10/12/2004	1.14E+02	4.74E+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.

#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	4.28E+02	N/A	6.06E+00	YES
MW390	Downgradient	Yes	5.32E+02	N/A	6.28E+00	YES
MW393	Downgradient	Yes	4.71E+02	N/A	6.15E+00	YES
MW396	Upgradient	Yes	5.11E+02	N/A	6.24E+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, $S = \sqrt{\text{Sum} ((\text{background result}-X)^2)/[\text{count of background results} - 1]}$

TL Upper Tolerance Limit, $TL = \bar{X} + (K * S)$, LL Lower Tolerance Limit, $LL = \bar{X} - (K * S)$

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

**** 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.**

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

pH

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 LL(1)=5.15E+00

Statistics-Transformed Background Data X= 1.864 S= 0.054 CV(2)=0.029 K factor**= 3.736 TL(2)= 2.07E+00 LL(2)=1.66E+00

Historical Background Data from Upgradient Wells with Transformed Result

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)?	LN(Result)	LN(Result) >TL(2)? LN(Result) <LL(2)?
MW386	Sidegradient	Yes	6.77E+00	NO	1.91E+00	N/A
MW390	Downgradient	Yes	6.30E+00	NO	1.84E+00	N/A
MW393	Downgradient	Yes	6.17E+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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= 0.311 S= 0.271 CV(2)=0.870 K factor**= 3.188 TL(2)= 1.18E+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	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 Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW386	Sidegradient	Yes	2.68E-01	NO	-1.32E+00	N/A
MW390	Downgradient	Yes	3.31E-01	NO	-1.11E+00	N/A
MW393	Downgradient	Yes	4.02E-01	NO	-9.11E-01	N/A
MW396	Upgradient	Yes	7.91E-01	NO	-2.34E-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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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.

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

Statistics-Transformed Background Data X= 4.595 S= 0.492 CV(2)=0.107 K factor**= 3.188 TL(2)= 6.16E+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	1.15E+02	4.74E+00
9/16/2002	1.16E+02	4.75E+00
10/16/2002	1.17E+02	4.76E+00
1/13/2003	1.22E+02	4.80E+00
4/8/2003	1.06E+02	4.66E+00
7/16/2003	1.17E+02	4.76E+00
10/14/2003	1.32E+02	4.88E+00
1/14/2004	2.96E+01	3.39E+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	1.02E+02	NO	4.62E+00	N/A
MW390	Downgradient	Yes	8.94E+01	NO	4.49E+00	N/A
MW393	Downgradient	Yes	7.88E+01	NO	4.37E+00	N/A
MW396	Upgradient	Yes	1.04E+02	NO	4.64E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

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 Background Data X= 3.054 S= 0.351 CV(2)=0.115 K factor**= 3.188 TL(2)= 4.17E+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	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/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	3.43E+01	NO	3.54E+00	N/A
MW390	Downgradient	Yes	3.88E+01	NO	3.66E+00	N/A
MW393	Downgradient	Yes	1.95E+01	NO	2.97E+00	N/A
MW396	Upgradient	Yes	2.99E+01	NO	3.40E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data X= 1.498 S= 1.321 CV(2)=0.882 K factor**= 3.188 TL(2)= 5.71E+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	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	-2.56E-01	N/A	#Error	N/A
MW390	Downgradient	Yes	4.14E+01	YES	3.72E+00	N/A
MW393	Downgradient	No	-9.57E-01	N/A	#Error	N/A
MW396	Upgradient	No	-3.29E-01	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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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.

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

Statistics-Transformed Background Data X= 2.210 S= 0.454 CV(2)=0.205 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

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	4.82E+00	NO	1.57E+00	N/A
MW390	Downgradient	Yes	1.58E+00	NO	4.57E-01	N/A
MW393	Downgradient	Yes	1.68E+00	NO	5.19E-01	N/A
MW396	Upgradient	Yes	3.29E+00	NO	1.19E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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.

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

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

Date Collected	Result	LN(Result)
8/13/2002	1.93E+02	5.26E+00
9/16/2002	1.90E+02	5.25E+00
10/16/2002	2.21E+02	5.40E+00
1/13/2003	1.06E+02	4.66E+00
4/8/2003	7.78E+01	4.35E+00
7/16/2003	1.22E+02	4.80E+00
10/14/2003	8.64E+01	4.46E+00
1/14/2004	1.45E+02	4.98E+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	1.19E+02	NO	4.78E+00	N/A
MW390	Downgradient	Yes	1.29E+01	NO	2.56E+00	N/A
MW393	Downgradient	Yes	1.27E+01	NO	2.54E+00	N/A
MW396	Upgradient	Yes	4.57E+01	NO	3.82E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Zinc

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= 0.044 S= 0.035 CV(1)=0.786 K factor**= 3.188 TL(1)= 1.56E-01 LL(1)=N/A

Statistics-Transformed Background Data X= -3.342 S= 0.682 CV(2)=-0.204 K factor**= 3.188 TL(2)= -1.17E+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	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
4/8/2003	3.50E-02	-3.35E+00
7/16/2003	2.00E-02	-3.91E+00
10/14/2003	2.00E-02	-3.91E+00
1/14/2004	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	3.62E-03	NO	-5.62E+00	N/A
MW390	Downgradient	Yes	4.26E-03	NO	-5.46E+00	N/A
MW393	Downgradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW396	Upgradient	Yes	4.51E-03	NO	-5.40E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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)
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)
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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW221	Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW222	Sidegradient	Yes	2.01E-02	NO	-3.91E+00	N/A
MW223	Sidegradient	Yes	3.16E-02	NO	-3.45E+00	N/A
MW224	Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW369	Downgradient	Yes	1.85E-01	NO	-1.69E+00	N/A
MW372	Downgradient	No	2.55E-02	N/A	-3.67E+00	N/A
MW384	Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW387	Downgradient	Yes	3.67E-02	NO	-3.30E+00	N/A
MW391	Downgradient	Yes	3.27E-02	NO	-3.42E+00	N/A
MW394	Upgradient	Yes	2.90E-02	NO	-3.54E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

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)
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

Date Collected	Result	LN(Result)
8/13/2002	5.03E+00	1.62E+00
9/16/2002	5.57E+00	1.72E+00
10/16/2002	1.28E+01	2.55E+00
1/13/2003	4.30E+00	1.46E+00
4/10/2003	9.52E+00	2.25E+00
7/16/2003	3.92E+00	1.37E+00
10/14/2003	1.06E+00	5.83E-02
1/13/2004	2.14E+00	7.61E-01

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	2.86E+01	N/A	3.35E+00	N/A
MW221	Sidegradient	Yes	2.07E+01	N/A	3.03E+00	N/A
MW222	Sidegradient	Yes	1.58E+01	N/A	2.76E+00	N/A
MW223	Sidegradient	Yes	1.07E+01	N/A	2.37E+00	N/A
MW224	Sidegradient	No	1.79E+00	N/A	5.82E-01	N/A
MW369	Downgradient	Yes	3.66E+01	N/A	3.60E+00	N/A
MW372	Downgradient	Yes	4.78E+01	N/A	3.87E+00	N/A
MW384	Sidegradient	Yes	2.87E+01	N/A	3.36E+00	N/A
MW387	Downgradient	Yes	9.34E+01	YES	4.54E+00	N/A
MW391	Downgradient	No	1.08E+01	N/A	2.38E+00	N/A
MW394	Upgradient	No	2.04E+00	N/A	7.13E-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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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

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	2.00E-01	-1.61E+00
1/13/2004	2.00E-01	-1.61E+00
4/13/2004	2.00E-01	-1.61E+00
7/21/2004	2.00E-01	-1.61E+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	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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	7.41E-03	N/A	-4.90E+00	NO
MW221	Sidegradient	Yes	1.56E-02	N/A	-4.16E+00	NO
MW222	Sidegradient	Yes	8.67E-03	N/A	-4.75E+00	NO
MW223	Sidegradient	Yes	7.77E-03	N/A	-4.86E+00	NO
MW224	Sidegradient	Yes	2.95E-02	N/A	-3.52E+00	NO
MW369	Downgradient	Yes	1.98E-02	N/A	-3.92E+00	NO
MW372	Downgradient	Yes	1.21E+00	N/A	1.91E-01	NO
MW384	Sidegradient	Yes	1.00E-01	N/A	-2.30E+00	NO
MW387	Downgradient	Yes	3.75E-02	N/A	-3.28E+00	NO
MW391	Downgradient	Yes	2.46E-02	N/A	-3.71E+00	NO
MW394	Upgradient	Yes	1.92E-02	N/A	-3.95E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

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)
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
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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	2.22E-01	NO	-1.51E+00	N/A
MW221	Sidegradient	Yes	4.15E-01	NO	-8.79E-01	N/A
MW222	Sidegradient	Yes	3.78E-01	NO	-9.73E-01	N/A
MW223	Sidegradient	Yes	3.99E-01	NO	-9.19E-01	N/A
MW224	Sidegradient	Yes	3.84E-01	NO	-9.57E-01	N/A
MW369	Downgradient	Yes	3.28E-01	NO	-1.11E+00	N/A
MW372	Downgradient	Yes	4.68E-01	NO	-7.59E-01	N/A
MW387	Downgradient	Yes	4.67E-01	NO	-7.61E-01	N/A
MW391	Downgradient	Yes	4.73E-01	NO	-7.49E-01	N/A
MW394	Upgradient	Yes	5.17E-01	NO	-6.60E-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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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)
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
1/13/2004	2.03E+01	3.01E+00
4/13/2004	2.38E+01	3.17E+00
7/21/2004	1.90E+01	2.94E+00

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	2.95E+01	3.38E+00
9/16/2002	2.99E+01	3.40E+00
10/16/2002	3.12E+01	3.44E+00
1/13/2003	3.07E+01	3.42E+00
4/10/2003	3.44E+01	3.54E+00
7/16/2003	2.96E+01	3.39E+00
10/14/2003	3.03E+01	3.41E+00
1/13/2004	2.84E+01	3.35E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	2.05E+01	NO	3.02E+00	N/A
MW221	Sidegradient	Yes	2.01E+01	NO	3.00E+00	N/A
MW222	Sidegradient	Yes	1.82E+01	NO	2.90E+00	N/A
MW223	Sidegradient	Yes	2.11E+01	NO	3.05E+00	N/A
MW224	Sidegradient	Yes	2.39E+01	NO	3.17E+00	N/A
MW369	Downgradient	Yes	1.68E+01	NO	2.82E+00	N/A
MW372	Downgradient	Yes	6.30E+01	YES	4.14E+00	N/A
MW384	Sidegradient	Yes	2.50E+01	NO	3.22E+00	N/A
MW387	Downgradient	Yes	3.86E+01	NO	3.65E+00	N/A
MW391	Downgradient	Yes	2.38E+01	NO	3.17E+00	N/A
MW394	Upgradient	Yes	2.59E+01	NO	3.25E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Chemical Oxygen Demand (COD)

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= 35.000 S= 0.000 CV(1)=0.000 K factor**= 2.523 TL(1)= 3.50E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 3.555 S= 0.000 CV(2)=0.000 K factor**= 2.523 TL(2)= 3.56E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

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)
10/14/2002	3.50E+01	3.56E+00
1/15/2003	3.50E+01	3.56E+00
4/10/2003	3.50E+01	3.56E+00
7/14/2003	3.50E+01	3.56E+00
10/13/2003	3.50E+01	3.56E+00
1/13/2004	3.50E+01	3.56E+00
4/13/2004	3.50E+01	3.56E+00
7/21/2004	3.50E+01	3.56E+00

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	3.50E+01	3.56E+00
9/16/2002	3.50E+01	3.56E+00
10/16/2002	3.50E+01	3.56E+00
1/13/2003	3.50E+01	3.56E+00
4/10/2003	3.50E+01	3.56E+00
7/16/2003	3.50E+01	3.56E+00
10/14/2003	3.50E+01	3.56E+00
1/13/2004	3.50E+01	3.56E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	No	2.00E+01	N/A	3.00E+00	N/A
MW221	Sidegradient	No	2.00E+01	N/A	3.00E+00	N/A
MW222	Sidegradient	Yes	1.39E+01	NO	2.63E+00	N/A
MW223	Sidegradient	No	2.00E+01	N/A	3.00E+00	N/A
MW224	Sidegradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW369	Downgradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW372	Downgradient	Yes	1.34E+01	NO	2.60E+00	N/A
MW384	Sidegradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW387	Downgradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW391	Downgradient	No	2.00E+01	N/A	3.00E+00	N/A
MW394	Upgradient	No	2.00E+01	N/A	3.00E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 49.044 S= 11.278 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= 0.244 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

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)
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
7/16/2003	5.81E+01	4.06E+00
10/14/2003	5.82E+01	4.06E+00
1/13/2004	5.60E+01	4.03E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	1.99E+01	NO	2.99E+00	N/A
MW221	Sidegradient	Yes	3.37E+01	NO	3.52E+00	N/A
MW222	Sidegradient	Yes	3.11E+01	NO	3.44E+00	N/A
MW223	Sidegradient	Yes	3.33E+01	NO	3.51E+00	N/A
MW224	Sidegradient	Yes	2.39E+01	NO	3.17E+00	N/A
MW369	Downgradient	Yes	2.80E+01	NO	3.33E+00	N/A
MW372	Downgradient	Yes	3.66E+01	NO	3.60E+00	N/A
MW384	Sidegradient	Yes	2.86E+01	NO	3.35E+00	N/A
MW387	Downgradient	Yes	3.49E+01	NO	3.55E+00	N/A
MW391	Downgradient	Yes	3.93E+01	NO	3.67E+00	N/A
MW394	Upgradient	Yes	4.17E+01	NO	3.73E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 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= 0.040 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

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

Well Number: MW220

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

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	1.00E-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
1/13/2004	1.00E-03	-6.91E+00

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	No	1.00E-03	N/A	-6.91E+00	N/A
MW222	Sidegradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW223	Sidegradient	Yes	2.70E-03	N/A	-5.91E+00	NO
MW224	Sidegradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW369	Downgradient	Yes	5.84E-03	N/A	-5.14E+00	NO
MW372	Downgradient	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	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW391	Downgradient	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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 382.132 S= 107.134 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= 1.164 CV(2)=0.204 K factor**= 2.523 TL(2)= 8.65E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

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)
10/14/2002	3.68E+02	5.91E+00
1/15/2003	4.33E+02	6.07E+00
4/10/2003	4.89E+02	6.19E+00
7/14/2003	4.30E+02	6.06E+00
10/13/2003	3.46E+02	5.85E+00
1/13/2004	3.65E+02	5.90E+00
4/13/2004	4.16E+02	6.03E+00
7/21/2004	3.53E+02	5.87E+00

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	4.06E+02	6.01E+00
9/16/2002	4.18E+02	6.04E+00
10/16/2002	4.11E+02	6.02E+00
1/13/2003	4.22E+02	6.05E+00
4/10/2003	4.20E+02	6.04E+00
7/16/2003	4.38E+02	6.08E+00
10/14/2003	3.91E+00	1.36E+00
1/13/2004	3.95E+02	5.98E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	3.58E+02	NO	5.88E+00	N/A
MW221	Sidegradient	Yes	4.35E+02	NO	6.08E+00	N/A
MW222	Sidegradient	Yes	3.88E+02	NO	5.96E+00	N/A
MW223	Sidegradient	Yes	3.95E+02	NO	5.98E+00	N/A
MW224	Sidegradient	Yes	4.48E+02	NO	6.10E+00	N/A
MW369	Downgradient	Yes	3.60E+02	NO	5.89E+00	N/A
MW372	Downgradient	Yes	8.03E+02	YES	6.69E+00	N/A
MW384	Sidegradient	Yes	4.49E+02	NO	6.11E+00	N/A
MW387	Downgradient	Yes	5.73E+02	NO	6.35E+00	N/A
MW391	Downgradient	Yes	5.02E+02	NO	6.22E+00	N/A
MW394	Upgradient	Yes	4.20E+02	NO	6.04E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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)
10/14/2002	2.11E-02	-3.86E+00
1/15/2003	2.00E-02	-3.91E+00
4/10/2003	2.00E-02	-3.91E+00
7/14/2003	2.00E-02	-3.91E+00
10/13/2003	2.00E-02	-3.91E+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: 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	2.00E-02	-3.91E+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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	1.51E-03	NO	-6.50E+00	N/A
MW221	Sidegradient	Yes	1.30E-03	NO	-6.65E+00	N/A
MW222	Sidegradient	Yes	1.08E-03	NO	-6.83E+00	N/A
MW223	Sidegradient	Yes	2.67E-03	NO	-5.93E+00	N/A
MW224	Sidegradient	Yes	2.21E-03	NO	-6.11E+00	N/A
MW369	Downgradient	Yes	1.85E-03	NO	-6.29E+00	N/A
MW372	Downgradient	Yes	1.02E-03	NO	-6.89E+00	N/A
MW384	Sidegradient	Yes	1.99E-03	NO	-6.22E+00	N/A
MW387	Downgradient	Yes	1.34E-03	NO	-6.62E+00	N/A
MW391	Downgradient	No	6.96E-04	N/A	-7.27E+00	N/A
MW394	Upgradient	No	1.34E-03	N/A	-6.62E+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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Cyanide UNITS: mg/L URG

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= 0.024 S= 0.010 CV(1)=0.431 K factor**= 2.523 TL(1)= 4.96E-02 LL(1)=N/A

Statistics-Transformed Background Data X= -3.797 S= 0.313 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

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)
10/14/2002	2.00E-02	-3.91E+00
1/15/2003	2.00E-02	-3.91E+00
4/10/2003	2.00E-02	-3.91E+00
7/14/2003	2.00E-02	-3.91E+00
10/13/2003	2.00E-02	-3.91E+00
1/13/2004	2.00E-02	-3.91E+00
4/13/2004	5.00E-02	-3.00E+00
7/21/2004	5.00E-02	-3.00E+00

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	2.00E-02	-3.91E+00
9/16/2002	2.00E-02	-3.91E+00
10/16/2002	2.00E-02	-3.91E+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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW221	Sidegradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW222	Sidegradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW223	Sidegradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW224	Sidegradient	Yes	1.93E-03	NO	-6.25E+00	N/A
MW369	Downgradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW372	Downgradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW384	Sidegradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW387	Downgradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW391	Downgradient	No	2.00E-01	N/A	-1.61E+00	N/A
MW394	Upgradient	No	2.00E-01	N/A	-1.61E+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, $S = \left[\frac{\text{Sum}([(background\ result - X)^2])}{[\text{count of background results} - 1]} \right]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	5.95E+00	NO	1.78E+00	N/A
MW221	Sidegradient	Yes	5.50E+00	NO	1.70E+00	N/A
MW222	Sidegradient	Yes	4.17E+00	NO	1.43E+00	N/A
MW223	Sidegradient	Yes	3.25E+00	NO	1.18E+00	N/A
MW224	Sidegradient	Yes	4.71E+00	NO	1.55E+00	N/A
MW369	Downgradient	Yes	4.13E+00	NO	1.42E+00	N/A
MW372	Downgradient	Yes	1.97E+00	NO	6.78E-01	N/A
MW384	Sidegradient	Yes	5.16E+00	NO	1.64E+00	N/A
MW387	Downgradient	Yes	4.96E+00	NO	1.60E+00	N/A
MW391	Downgradient	Yes	2.88E+00	NO	1.06E+00	N/A
MW394	Upgradient	Yes	6.23E+00	NO	1.83E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 232.688 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

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)
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

Date Collected	Result	LN(Result)
8/13/2002	2.47E+02	5.51E+00
9/16/2002	2.59E+02	5.56E+00
10/16/2002	2.01E+02	5.30E+00
1/13/2003	2.28E+02	5.43E+00
4/10/2003	2.49E+02	5.52E+00
7/16/2003	2.40E+02	5.48E+00
10/14/2003	2.30E+02	5.44E+00
1/13/2004	2.10E+02	5.35E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	1.89E+02	NO	5.24E+00	N/A
MW221	Sidegradient	Yes	2.06E+02	NO	5.33E+00	N/A
MW222	Sidegradient	Yes	1.99E+02	NO	5.29E+00	N/A
MW223	Sidegradient	Yes	2.08E+02	NO	5.34E+00	N/A
MW224	Sidegradient	Yes	2.55E+02	NO	5.54E+00	N/A
MW369	Downgradient	Yes	1.77E+02	NO	5.18E+00	N/A
MW372	Downgradient	Yes	4.49E+02	YES	6.11E+00	N/A
MW384	Sidegradient	Yes	2.21E+02	NO	5.40E+00	N/A
MW387	Downgradient	Yes	3.03E+02	YES	5.71E+00	N/A
MW391	Downgradient	Yes	1.75E+02	NO	5.16E+00	N/A
MW394	Upgradient	Yes	1.93E+02	NO	5.26E+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
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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Iron

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= 0.897 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
1/13/2004	7.93E-01	-2.32E-01
4/13/2004	1.30E-01	-2.04E+00
7/21/2004	3.82E-01	-9.62E-01

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	1.34E+00	2.93E-01
9/16/2002	3.28E-01	-1.11E+00
10/16/2002	1.38E+00	3.22E-01
1/13/2003	1.30E+00	2.62E-01
4/10/2003	4.94E-01	-7.05E-01
7/16/2003	6.20E-01	-4.78E-01
10/14/2003	3.70E-01	-9.94E-01
1/13/2004	2.51E-01	-1.38E+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-01	N/A	-2.30E+00	N/A
MW221	Sidegradient	No	1.00E-01	N/A	-2.30E+00	N/A
MW222	Sidegradient	Yes	4.29E-02	N/A	-3.15E+00	NO
MW223	Sidegradient	Yes	6.19E-01	N/A	-4.80E-01	NO
MW224	Sidegradient	No	1.00E-01	N/A	-2.30E+00	N/A
MW369	Downgradient	Yes	2.39E-01	N/A	-1.43E+00	NO
MW372	Downgradient	Yes	7.90E-02	N/A	-2.54E+00	NO
MW384	Sidegradient	Yes	2.03E-01	N/A	-1.59E+00	NO
MW387	Downgradient	Yes	1.23E-01	N/A	-2.10E+00	NO
MW391	Downgradient	Yes	1.36E-01	N/A	-2.00E+00	NO
MW394	Upgradient	No	7.79E-02	N/A	-2.55E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

Historical Background Data from Upgradient Wells with Transformed Result

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)
10/14/2002	9.16E+00	2.21E+00
1/15/2003	1.00E+01	2.30E+00
4/10/2003	1.08E+01	2.38E+00
7/14/2003	1.47E+01	2.69E+00
10/13/2003	9.03E+00	2.20E+00
1/13/2004	8.49E+00	2.14E+00
4/13/2004	9.70E+00	2.27E+00
7/21/2004	8.06E+00	2.09E+00

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	1.18E+01	2.47E+00
9/16/2002	1.21E+01	2.49E+00
10/16/2002	1.13E+01	2.42E+00
1/13/2003	1.03E+01	2.33E+00
4/10/2003	1.17E+01	2.46E+00
7/16/2003	1.20E+01	2.48E+00
10/14/2003	1.22E+01	2.50E+00
1/13/2004	1.14E+01	2.43E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	8.46E+00	NO	2.14E+00	N/A
MW221	Sidegradient	Yes	8.66E+00	NO	2.16E+00	N/A
MW222	Sidegradient	Yes	8.09E+00	NO	2.09E+00	N/A
MW223	Sidegradient	Yes	8.47E+00	NO	2.14E+00	N/A
MW224	Sidegradient	Yes	1.00E+01	NO	2.30E+00	N/A
MW369	Downgradient	Yes	6.46E+00	NO	1.87E+00	N/A
MW372	Downgradient	Yes	2.25E+01	YES	3.11E+00	N/A
MW384	Sidegradient	Yes	1.03E+01	NO	2.33E+00	N/A
MW387	Downgradient	Yes	1.64E+01	YES	2.80E+00	N/A
MW391	Downgradient	Yes	1.05E+01	NO	2.35E+00	N/A
MW394	Upgradient	Yes	1.14E+01	NO	2.43E+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
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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

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

Well Number: MW220

Date Collected	Result	LN(Result)
10/14/2002	3.06E-02	-3.49E+00
1/15/2003	2.91E-02	-3.54E+00
4/10/2003	1.37E-02	-4.29E+00
7/14/2003	2.54E+00	9.32E-01
10/13/2003	3.78E-01	-9.73E-01
1/13/2004	1.59E-01	-1.84E+00
4/13/2004	7.07E-03	-4.95E+00
7/21/2004	8.41E-02	-2.48E+00

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	5.42E-01	-6.12E-01
9/16/2002	1.55E-01	-1.86E+00
10/16/2002	1.03E-01	-2.27E+00
1/13/2003	1.28E-01	-2.06E+00
4/10/2003	5.00E-03	-5.30E+00
7/16/2003	2.72E-01	-1.30E+00
10/14/2003	7.95E-02	-2.53E+00
1/13/2004	6.58E-02	-2.72E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	1.19E-03	N/A	-6.73E+00	NO
MW221	Sidegradient	No	5.00E-03	N/A	-5.30E+00	N/A
MW222	Sidegradient	Yes	2.23E-03	N/A	-6.11E+00	NO
MW223	Sidegradient	Yes	3.52E-02	N/A	-3.35E+00	NO
MW224	Sidegradient	Yes	1.80E-03	N/A	-6.32E+00	NO
MW369	Downgradient	Yes	2.63E-02	N/A	-3.64E+00	NO
MW372	Downgradient	Yes	1.25E-03	N/A	-6.68E+00	NO
MW384	Sidegradient	Yes	5.94E-03	N/A	-5.13E+00	NO
MW387	Downgradient	Yes	4.93E-03	N/A	-5.31E+00	NO
MW391	Downgradient	Yes	2.94E-03	N/A	-5.83E+00	NO
MW394	Upgradient	Yes	1.36E-03	N/A	-6.60E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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 Result

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

Well Number: MW220

Date Collected	Result	LN(Result)
10/14/2002	5.58E-03	-5.19E+00
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
10/16/2002	1.00E-03	-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
1/13/2004	1.00E-03	-6.91E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	5.17E-04	N/A	-7.57E+00	NO
MW221	Sidegradient	Yes	1.53E-03	N/A	-6.48E+00	NO
MW222	Sidegradient	Yes	1.80E-03	N/A	-6.32E+00	NO
MW223	Sidegradient	Yes	7.39E-03	N/A	-4.91E+00	NO
MW224	Sidegradient	Yes	7.05E-04	N/A	-7.26E+00	NO
MW369	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW372	Downgradient	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	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW391	Downgradient	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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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

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
1/13/2003	5.00E-03	-5.30E+00
4/10/2003	5.00E-03	-5.30E+00
7/16/2003	5.00E-03	-5.30E+00
10/14/2003	5.00E-03	-5.30E+00
1/13/2004	5.00E-03	-5.30E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	5.36E-03	N/A	-5.23E+00	NO
MW221	Sidegradient	Yes	1.02E-02	N/A	-4.59E+00	NO
MW222	Sidegradient	Yes	2.36E-02	N/A	-3.75E+00	NO
MW223	Sidegradient	Yes	5.72E-01	N/A	-5.59E-01	NO
MW224	Sidegradient	Yes	6.18E-03	N/A	-5.09E+00	NO
MW369	Downgradient	Yes	3.11E-03	N/A	-5.77E+00	NO
MW372	Downgradient	Yes	7.01E-04	N/A	-7.26E+00	NO
MW384	Sidegradient	Yes	1.88E-03	N/A	-6.28E+00	NO
MW387	Downgradient	Yes	7.40E-04	N/A	-7.21E+00	NO
MW391	Downgradient	No	2.00E-03	N/A	-6.21E+00	N/A
MW394	Upgradient	Yes	3.88E-03	N/A	-5.55E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

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
MW391
MW394

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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)
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
10/14/2003	6.40E+00	1.86E+00
1/13/2004	6.39E+00	1.85E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)? Result <LL(1)?	LN(Result)	LN(Result) >TL(2)? LN(Result) <LL(2)?
MW220	Upgradient	Yes	6.11E+00	NO	1.81E+00	N/A
MW221	Sidegradient	Yes	6.14E+00	NO	1.81E+00	N/A
MW222	Sidegradient	Yes	6.18E+00	NO	1.82E+00	N/A
MW223	Sidegradient	Yes	6.14E+00	NO	1.81E+00	N/A
MW224	Sidegradient	Yes	6.20E+00	NO	1.82E+00	N/A
MW369	Downgradient	Yes	5.98E+00	NO	1.79E+00	N/A
MW372	Downgradient	Yes	6.12E+00	NO	1.81E+00	N/A
MW384	Sidegradient	Yes	6.12E+00	NO	1.81E+00	N/A
MW387	Downgradient	Yes	6.28E+00	NO	1.84E+00	N/A
MW391	Downgradient	Yes	6.31E+00	NO	1.84E+00	N/A
MW394	Upgradient	Yes	5.90E+00	NO	1.77E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{1/2}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

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

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
7/16/2003	1.14E+00	1.31E-01
10/14/2003	1.05E+00	4.88E-02
1/13/2004	1.07E+00	6.77E-02

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	7.01E+00	N/A	1.95E+00	NO
MW221	Sidegradient	Yes	1.11E+00	N/A	1.04E-01	NO
MW222	Sidegradient	Yes	6.64E-01	N/A	-4.09E-01	NO
MW223	Sidegradient	Yes	1.30E+00	N/A	2.62E-01	NO
MW224	Sidegradient	Yes	9.74E-01	N/A	-2.63E-02	NO
MW369	Downgradient	Yes	5.97E-01	N/A	-5.16E-01	NO
MW372	Downgradient	Yes	2.09E+00	N/A	7.37E-01	NO
MW384	Sidegradient	Yes	1.43E+00	N/A	3.58E-01	NO
MW387	Downgradient	Yes	1.81E+00	N/A	5.93E-01	NO
MW391	Downgradient	Yes	1.52E+00	N/A	4.19E-01	NO
MW394	Upgradient	Yes	1.23E+00	N/A	2.07E-01	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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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)
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

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	3.29E+01	3.49E+00
9/16/2002	2.99E+01	3.40E+00
10/16/2002	2.90E+01	3.37E+00
1/13/2003	2.71E+01	3.30E+00
4/10/2003	2.48E+01	3.21E+00
7/16/2003	3.56E+01	3.57E+00
10/14/2003	3.39E+01	3.52E+00
1/13/2004	3.13E+01	3.44E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	3.63E+01	NO	3.59E+00	N/A
MW221	Sidegradient	Yes	4.48E+01	NO	3.80E+00	N/A
MW222	Sidegradient	Yes	4.39E+01	NO	3.78E+00	N/A
MW223	Sidegradient	Yes	4.18E+01	NO	3.73E+00	N/A
MW224	Sidegradient	Yes	5.75E+01	NO	4.05E+00	N/A
MW369	Downgradient	Yes	4.65E+01	NO	3.84E+00	N/A
MW372	Downgradient	Yes	6.43E+01	YES	4.16E+00	N/A
MW384	Sidegradient	Yes	4.67E+01	NO	3.84E+00	N/A
MW387	Downgradient	Yes	4.78E+01	NO	3.87E+00	N/A
MW391	Downgradient	Yes	3.46E+01	NO	3.54E+00	N/A
MW394	Upgradient	Yes	3.44E+01	NO	3.54E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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)
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

Date Collected	Result	LN(Result)
8/13/2002	1.12E+01	2.42E+00
9/16/2002	8.30E+00	2.12E+00
10/16/2002	8.00E+00	2.08E+00
1/13/2003	8.50E+00	2.14E+00
4/10/2003	7.90E+00	2.07E+00
7/16/2003	8.40E+00	2.13E+00
10/14/2003	8.20E+00	2.10E+00
1/13/2004	8.10E+00	2.09E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	1.67E+01	NO	2.82E+00	N/A
MW221	Sidegradient	Yes	1.37E+01	NO	2.62E+00	N/A
MW222	Sidegradient	Yes	1.21E+01	NO	2.49E+00	N/A
MW223	Sidegradient	Yes	1.38E+01	NO	2.62E+00	N/A
MW224	Sidegradient	Yes	1.80E+01	YES	2.89E+00	N/A
MW369	Downgradient	Yes	8.69E+00	NO	2.16E+00	N/A
MW372	Downgradient	Yes	1.44E+02	YES	4.97E+00	N/A
MW384	Sidegradient	Yes	2.95E+01	YES	3.38E+00	N/A
MW387	Downgradient	Yes	2.92E+01	YES	3.37E+00	N/A
MW391	Downgradient	Yes	1.22E+01	NO	2.50E+00	N/A
MW394	Upgradient	Yes	1.18E+01	NO	2.47E+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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Technetium-99 UNITS: pCi/L URG

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= 9.354 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.

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	No	4.11E+00	N/A	1.41E+00	N/A
MW221	Sidegradient	No	1.43E+00	N/A	3.58E-01	N/A
MW222	Sidegradient	No	-4.49E-01	N/A	#Error	N/A
MW223	Sidegradient	No	-2.49E+00	N/A	#Error	N/A
MW224	Sidegradient	No	-1.15E+00	N/A	#Error	N/A
MW369	Downgradient	Yes	7.26E+01	YES	4.28E+00	N/A
MW372	Downgradient	Yes	6.71E+01	YES	4.21E+00	N/A
MW384	Sidegradient	Yes	2.37E+01	NO	3.17E+00	N/A
MW387	Downgradient	Yes	1.09E+02	YES	4.69E+00	N/A
MW391	Downgradient	No	-2.25E-01	N/A	#Error	N/A
MW394	Upgradient	No	-1.91E+00	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

MW369
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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Total Organic Carbon (TOC)

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= 1.494 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

Historical Background Data from Upgradient Wells with Transformed Result

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)
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

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	1.30E+00	2.62E-01
9/16/2002	1.00E+00	0.00E+00
10/16/2002	1.00E+00	0.00E+00
1/13/2003	1.60E+00	4.70E-01
4/10/2003	1.00E+00	0.00E+00
7/16/2003	1.40E+00	3.36E-01
10/14/2003	1.30E+00	2.62E-01
1/13/2004	1.00E+00	0.00E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	5.44E-01	NO	-6.09E-01	N/A
MW221	Sidegradient	Yes	5.20E-01	NO	-6.54E-01	N/A
MW222	Sidegradient	Yes	5.08E-01	NO	-6.77E-01	N/A
MW223	Sidegradient	Yes	5.21E-01	NO	-6.52E-01	N/A
MW224	Sidegradient	Yes	9.89E-01	NO	-1.11E-02	N/A
MW369	Downgradient	Yes	8.40E-01	NO	-1.74E-01	N/A
MW372	Downgradient	Yes	1.09E+00	NO	8.62E-02	N/A
MW384	Sidegradient	Yes	1.05E+00	NO	4.88E-02	N/A
MW387	Downgradient	Yes	1.09E+00	NO	8.62E-02	N/A
MW391	Downgradient	Yes	4.78E-01	NO	-7.38E-01	N/A
MW394	Upgradient	Yes	5.40E-01	NO	-6.16E-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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

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

Well Number: MW220

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

Well Number: MW394

Date Collected	Result	LN(Result)
8/13/2002	5.00E+01	3.91E+00
9/16/2002	6.72E+02	6.51E+00
10/16/2002	5.00E+01	3.91E+00
1/13/2003	3.61E+01	3.59E+00
4/10/2003	1.00E+01	2.30E+00
7/16/2003	4.27E+01	3.75E+00
10/14/2003	2.20E+01	3.09E+00
1/13/2004	1.28E+01	2.55E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	No	1.00E+01	N/A	2.30E+00	N/A
MW221	Sidegradient	Yes	8.86E+00	N/A	2.18E+00	NO
MW222	Sidegradient	No	1.00E+01	N/A	2.30E+00	N/A
MW223	Sidegradient	Yes	3.38E+00	N/A	1.22E+00	NO
MW224	Sidegradient	Yes	7.01E+00	N/A	1.95E+00	NO
MW369	Downgradient	Yes	1.06E+01	N/A	2.36E+00	NO
MW372	Downgradient	Yes	8.68E+00	N/A	2.16E+00	NO
MW384	Sidegradient	Yes	6.19E+00	N/A	1.82E+00	NO
MW387	Downgradient	Yes	7.59E+00	N/A	2.03E+00	NO
MW391	Downgradient	Yes	3.82E+00	N/A	1.34E+00	NO
MW394	Upgradient	Yes	6.65E+00	N/A	1.89E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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 Background Data from Upgradient Wells with Transformed Result

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)
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: MW394

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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	4.82E-03	NO	-5.33E+00	N/A
MW221	Sidegradient	Yes	5.16E-03	NO	-5.27E+00	N/A
MW222	Sidegradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW223	Sidegradient	Yes	4.06E-03	NO	-5.51E+00	N/A
MW224	Sidegradient	No	2.00E-02	N/A	-3.91E+00	N/A
MW369	Downgradient	Yes	6.17E-03	NO	-5.09E+00	N/A
MW372	Downgradient	Yes	1.04E-02	NO	-4.57E+00	N/A
MW384	Sidegradient	Yes	4.89E-03	NO	-5.32E+00	N/A
MW387	Downgradient	Yes	4.29E-03	NO	-5.45E+00	N/A
MW391	Downgradient	Yes	4.78E-03	NO	-5.34E+00	N/A
MW394	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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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 Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

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

Date Collected	Result	LN(Result)
8/13/2002	8.24E-01	-1.94E-01
9/16/2002	2.00E-01	-1.61E+00
10/17/2002	2.00E-04	-8.52E+00
1/13/2003	3.63E-01	-1.01E+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
1/13/2004	2.00E-01	-1.61E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	2.48E-02	N/A	-3.70E+00	N/A
MW373	Downgradient	No	2.27E-02	N/A	-3.79E+00	N/A
MW385	Sidegradient	No	5.00E-02	N/A	-3.00E+00	N/A
MW388	Downgradient	Yes	3.17E-02	NO	-3.45E+00	N/A
MW392	Downgradient	Yes	3.22E-02	NO	-3.44E+00	N/A
MW395	Upgradient	Yes	2.18E-02	NO	-3.83E+00	N/A
MW397	Upgradient	Yes	2.35E-01	NO	-1.45E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

Historical Background Data from Upgradient Wells with Transformed Result

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

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	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

Date Collected	Result	LN(Result)
8/13/2002	2.00E+00	6.93E-01
9/16/2002	2.00E+00	6.93E-01
10/17/2002	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
1/13/2004	2.00E-01	-1.61E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	6.95E-02	N/A	-2.67E+00	NO
MW373	Downgradient	Yes	2.50E+00	N/A	9.16E-01	NO
MW385	Sidegradient	Yes	4.97E-02	N/A	-3.00E+00	NO
MW388	Downgradient	Yes	2.50E-02	N/A	-3.69E+00	NO
MW392	Downgradient	Yes	2.52E-02	N/A	-3.68E+00	NO
MW395	Upgradient	Yes	2.11E-02	N/A	-3.86E+00	NO
MW397	Upgradient	Yes	8.42E-03	N/A	-4.78E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

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

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

Well Number: MW397

Date Collected	Result	LN(Result)
8/13/2002	1.00E+00	0.00E+00
9/16/2002	1.00E+00	0.00E+00
10/17/2002	1.00E+00	0.00E+00
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	1.00E+00	0.00E+00
1/13/2004	1.00E+00	0.00E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	5.12E-01	NO	-6.69E-01	N/A
MW373	Downgradient	Yes	4.36E-01	NO	-8.30E-01	N/A
MW385	Sidegradient	Yes	2.23E-01	NO	-1.50E+00	N/A
MW388	Downgradient	Yes	3.96E-01	NO	-9.26E-01	N/A
MW392	Downgradient	Yes	5.52E-01	NO	-5.94E-01	N/A
MW395	Upgradient	Yes	5.31E-01	NO	-6.33E-01	N/A
MW397	Upgradient	Yes	3.80E-01	NO	-9.68E-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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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

Well Number: MW395

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

Date Collected	Result	LN(Result)
8/13/2002	1.94E+01	2.97E+00
9/16/2002	1.90E+01	2.94E+00
10/17/2002	1.79E-02	-4.02E+00
1/13/2003	1.78E+01	2.88E+00
4/8/2003	2.03E+01	3.01E+00
7/16/2003	1.94E+01	2.97E+00
10/14/2003	1.99E+01	2.99E+00
1/13/2004	1.88E+01	2.93E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	2.70E+01	NO	3.30E+00	N/A
MW373	Downgradient	Yes	8.04E+01	YES	4.39E+00	N/A
MW385	Sidegradient	Yes	3.34E+01	NO	3.51E+00	N/A
MW388	Downgradient	Yes	2.47E+01	NO	3.21E+00	N/A
MW392	Downgradient	Yes	2.60E+01	NO	3.26E+00	N/A
MW395	Upgradient	Yes	2.82E+01	NO	3.34E+00	N/A
MW397	Upgradient	Yes	1.77E+01	NO	2.87E+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

MW373

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Chemical Oxygen Demand (COD)

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= 35.313 S= 1.250 CV(1)=0.035 K factor**= 2.523 TL(1)= 3.85E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 3.564 S= 0.033 CV(2)=0.009 K factor**= 2.523 TL(2)= 3.65E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
8/13/2002	3.50E+01	3.56E+00
9/16/2002	3.50E+01	3.56E+00
10/16/2002	3.50E+01	3.56E+00
1/13/2003	3.50E+01	3.56E+00
4/10/2003	3.50E+01	3.56E+00
7/16/2003	3.50E+01	3.56E+00
10/14/2003	3.50E+01	3.56E+00
1/13/2004	3.50E+01	3.56E+00

Well Number: MW397

Date Collected	Result	LN(Result)
8/13/2002	4.00E+01	3.69E+00
9/16/2002	3.50E+01	3.56E+00
10/17/2002	3.50E+01	3.56E+00
1/13/2003	3.50E+01	3.56E+00
4/8/2003	3.50E+01	3.56E+00
7/16/2003	3.50E+01	3.56E+00
10/14/2003	3.50E+01	3.56E+00
1/13/2004	3.50E+01	3.56E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW373	Downgradient	Yes	1.57E+01	NO	2.75E+00	N/A
MW385	Sidegradient	No	2.00E+01	N/A	3.00E+00	N/A
MW388	Downgradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW392	Downgradient	No	2.00E+01	N/A	3.00E+00	N/A
MW395	Upgradient	No	2.00E+01	N/A	3.00E+00	N/A
MW397	Upgradient	Yes	9.28E+00	NO	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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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

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

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

Date Collected	Result	LN(Result)
8/13/2002	3.89E+01	3.66E+00
9/16/2002	3.98E+01	3.68E+00
10/17/2002	3.93E+01	3.67E+00
1/13/2003	4.05E+01	3.70E+00
4/8/2003	4.21E+01	3.74E+00
7/16/2003	4.20E+01	3.74E+00
10/14/2003	4.08E+01	3.71E+00
1/13/2004	4.16E+01	3.73E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	4.11E+01	NO	3.72E+00	N/A
MW373	Downgradient	Yes	2.98E+01	NO	3.39E+00	N/A
MW385	Sidegradient	Yes	1.88E+01	NO	2.93E+00	N/A
MW388	Downgradient	Yes	3.30E+01	NO	3.50E+00	N/A
MW392	Downgradient	Yes	4.40E+01	NO	3.78E+00	N/A
MW395	Upgradient	Yes	4.40E+01	NO	3.78E+00	N/A
MW397	Upgradient	Yes	3.30E+01	NO	3.50E+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, $S = \sqrt{\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

cis-1,2-Dichloroethene

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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 5.000 S= 0.000 CV(1)=0.000 K factor**= 2.523 TL(1)= 5.00E+00 LL(1)=N/A

Statistics-Transformed Background Data X= 1.609 S= 0.000 CV(2)=0.000 K factor**= 2.523 TL(2)= 1.61E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
8/13/2002	5.00E+00	1.61E+00
9/30/2002	5.00E+00	1.61E+00
10/16/2002	5.00E+00	1.61E+00
1/13/2003	5.00E+00	1.61E+00
4/10/2003	5.00E+00	1.61E+00
7/16/2003	5.00E+00	1.61E+00
10/14/2003	5.00E+00	1.61E+00
1/13/2004	5.00E+00	1.61E+00

Well Number: MW397

Date Collected	Result	LN(Result)
8/13/2002	5.00E+00	1.61E+00
9/30/2002	5.00E+00	1.61E+00
10/17/2002	5.00E+00	1.61E+00
1/13/2003	5.00E+00	1.61E+00
4/8/2003	5.00E+00	1.61E+00
7/16/2003	5.00E+00	1.61E+00
10/14/2003	5.00E+00	1.61E+00
1/13/2004	5.00E+00	1.61E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	1.00E+00	N/A	0.00E+00	N/A
MW373	Downgradient	No	1.00E+00	N/A	0.00E+00	N/A
MW385	Sidegradient	No	1.00E+00	N/A	0.00E+00	N/A
MW388	Downgradient	No	1.00E+00	N/A	0.00E+00	N/A
MW392	Downgradient	Yes	4.00E-01	NO	-9.16E-01	N/A
MW395	Upgradient	No	1.00E+00	N/A	0.00E+00	N/A
MW397	Upgradient	No	1.00E+00	N/A	0.00E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 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)=1.515 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 Result

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

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

Date Collected	Result	LN(Result)
8/13/2002	2.50E-02	-3.69E+00
9/16/2002	2.50E-02	-3.69E+00
10/17/2002	1.00E-03	-6.91E+00
1/13/2003	1.00E-03	-6.91E+00
4/8/2003	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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW373	Downgradient	Yes	6.42E-04	N/A	-7.35E+00	NO
MW385	Sidegradient	Yes	4.45E-04	N/A	-7.72E+00	NO
MW388	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW392	Downgradient	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	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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 377.875 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

Historical Background Data from Upgradient Wells with Transformed Result

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

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

Date Collected	Result	LN(Result)
8/13/2002	3.22E+02	5.77E+00
9/16/2002	3.15E+02	5.75E+00
10/17/2002	3.17E+02	5.76E+00
1/13/2003	3.20E+02	5.77E+00
4/8/2003	3.90E+02	5.97E+00
7/16/2003	3.54E+02	5.87E+00
10/14/2003	3.31E+02	5.80E+00
1/13/2004	3.34E+02	5.81E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	4.38E+02	NO	6.08E+00	N/A
MW373	Downgradient	Yes	1.02E+03	YES	6.92E+00	N/A
MW385	Sidegradient	Yes	4.60E+02	NO	6.13E+00	N/A
MW388	Downgradient	Yes	4.47E+02	NO	6.10E+00	N/A
MW392	Downgradient	Yes	3.78E+02	NO	5.93E+00	N/A
MW395	Upgradient	Yes	4.04E+02	NO	6.00E+00	N/A
MW397	Upgradient	Yes	3.27E+02	NO	5.79E+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

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 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= 0.013 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 Background Data from Upgradient Wells with Transformed Result

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

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

Date Collected	Result	LN(Result)
8/13/2002	5.00E-02	-3.00E+00
9/16/2002	5.00E-02	-3.00E+00
10/17/2002	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
1/13/2004	2.00E-02	-3.91E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	1.08E-03	NO	-6.83E+00	N/A
MW373	Downgradient	Yes	1.12E-03	NO	-6.79E+00	N/A
MW385	Sidegradient	Yes	1.83E-03	NO	-6.30E+00	N/A
MW388	Downgradient	Yes	1.12E-03	NO	-6.79E+00	N/A
MW392	Downgradient	No	1.15E-03	N/A	-6.77E+00	N/A
MW395	Upgradient	No	9.80E-04	N/A	-6.93E+00	N/A
MW397	Upgradient	Yes	1.26E-03	NO	-6.68E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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 Background Data from Upgradient Wells with Transformed Result

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

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
1/13/2003	2.36E+00	8.59E-01
4/10/2003	1.14E+00	1.31E-01
7/16/2003	1.76E+00	5.65E-01
10/14/2003	4.05E+00	1.40E+00
1/13/2004	4.26E+00	1.45E+00

Well Number: MW397

Date Collected	Result	LN(Result)
8/13/2002	1.16E+01	2.45E+00
9/16/2002	5.86E+00	1.77E+00
10/17/2002	5.94E+00	1.78E+00
1/13/2003	4.66E+00	1.54E+00
4/8/2003	3.77E+00	1.33E+00
7/16/2003	3.47E+00	1.24E+00
10/14/2003	5.34E+00	1.68E+00
1/13/2004	5.51E+00	1.71E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	5.24E+00	NO	1.66E+00	N/A
MW373	Downgradient	Yes	1.90E+00	NO	6.42E-01	N/A
MW385	Sidegradient	Yes	2.19E+00	NO	7.84E-01	N/A
MW388	Downgradient	Yes	5.03E+00	NO	1.62E+00	N/A
MW392	Downgradient	Yes	3.04E+00	NO	1.11E+00	N/A
MW395	Upgradient	Yes	5.52E+00	NO	1.71E+00	N/A
MW397	Upgradient	Yes	6.72E+00	NO	1.91E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 219.250 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

Historical Background Data from Upgradient Wells with Transformed Result

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

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

Date Collected	Result	LN(Result)
8/13/2002	1.87E+02	5.23E+00
9/16/2002	1.97E+02	5.28E+00
10/17/2002	1.83E+02	5.21E+00
1/13/2003	1.82E+02	5.20E+00
4/8/2003	2.17E+02	5.38E+00
7/16/2003	1.96E+02	5.28E+00
10/14/2003	1.98E+02	5.29E+00
1/13/2004	1.77E+02	5.18E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	1.85E+02	NO	5.22E+00	N/A
MW373	Downgradient	Yes	6.18E+02	YES	6.43E+00	N/A
MW385	Sidegradient	Yes	2.13E+02	NO	5.36E+00	N/A
MW388	Downgradient	Yes	2.35E+02	NO	5.46E+00	N/A
MW392	Downgradient	Yes	1.83E+02	NO	5.21E+00	N/A
MW395	Upgradient	Yes	1.80E+02	NO	5.19E+00	N/A
MW397	Upgradient	Yes	1.67E+02	NO	5.12E+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

MW373

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 0.400 S= 0.514 CV(1)=1.286 K factor**= 2.523 TL(1)= 1.70E+00 LL(1)=N/A

Statistics-Transformed Background Data X= -2.197 S= 2.634 CV(2)=-1.199 K factor**= 2.523 TL(2)= 4.45E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

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

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

Date Collected	Result	LN(Result)
8/13/2002	1.58E+00	4.57E-01
9/16/2002	2.32E-01	-1.46E+00
10/17/2002	2.00E-04	-8.52E+00
1/13/2003	4.53E-01	-7.92E-01
4/8/2003	2.00E-01	-1.61E+00
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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	3.39E-02	N/A	-3.38E+00	NO
MW373	Downgradient	Yes	5.44E-02	N/A	-2.91E+00	NO
MW385	Sidegradient	Yes	3.30E-02	N/A	-3.41E+00	NO
MW388	Downgradient	Yes	1.23E-01	N/A	-2.10E+00	NO
MW392	Downgradient	No	6.14E-02	N/A	-2.79E+00	N/A
MW395	Upgradient	No	1.00E-01	N/A	-2.30E+00	N/A
MW397	Upgradient	Yes	4.63E-01	N/A	-7.70E-01	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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

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

Date Collected	Result	LN(Result)
8/13/2002	7.83E+00	2.06E+00
9/16/2002	7.64E+00	2.03E+00
10/17/2002	6.58E-03	-5.02E+00
1/13/2003	6.69E+00	1.90E+00
4/8/2003	7.28E+00	1.99E+00
7/16/2003	7.82E+00	2.06E+00
10/14/2003	7.94E+00	2.07E+00
1/13/2004	7.51E+00	2.02E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	1.10E+01	NO	2.40E+00	N/A
MW373	Downgradient	Yes	2.97E+01	YES	3.39E+00	N/A
MW385	Sidegradient	Yes	1.30E+01	NO	2.56E+00	N/A
MW388	Downgradient	Yes	1.06E+01	NO	2.36E+00	N/A
MW392	Downgradient	Yes	1.11E+01	NO	2.41E+00	N/A
MW395	Upgradient	Yes	1.25E+01	NO	2.53E+00	N/A
MW397	Upgradient	Yes	7.33E+00	NO	1.99E+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

MW373

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

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

Date Collected	Result	LN(Result)
8/13/2002	4.66E-01	-7.64E-01
9/16/2002	7.70E-02	-2.56E+00
10/17/2002	2.80E-02	-3.58E+00
1/13/2003	1.64E-02	-4.11E+00
4/8/2003	4.07E-02	-3.20E+00
7/16/2003	1.67E-02	-4.09E+00
10/14/2003	5.55E-03	-5.19E+00
1/13/2004	5.00E-03	-5.30E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	5.00E-03	N/A	-5.30E+00	N/A
MW373	Downgradient	Yes	6.31E-02	N/A	-2.76E+00	NO
MW385	Sidegradient	Yes	3.10E-02	N/A	-3.47E+00	NO
MW388	Downgradient	Yes	1.25E-03	N/A	-6.68E+00	NO
MW392	Downgradient	Yes	1.26E-02	N/A	-4.37E+00	NO
MW395	Upgradient	No	5.00E-03	N/A	-5.30E+00	N/A
MW397	Upgradient	Yes	7.81E-03	N/A	-4.85E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 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)=1.451 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

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

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

Date Collected	Result	LN(Result)
8/13/2002	2.50E-02	-3.69E+00
9/16/2002	2.50E-02	-3.69E+00
10/17/2002	1.00E-03	-6.91E+00
1/13/2003	1.00E-03	-6.91E+00
4/8/2003	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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
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	3.88E-04	N/A	-7.85E+00	NO
MW388	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW392	Downgradient	No	1.00E-03	N/A	-6.91E+00	N/A
MW395	Upgradient	Yes	2.12E-04	N/A	-8.46E+00	NO
MW397	Upgradient	Yes	3.81E-04	N/A	-7.87E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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 Result

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

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	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

Date Collected	Result	LN(Result)
8/13/2002	5.00E-02	-3.00E+00
9/16/2002	5.00E-02	-3.00E+00
10/17/2002	5.00E-03	-5.30E+00
1/13/2003	5.02E-03	-5.29E+00
4/8/2003	5.00E-03	-5.30E+00
7/16/2003	5.00E-03	-5.30E+00
10/14/2003	5.00E-03	-5.30E+00
1/13/2004	5.00E-03	-5.30E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	2.00E-03	N/A	-6.21E+00	N/A
MW373	Downgradient	Yes	1.43E-03	N/A	-6.55E+00	NO
MW385	Sidegradient	Yes	1.24E-03	N/A	-6.69E+00	NO
MW388	Downgradient	Yes	6.16E-04	N/A	-7.39E+00	NO
MW392	Downgradient	No	2.00E-03	N/A	-6.21E+00	N/A
MW395	Upgradient	Yes	1.05E-03	N/A	-6.86E+00	NO
MW397	Upgradient	Yes	2.07E-03	N/A	-6.18E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

Historical Background Data from Upgradient Wells with Transformed Result

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

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

Well Number: MW397

Date Collected	Result	LN(Result)
8/13/2002	5.84E+00	1.76E+00
9/30/2002	6.00E+00	1.79E+00
10/17/2002	5.75E+00	1.75E+00
1/13/2003	6.00E+00	1.79E+00
4/8/2003	6.30E+00	1.84E+00
7/16/2003	6.20E+00	1.82E+00
10/14/2003	6.36E+00	1.85E+00
1/13/2004	6.32E+00	1.84E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)? Result <LL(1)?	LN(Result)	LN(Result) >TL(2)? LN(Result) <LL(2)?
MW370	Downgradient	Yes	6.00E+00	NO	1.79E+00	N/A
MW373	Downgradient	Yes	6.04E+00	NO	1.80E+00	N/A
MW385	Sidegradient	Yes	6.38E+00	NO	1.85E+00	N/A
MW388	Downgradient	Yes	6.11E+00	NO	1.81E+00	N/A
MW392	Downgradient	Yes	6.07E+00	NO	1.80E+00	N/A
MW395	Upgradient	Yes	5.96E+00	NO	1.79E+00	N/A
MW397	Upgradient	Yes	5.88E+00	NO	1.77E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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/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/A

Historical Background Data from Upgradient Wells with Transformed Result

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

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

Date Collected	Result	LN(Result)
8/13/2002	2.03E+00	7.08E-01
9/16/2002	2.00E+00	6.93E-01
10/17/2002	1.45E-03	-6.54E+00
1/13/2003	1.69E+00	5.25E-01
4/8/2003	1.73E+00	5.48E-01
7/16/2003	2.00E+00	6.93E-01
10/14/2003	1.92E+00	6.52E-01
1/13/2004	1.87E+00	6.26E-01

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	2.42E+00	NO	8.84E-01	N/A
MW373	Downgradient	Yes	2.79E+00	NO	1.03E+00	N/A
MW385	Sidegradient	Yes	1.69E+00	NO	5.25E-01	N/A
MW388	Downgradient	Yes	1.64E+00	NO	4.95E-01	N/A
MW392	Downgradient	Yes	1.96E+00	NO	6.73E-01	N/A
MW395	Upgradient	Yes	1.73E+00	NO	5.48E-01	N/A
MW397	Upgradient	Yes	1.73E+00	NO	5.48E-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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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

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

Date Collected	Result	LN(Result)
8/13/2002	3.52E+01	3.56E+00
9/16/2002	3.43E+01	3.54E+00
10/17/2002	3.36E-02	-3.39E+00
1/13/2003	3.13E+01	3.44E+00
4/8/2003	4.61E+01	3.83E+00
7/16/2003	3.84E+01	3.65E+00
10/14/2003	3.71E+01	3.61E+00
1/13/2004	3.43E+01	3.54E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	4.01E+01	NO	3.69E+00	N/A
MW373	Downgradient	Yes	6.92E+01	YES	4.24E+00	N/A
MW385	Sidegradient	Yes	3.33E+01	NO	3.51E+00	N/A
MW388	Downgradient	Yes	4.32E+01	NO	3.77E+00	N/A
MW392	Downgradient	Yes	2.75E+01	NO	3.31E+00	N/A
MW395	Upgradient	Yes	3.44E+01	NO	3.54E+00	N/A
MW397	Upgradient	Yes	3.12E+01	NO	3.44E+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

MW373

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

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

Date Collected	Result	LN(Result)
8/13/2002	1.40E+01	2.64E+00
9/16/2002	1.28E+01	2.55E+00
10/17/2002	1.23E+01	2.51E+00
1/13/2003	1.27E+01	2.54E+00
4/8/2003	1.28E+01	2.55E+00
7/16/2003	1.31E+01	2.57E+00
10/14/2003	1.21E+01	2.49E+00
1/13/2004	1.21E+01	2.49E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	1.94E+01	YES	2.97E+00	N/A
MW373	Downgradient	Yes	2.25E+02	YES	5.42E+00	N/A
MW385	Sidegradient	Yes	1.83E+01	YES	2.91E+00	N/A
MW388	Downgradient	Yes	1.73E+01	YES	2.85E+00	N/A
MW392	Downgradient	Yes	7.51E+00	NO	2.02E+00	N/A
MW395	Upgradient	Yes	1.10E+01	NO	2.40E+00	N/A
MW397	Upgradient	Yes	1.14E+01	NO	2.43E+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

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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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 Background Data from Upgradient Wells with Transformed 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)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	No	9.90E+00	N/A	2.29E+00	N/A
MW373	Downgradient	No	4.84E-01	N/A	-7.26E-01	N/A
MW385	Sidegradient	Yes	3.81E+01	YES	3.64E+00	N/A
MW388	Downgradient	No	5.91E+00	N/A	1.78E+00	N/A
MW392	Downgradient	No	1.59E+00	N/A	4.64E-01	N/A
MW395	Upgradient	No	-2.62E+00	N/A	#Error	N/A
MW397	Upgradient	No	3.37E+00	N/A	1.21E+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

MW385

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Historical Background Comparison

Total Organic Carbon (TOC)

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= 1.544 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

Historical Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

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

Date Collected	Result	LN(Result)
8/13/2002	1.00E+00	0.00E+00
9/16/2002	1.00E+00	0.00E+00
10/17/2002	1.00E+00	0.00E+00
1/13/2003	3.60E+00	1.28E+00
4/8/2003	1.90E+00	6.42E-01
7/16/2003	1.10E+00	9.53E-02
10/14/2003	1.00E+00	0.00E+00
1/13/2004	1.00E+00	0.00E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	8.27E-01	NO	-1.90E-01	N/A
MW373	Downgradient	Yes	1.43E+00	NO	3.58E-01	N/A
MW385	Sidegradient	Yes	9.28E-01	NO	-7.47E-02	N/A
MW388	Downgradient	Yes	8.48E-01	NO	-1.65E-01	N/A
MW392	Downgradient	Yes	4.49E-01	NO	-8.01E-01	N/A
MW395	Upgradient	Yes	4.85E-01	NO	-7.24E-01	N/A
MW397	Upgradient	Yes	4.49E-01	NO	-8.01E-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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, 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

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

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)
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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	7.96E+00	NO	2.07E+00	N/A
MW373	Downgradient	Yes	9.53E+00	NO	2.25E+00	N/A
MW385	Sidegradient	Yes	9.93E+00	NO	2.30E+00	N/A
MW388	Downgradient	Yes	5.25E+00	NO	1.66E+00	N/A
MW392	Downgradient	Yes	1.02E+01	NO	2.32E+00	N/A
MW395	Upgradient	Yes	8.20E+00	NO	2.10E+00	N/A
MW397	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 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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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 or is less than the LL, that is statistically significant evidence of elevated or lowered concentration in that well.

Statistics-Background Data X= 0.044 S= 0.034 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= 0.659 CV(2)=-0.197 K factor**= 2.523 TL(2)= -1.68E+00 LL(2)=N/A

Historical Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

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

Date Collected	Result	LN(Result)
8/13/2002	1.00E-01	-2.30E+00
9/16/2002	1.00E-01	-2.30E+00
10/17/2002	2.50E-02	-3.69E+00
1/13/2003	3.50E-02	-3.35E+00
4/8/2003	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

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW370	Downgradient	Yes	4.80E-03	NO	-5.34E+00	N/A
MW373	Downgradient	Yes	4.69E-03	NO	-5.36E+00	N/A
MW385	Sidegradient	Yes	4.81E-03	NO	-5.34E+00	N/A
MW388	Downgradient	Yes	3.43E-03	NO	-5.68E+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	Yes	5.18E-03	NO	-5.26E+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, $S = [\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])]^{0.5}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

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 Fourth Quarter 2025 Statistical Analysis	Current 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 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= 372.613	S= 67.161	CV(1)=0.180	K factor**= 3.188	TL(1)= 5.87E+02	LL(1)=N/A

Statistics-Transformed Background Data	X= 5.905	S= 0.189	CV(2)=0.032	K factor**= 3.188	TL(2)= 6.51E+00	LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW396

Date Collected	Result	LN(Result)
10/18/2023	2.62E+02	5.57E+00
1/30/2024	3.08E+02	5.73E+00
4/16/2024	3.53E+02	5.87E+00
7/24/2024	3.73E+02	5.92E+00
10/15/2024	4.40E+02	6.09E+00
1/29/2025	3.69E+02	5.91E+00
4/16/2025	4.67E+02	6.15E+00
7/24/2025	4.09E+02	6.01E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW386	Sidegradient	Yes	4.28E+02	NO	6.06E+00	N/A
MW390	Downgradient	Yes	5.32E+02	NO	6.28E+00	N/A
MW393	Downgradient	Yes	4.71E+02	NO	6.15E+00	N/A
MW396	Upgradient	Yes	5.11E+02	NO	6.24E+00	N/A

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis
Technetium-99

Current Background Comparison
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 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= -0.885	S= 5.480	CV(1)=-6.192	K factor**= 3.188	TL(1)= 1.66E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 1.237	S= 0.559	CV(2)=0.452	K factor**= 3.188	TL(2)= 1.90E+00	LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

Well Number: MW396		
Date Collected	Result	LN(Result)
10/18/2023	4.46E+00	1.50E+00
1/30/2024	-5.21E+00	#Func!
4/16/2024	-3.78E+00	#Func!
7/24/2024	-8.86E+00	#Func!
10/15/2024	2.29E+00	8.29E-01
1/29/2025	-4.73E+00	#Func!
4/16/2025	2.06E+00	7.23E-01
7/24/2025	6.69E+00	1.90E+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)?	LN(Result)	LN(Result) >TL(2)
MW390	Downgradient	Yes	4.14E+01	YES	3.72E+00	N/A

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.

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.

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.

C-746-S/T Fourth 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.

Statistics-Background Data X= 10.834 S= 7.307 CV(1)=0.674 K factor**= 2.523 TL(1)= 2.93E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 2.171 S= 0.686 CV(2)=0.316 K factor**= 2.523 TL(2)= 3.90E+00 LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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)
10/16/2023	1.90E+01	2.94E+00
1/29/2024	1.82E+01	2.90E+00
4/11/2024	2.95E+01	3.38E+00
7/24/2024	1.76E+01	2.87E+00
10/14/2024	1.06E+01	2.36E+00
1/29/2025	9.86E+00	2.29E+00
4/14/2025	9.59E+00	2.26E+00
7/23/2025	1.54E+01	2.73E+00

Well Number: MW394

Date Collected	Result	LN(Result)
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
1/29/2025	4.58E+00	1.52E+00
4/16/2025	6.84E+00	1.92E+00
7/24/2025	6.56E+00	1.88E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW387	Downgradient	Yes	9.34E+01	YES	4.54E+00	N/A

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.

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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= 25.450 S= 2.705 CV(1)=0.106 K factor**= 2.523 TL(1)= 3.23E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 3.231 S= 0.112 CV(2)=0.035 K factor**= 2.523 TL(2)= 3.51E+00 LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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)
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
1/29/2025	2.40E+01	3.18E+00
4/14/2025	2.62E+01	3.27E+00
7/23/2025	2.73E+01	3.31E+00

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	2.79E+01	3.33E+00
1/30/2024	2.68E+01	3.29E+00
4/16/2024	2.79E+01	3.33E+00
7/24/2024	2.75E+01	3.31E+00
10/15/2024	2.66E+01	3.28E+00
1/29/2025	2.79E+01	3.33E+00
4/16/2025	2.80E+01	3.33E+00
7/24/2025	2.60E+01	3.26E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW372	Downgradient	Yes	6.30E+01	YES	4.14E+00	N/A

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.

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis	Current 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 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=400.563 S= 39.192 CV(1)=0.098 **K factor**= 2.523** TL(1)= 4.99E+02 LL(1)=N/A

Statistics-Transformed Background Data X= 5.988 S= 0.102 CV(2)=0.017 **K factor**= 2.523** TL(2)= 6.25E+00 LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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)
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
1/29/2025	4.63E+02	6.14E+00
4/14/2025	4.34E+02	6.07E+00
7/23/2025	4.26E+02	6.05E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW372	Downgradient	Yes	8.03E+02	YES	6.69E+00	N/A

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	4.03E+02	6.00E+00
1/30/2024	4.07E+02	6.01E+00
4/16/2024	4.14E+02	6.03E+00
7/24/2024	4.00E+02	5.99E+00
10/15/2024	4.01E+02	5.99E+00
1/29/2025	4.36E+02	6.08E+00
4/16/2025	4.29E+02	6.06E+00
7/24/2025	4.05E+02	6.00E+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.

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Current 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 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**= 192.750 **S**= 55.146 **CV(1)**=0.286 **K factor****= 2.523 **TL(1)**= 3.32E+02 **LL(1)**=N/A

Statistics-Transformed Background Data **X**= 5.126 **S**= 0.764 **CV(2)**=0.149 **K factor****= 2.523 **TL(2)**= 7.05E+00 **LL(2)**=N/A

Current Background Data from Upgradient Wells with Transformed Result

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)
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
1/29/2025	2.05E+02	5.32E+00
4/14/2025	2.36E+02	5.46E+00
7/23/2025	2.53E+02	5.53E+00

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	1.70E+02	5.14E+00
1/30/2024	2.00E+02	5.30E+00
4/16/2024	1.92E+02	5.26E+00
7/24/2024	2.17E+02	5.38E+00
10/15/2024	2.11E+02	5.35E+00
1/29/2025	1.00E+01	2.30E+00
4/16/2025	2.22E+02	5.40E+00
7/24/2025	1.95E+02	5.27E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW372	Downgradient	Yes	4.49E+02	YES	6.11E+00	N/A
MW387	Downgradient	Yes	3.03E+02	NO	5.71E+00	N/A

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.

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, $S = \sqrt{[\text{Sum} ((\text{background result}-X)^2)/[\text{count of background results} - 1]]}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis

Current 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 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= 10.613	S= 1.185	CV(1)=0.112	K factor**= 2.523	TL(1)= 1.36E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 2.356	S= 0.118	CV(2)=0.050	K factor**= 2.523	TL(2)= 2.65E+00	LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

Well Number: MW220

Date Collected	Result	LN(Result)
10/16/2023	8.85E+00	2.18E+00
1/29/2024	8.23E+00	2.11E+00
4/11/2024	9.96E+00	2.30E+00
7/24/2024	1.04E+01	2.34E+00
10/14/2024	8.55E+00	2.15E+00
1/29/2025	9.82E+00	2.28E+00
4/14/2025	1.11E+01	2.41E+00
7/23/2025	1.12E+01	2.42E+00

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	1.16E+01	2.45E+00
1/30/2024	1.10E+01	2.40E+00
4/16/2024	1.16E+01	2.45E+00
7/24/2024	1.15E+01	2.44E+00
10/15/2024	1.14E+01	2.43E+00
1/29/2025	1.17E+01	2.46E+00
4/16/2025	1.18E+01	2.47E+00
7/24/2025	1.11E+01	2.41E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW372	Downgradient	Yes	2.25E+01	YES	3.11E+00	N/A
MW387	Downgradient	Yes	1.64E+01	YES	2.80E+00	N/A

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.

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis**Current 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 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**=440.863 **S**= 50.912 **CV(1)**=0.115 **K factor****= 2.523 **TL(1)**= 5.69E+02 **LL(1)**=N/A

Statistics-Transformed Background Data **X**= 6.083 **S**= 0.114 **CV(2)**=0.019 **K factor****= 2.523 **TL(2)**= 6.37E+00 **LL(2)**=N/A

Current Background Data from Upgradient Wells with Transformed Result

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)
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
1/29/2025	4.39E+02	6.09E+00
4/14/2025	4.28E+02	6.06E+00
7/23/2025	4.46E+02	6.10E+00

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	4.61E+02	6.13E+00
1/30/2024	5.18E+02	6.25E+00
4/16/2024	4.12E+02	6.02E+00
7/24/2024	4.04E+02	6.00E+00
10/15/2024	5.34E+02	6.28E+00
1/29/2025	3.78E+02	5.93E+00
4/16/2025	4.98E+02	6.21E+00
7/24/2025	4.08E+02	6.01E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW220	Upgradient	Yes	5.53E+02	NO	6.32E+00	N/A
MW221	Sidegradient	Yes	5.38E+02	NO	6.29E+00	N/A
MW222	Sidegradient	Yes	5.13E+02	NO	6.24E+00	N/A
MW223	Sidegradient	Yes	5.31E+02	NO	6.27E+00	N/A
MW224	Sidegradient	Yes	5.08E+02	NO	6.23E+00	N/A
MW369	Downgradient	Yes	4.92E+02	NO	6.20E+00	N/A
MW372	Downgradient	Yes	5.20E+02	NO	6.25E+00	N/A
MW384	Sidegradient	Yes	4.87E+02	NO	6.19E+00	N/A
MW387	Downgradient	Yes	5.11E+02	NO	6.24E+00	N/A
MW391	Downgradient	Yes	4.40E+02	NO	6.09E+00	N/A
MW394	Upgradient	Yes	5.07E+02	NO	6.23E+00	N/A

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Current 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 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**= 37.500 **S**= 5.246 **CV(1)**=0.140 **K factor****= 2.523 **TL(1)**= 5.07E+01 **LL(1)**=N/A

Statistics-Transformed Background Data **X**= 3.616 **S**= 0.135 **CV(2)**=0.037 **K factor****= 2.523 **TL(2)**= 3.96E+00 **LL(2)**=N/A

Current Background Data from Upgradient Wells with Transformed Result

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)
10/16/2023	3.72E+01	3.62E+00
1/29/2024	3.58E+01	3.58E+00
4/11/2024	4.34E+01	3.77E+00
7/24/2024	4.60E+01	3.83E+00
10/14/2024	3.69E+01	3.61E+00
1/29/2025	4.12E+01	3.72E+00
4/14/2025	4.60E+01	3.83E+00
7/23/2025	4.61E+01	3.83E+00

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	3.45E+01	3.54E+00
1/30/2024	3.16E+01	3.45E+00
4/16/2024	3.41E+01	3.53E+00
7/24/2024	3.32E+01	3.50E+00
10/15/2024	3.29E+01	3.49E+00
1/29/2025	3.36E+01	3.51E+00
4/16/2025	3.52E+01	3.56E+00
7/24/2025	3.23E+01	3.48E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW372	Downgradient	Yes	6.43E+01	YES	4.16E+00	N/A

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.

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis Current 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 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= 15.194 S= 4.019 CV(1)=0.265 K factor**= 2.523 TL(1)= 2.53E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 2.690 S= 0.254 CV(2)=0.095 K factor**= 2.523 TL(2)= 3.33E+00 LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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)
10/16/2023	1.55E+01	2.74E+00
1/29/2024	1.47E+01	2.69E+00
4/11/2024	1.86E+01	2.92E+00
7/24/2024	2.16E+01	3.07E+00
10/14/2024	1.66E+01	2.81E+00
1/29/2025	1.91E+01	2.95E+00
4/14/2025	2.22E+01	3.10E+00
7/23/2025	2.06E+01	3.03E+00

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	1.17E+01	2.46E+00
1/30/2024	1.16E+01	2.45E+00
4/16/2024	1.20E+01	2.48E+00
7/24/2024	1.17E+01	2.46E+00
10/15/2024	1.17E+01	2.46E+00
1/29/2025	1.16E+01	2.45E+00
4/16/2025	1.18E+01	2.47E+00
7/24/2025	1.21E+01	2.49E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW224	Sidegradient	Yes	1.80E+01	NO	2.89E+00	N/A
MW372	Downgradient	Yes	1.44E+02	YES	4.97E+00	N/A
MW384	Sidegradient	Yes	2.95E+01	YES	3.38E+00	N/A
MW387	Downgradient	Yes	2.92E+01	YES	3.37E+00	N/A

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.

Wells with Exceedances

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, $S = \sqrt{\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis	Current 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 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= 8.414	S= 6.557	CV(1)=0.779	K factor**= 2.523	TL(1)= 2.50E+01	LL(1)=N/A

Statistics-Transformed Background Data	X= 1.454	S= 1.683	CV(2)=1.158	K factor**= 2.523	TL(2)= 5.70E+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 Background Data from Upgradient Wells with Transformed Result

Well Number: MW220

Date Collected	Result	LN(Result)
10/16/2023	1.58E+01	2.76E+00
1/29/2024	2.00E+01	3.00E+00
4/11/2024	1.64E+01	2.80E+00
7/24/2024	2.79E+00	1.03E+00
10/14/2024	1.48E+01	2.69E+00
1/29/2025	8.02E+00	2.08E+00
4/14/2025	1.05E+01	2.35E+00
7/23/2025	4.27E+00	1.45E+00

Well Number: MW394

Date Collected	Result	LN(Result)
10/17/2023	1.63E+01	2.79E+00
1/30/2024	2.34E+00	8.50E-01
4/16/2024	5.85E+00	1.77E+00
7/24/2024	6.82E+00	1.92E+00
10/15/2024	1.47E-01	-1.92E+00
1/29/2025	9.28E+00	2.23E+00
4/16/2025	1.25E+00	2.23E-01
7/24/2025	6.34E-02	-2.76E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW369	Downgradient	Yes	7.26E+01	YES	4.28E+00	N/A
MW372	Downgradient	Yes	6.71E+01	YES	4.21E+00	N/A
MW387	Downgradient	Yes	1.09E+02	YES	4.69E+00	N/A

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.

Wells with Exceedances

MW369
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, $S = \sqrt{[\text{Sum} ((\text{background result}-X)^2)/[\text{count of background results} - 1]]}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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= 23.738 S= 5.031 CV(1)=0.212 K factor**= 2.523 TL(1)= 3.64E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 3.145 S= 0.218 CV(2)=0.069 K factor**= 2.523 TL(2)= 3.70E+00 LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
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
1/29/2025	2.79E+01	3.33E+00
4/16/2025	2.81E+01	3.34E+00
7/24/2025	2.69E+01	3.29E+00

Well Number: MW397

Date Collected	Result	LN(Result)
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
1/29/2025	3.18E+01	3.46E+00
4/14/2025	1.91E+01	2.95E+00
7/23/2025	1.83E+01	2.91E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW373	Downgradient	Yes	8.04E+01	YES	4.39E+00	N/A

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.

Wells with Exceedances

MW373

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis
Current 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 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= 361.063	S= 40.117	CV(1)=0.111	K factor**= 2.523	TL(1)= 4.62E+02	LL(1)=N/A
Statistics-Transformed Background Data	X= 5.883	S= 0.113	CV(2)=0.019	K factor**= 2.523	TL(2)= 6.17E+00	LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
10/18/2023	3.83E+02	5.95E+00
1/30/2024	3.88E+02	5.96E+00
4/16/2024	4.01E+02	5.99E+00
7/24/2024	3.91E+02	5.97E+00
10/15/2024	3.84E+02	5.95E+00
1/29/2025	3.87E+02	5.96E+00
4/16/2025	4.01E+02	5.99E+00
7/24/2025	3.94E+02	5.98E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW373	Downgradient	Yes	1.02E+03	YES	6.92E+00	N/A

Well Number: MW397

Date Collected	Result	LN(Result)
10/16/2023	3.09E+02	5.73E+00
1/30/2024	3.17E+02	5.76E+00
4/15/2024	3.14E+02	5.75E+00
7/22/2024	3.18E+02	5.76E+00
10/16/2024	4.20E+02	6.04E+00
1/29/2025	3.16E+02	5.76E+00
4/14/2025	3.24E+02	5.78E+00
7/23/2025	3.30E+02	5.80E+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.

Wells with Exceedances

MW373

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.

C-746-S/T Fourth 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= 185.125 S= 22.081 CV(1)=0.119 K factor**= 2.523 TL(1)= 2.41E+02 LL(1)=N/A

Statistics-Transformed Background Data X= 5.214 S= 0.120 CV(2)=0.023 K factor**= 2.523 TL(2)= 5.52E+00 LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
10/18/2023	1.76E+02	5.17E+00
1/30/2024	2.07E+02	5.33E+00
4/16/2024	2.02E+02	5.31E+00
7/24/2024	2.14E+02	5.37E+00
10/15/2024	2.09E+02	5.34E+00
1/29/2025	1.78E+02	5.18E+00
4/16/2025	2.13E+02	5.36E+00
7/24/2025	2.07E+02	5.33E+00

Well Number: MW397

Date Collected	Result	LN(Result)
10/16/2023	1.65E+02	5.11E+00
1/30/2024	1.61E+02	5.08E+00
4/15/2024	1.66E+02	5.11E+00
7/22/2024	1.60E+02	5.08E+00
10/16/2024	1.64E+02	5.10E+00
1/29/2025	1.52E+02	5.02E+00
4/14/2025	2.00E+02	5.30E+00
7/23/2025	1.88E+02	5.24E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW373	Downgradient	Yes	6.18E+02	YES	6.43E+00	N/A

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.

Wells with Exceedances

MW373

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis	Current Background Comparison
Magnesium	LRGA
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= 10.048	S= 2.251	CV(1)=0.224	K factor**= 2.523	TL(1)= 1.57E+01	LL(1)=N/A

Statistics-Transformed Background Data	X= 2.283	S= 0.228	CV(2)=0.100	K factor**= 2.523	TL(2)= 2.86E+00	LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
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
1/29/2025	1.18E+01	2.47E+00
4/16/2025	1.24E+01	2.52E+00
7/24/2025	1.17E+01	2.46E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW373	Downgradient	Yes	2.97E+01	YES	3.39E+00	N/A

Well Number: MW397

Date Collected	Result	LN(Result)
10/16/2023	7.83E+00	2.06E+00
1/30/2024	7.49E+00	2.01E+00
4/15/2024	7.73E+00	2.05E+00
7/22/2024	7.52E+00	2.02E+00
10/16/2024	7.57E+00	2.02E+00
1/29/2025	1.42E+01	2.65E+00
4/14/2025	8.23E+00	2.11E+00
7/23/2025	7.60E+00	2.03E+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.

Wells with Exceedances

MW373

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis	Current Background Comparison
Oxidation-Reduction Potential	LRGA

UNITS: mV

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=424.063 S= 58.038 CV(1)=0.137 **K factor**= 2.523** TL(1)= 5.70E+02 LL(1)=N/A

Statistics-Transformed Background Data X= 6.041 S= 0.137 CV(2)=0.023 **K factor**= 2.523** TL(2)= 6.39E+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 Background Data from Upgradient Wells with Transformed Result

Well Number: MW395

Date Collected	Result	LN(Result)
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
1/29/2025	3.84E+02	5.95E+00
4/16/2025	4.80E+02	6.17E+00
7/24/2025	3.91E+02	5.97E+00

Well Number: MW397

Date Collected	Result	LN(Result)
10/16/2023	4.87E+02	6.19E+00
1/30/2024	5.40E+02	6.29E+00
4/15/2024	3.74E+02	5.92E+00
7/22/2024	3.97E+02	5.98E+00
10/16/2024	3.13E+02	5.75E+00
1/29/2025	3.89E+02	5.96E+00
4/14/2025	4.23E+02	6.05E+00
7/23/2025	4.37E+02	6.08E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW370	Downgradient	Yes	5.05E+02	NO	6.22E+00	N/A
MW373	Downgradient	Yes	4.81E+02	NO	6.18E+00	N/A
MW385	Sidegradient	Yes	4.21E+02	NO	6.04E+00	N/A
MW388	Downgradient	Yes	4.73E+02	NO	6.16E+00	N/A
MW392	Downgradient	Yes	5.24E+02	NO	6.26E+00	N/A
MW395	Upgradient	Yes	5.23E+02	NO	6.26E+00	N/A
MW397	Upgradient	Yes	5.12E+02	NO	6.24E+00	N/A

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, $S = \sqrt{[\text{Sum}([(background\ result - X)^2]/[\text{count of background results} - 1])}$

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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**= 35.881 **S**= 16.957 **CV(1)**=0.473 **K factor****= 2.523 **TL(1)**= 7.87E+01 **LL(1)**=N/A

Statistics-Transformed Background Data **X**= 3.525 **S**= 0.290 **CV(2)**=0.082 **K factor****= 2.523 **TL(2)**= 4.26E+00 **LL(2)**=N/A

Current Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
10/18/2023	3.06E+01	3.42E+00
1/30/2024	2.92E+01	3.37E+00
4/16/2024	3.14E+01	3.45E+00
7/24/2024	3.08E+01	3.43E+00
10/15/2024	3.06E+01	3.42E+00
1/29/2025	3.11E+01	3.44E+00
4/16/2025	3.40E+01	3.53E+00
7/24/2025	3.08E+01	3.43E+00

Well Number: MW397

Date Collected	Result	LN(Result)
10/16/2023	3.15E+01	3.45E+00
1/30/2024	3.00E+01	3.40E+00
4/15/2024	3.19E+01	3.46E+00
7/22/2024	3.23E+01	3.48E+00
10/16/2024	3.17E+01	3.46E+00
1/29/2025	9.92E+01	4.60E+00
4/14/2025	3.54E+01	3.57E+00
7/23/2025	3.36E+01	3.51E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW373	Downgradient	Yes	6.92E+01	NO	4.24E+00	N/A

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth 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= 11.431 S= 0.326 CV(1)=0.029 K factor**= 2.523 TL(1)= 1.23E+01 LL(1)=N/A

Statistics-Transformed Background Data X= 2.436 S= 0.028 CV(2)=0.012 K factor**= 2.523 TL(2)= 2.51E+00 LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

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

Well Number: MW395

Date Collected	Result	LN(Result)
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
1/29/2025	1.11E+01	2.41E+00
4/16/2025	1.15E+01	2.44E+00
7/24/2025	1.13E+01	2.42E+00

Well Number: MW397

Date Collected	Result	LN(Result)
10/16/2023	1.15E+01	2.44E+00
1/30/2024	1.16E+01	2.45E+00
4/15/2024	1.17E+01	2.46E+00
7/22/2024	1.18E+01	2.47E+00
10/16/2024	1.14E+01	2.43E+00
1/29/2025	1.14E+01	2.43E+00
4/14/2025	1.21E+01	2.49E+00
7/23/2025	1.19E+01	2.48E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result > TL(1)?	LN(Result)	LN(Result) > TL(2)
MW370	Downgradient	Yes	1.94E+01	YES	2.97E+00	N/A
MW373	Downgradient	Yes	2.25E+02	YES	5.42E+00	N/A
MW385	Sidegradient	Yes	1.83E+01	YES	2.91E+00	N/A
MW388	Downgradient	Yes	1.73E+01	YES	2.85E+00	N/A

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.

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.

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

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

C-746-S/T Fourth Quarter 2025 Statistical Analysis
Technetium-99

Current Background Comparison
LRGA

UNITS: pCi/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=9.556	S= 6.681	CV(1)=0.699	K factor**= 2.523	TL(1)= 2.64E+01	LL(1)=N/A
Statistics-Transformed Background Data	X= 1.996	S= 0.778	CV(2)=0.390	K factor**= 2.523	TL(2)= 3.96E+00	LL(2)=N/A

Current Background Data from Upgradient Wells with Transformed Result

Well Number: MW395

Date Collected	Result	LN(Result)
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
1/29/2025	2.80E+00	1.03E+00
4/16/2025	2.75E+00	1.01E+00
7/24/2025	5.35E+00	1.68E+00

Well Number: MW397

Date Collected	Result	LN(Result)
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
1/29/2025	1.90E+01	2.94E+00
4/14/2025	1.68E+01	2.82E+00
7/23/2025	4.62E+00	1.53E+00

Current Quarter Data

Well No.	Gradient	Detected?	Result	Result >TL(1)?	LN(Result)	LN(Result) >TL(2)
MW385	Sidegradient	Yes	3.81E+01	YES	3.64E+00	N/A

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.

Wells with Exceedances

MW385

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

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

X Mean, $X = (\text{sum of background results})/(\text{count of background results})$

** 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.

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ATTACHMENT D3

STATISTICIAN QUALIFICATION STATEMENT

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January 22, 2026

Ms. Katrina Hall
Four Rivers Nuclear Partnership, LLC
5511 Hobbs Road
Kevil, KY 42053

Dear Ms. Hall:

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 fourth quarter 2025 monitoring well data collected from the C-746-S Residential Landfill, C-746-T Inert Landfill, and C-746-U Contained Landfill were performed in accordance with guidance provided in the U.S. Environmental Protection Agency guidance document, *Statistical Analysis of Ground-Water 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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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 fourth quarter 2025 and to determine the groundwater flow rate and direction.

Water levels during this reporting period were measured on October 14, 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 contain 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 north 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 7.98×10^{-4} ft/ft. Additional water level measurements in October (Figure E.3) document the vicinity groundwater hydraulic gradient for the RGA to be 5.87×10^{-4} ft/ft, northward. 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. SW073-00045 NWC1 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.

Vicinity groundwater flow near the C-746-S&T Landfills typically trends northeastward toward the Ohio River. As demonstrated on the potentiometric map for October 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 vicinity (MW98, MW100, MW125, MW139, MW165A, MW173, MW193, MW197, and MW200), were used to contour the RGA potentiometric surface (Table E.4).

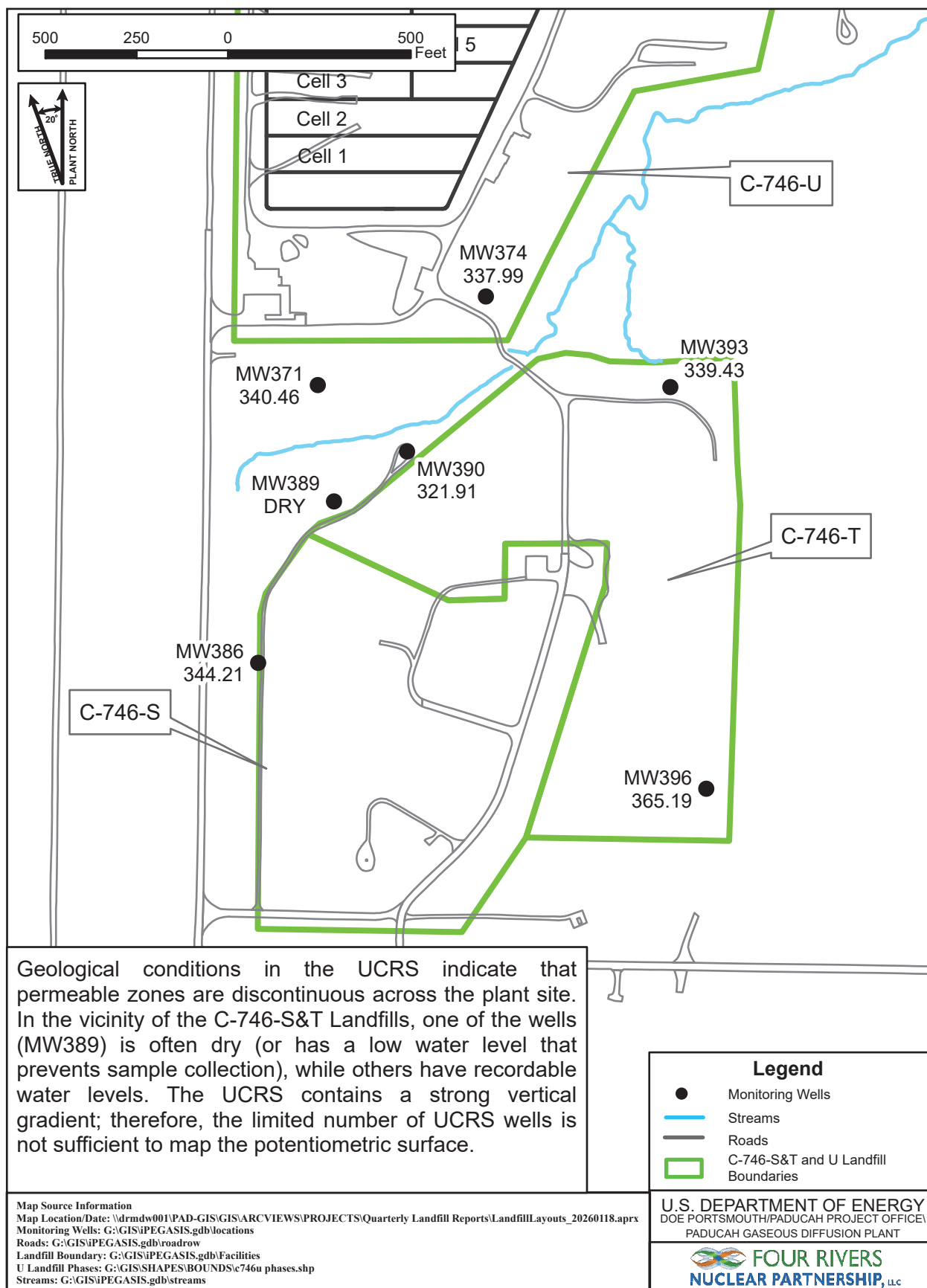


Figure E.1. Potentiometric Measurements of the Upper Continental Recharge System at the C-746-S&T Landfills, October 14, 2025

Table E.1. C-746-S&T Landfills Fourth Quarter 2025 (October) Water Levels

C-746-S&T Landfills (October 2025) Water Levels										
Date	Time	Well	Formation	Datum Elev	BP	Delta BP	Raw Data		*Corrected Data	
							DTW	Elev	DTW	Elev
				(ft amsl)	(in Hg)	(ft H20)	(ft)	(ft amsl)	(ft)	(ft amsl)
10/14/2025	13:10	MW220	URGA	382.01	30.21	0.03	56.81	325.20	56.84	325.17
10/14/2025	13:19	MW221	URGA	391.38	30.21	0.03	66.45	324.93	66.48	324.90
10/14/2025	13:14	MW222	URGA	395.27	30.21	0.03	70.51	324.76	70.54	324.73
10/14/2025	13:16	MW223	URGA	394.38	30.21	0.03	69.54	324.84	69.57	324.81
10/14/2025	13:12	MW224	URGA	395.69	30.21	0.03	70.61	325.08	70.64	325.05
10/14/2025	13:03	MW225	URGA	385.73	30.21	0.03	60.63	325.10	60.66	325.07
10/14/2025	12:34	MW353	LRGA	375.05	30.24	0.00	49.34	325.71	49.34	325.71
10/14/2025	10:18	MW369	URGA	364.23	30.24	0.00	39.31	324.92	39.31	324.92
10/14/2025	10:19	MW370	LRGA	365.12	30.24	0.00	40.20	324.92	40.20	324.92
10/14/2025	10:20	MW371	UCRS	364.64	30.24	0.00	24.18	340.46	24.18	340.46
10/14/2025	10:16	MW372	URGA	359.42	30.24	0.00	34.47	324.95	34.47	324.95
10/14/2025	10:14	MW373	LRGA	359.73	30.24	0.00	34.77	324.96	34.77	324.96
10/14/2025	10:15	MW374	UCRS	359.44	30.24	0.00	21.45	337.99	21.45	337.99
10/14/2025	12:54	MW384	URGA	365.29	30.21	0.03	40.31	324.98	40.34	324.95
10/14/2025	12:55	MW385	LRGA	365.74	30.21	0.03	40.70	325.04	40.73	325.01
10/14/2025	12:56	MW386	UCRS	365.32	30.21	0.03	21.08	344.24	21.11	344.21
10/14/2025	12:57	MW387	URGA	363.48	30.21	0.03	38.55	324.93	38.58	324.90
10/14/2025	12:58	MW388	LRGA	363.45	30.21	0.03	38.52	324.93	38.55	324.90
10/14/2025	12:59	MW389	UCRS	364.11	30.21	0.03	N/A	N/A	N/A	N/A
10/14/2025	13:00	MW390	UCRS	360.39	30.21	0.03	35.45	324.94	35.48	324.91
10/14/2025	12:39	MW391	URGA	366.67	30.24	0.00	41.75	324.92	41.75	324.92
10/14/2025	12:40	MW392	LRGA	365.85	30.24	0.00	40.94	324.91	40.94	324.91
10/14/2025	12:41	MW393	UCRS	366.62	30.24	0.00	27.19	339.43	27.19	339.43
10/14/2025	12:49	MW394	URGA	378.46	30.24	0.00	53.14	325.32	53.14	325.32
10/14/2025	12:47	MW395	LRGA	379.12	30.24	0.00	53.84	325.28	53.84	325.28
10/14/2025	12:48	MW396	UCRS	378.75	30.24	0.00	13.56	365.19	13.56	365.19
10/14/2025	12:51	MW397	LRGA	387.00	30.24	0.00	61.68	325.32	61.68	325.32
10/14/2025	12:43	MW418	URGA	367.21	30.24	0.00	42.15	325.06	42.15	325.06
10/14/2025	12:44	MW419	LRGA	367.05	30.24	0.00	42.00	325.05	42.00	325.05
Reference Barometric Pressure				30.24						
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										

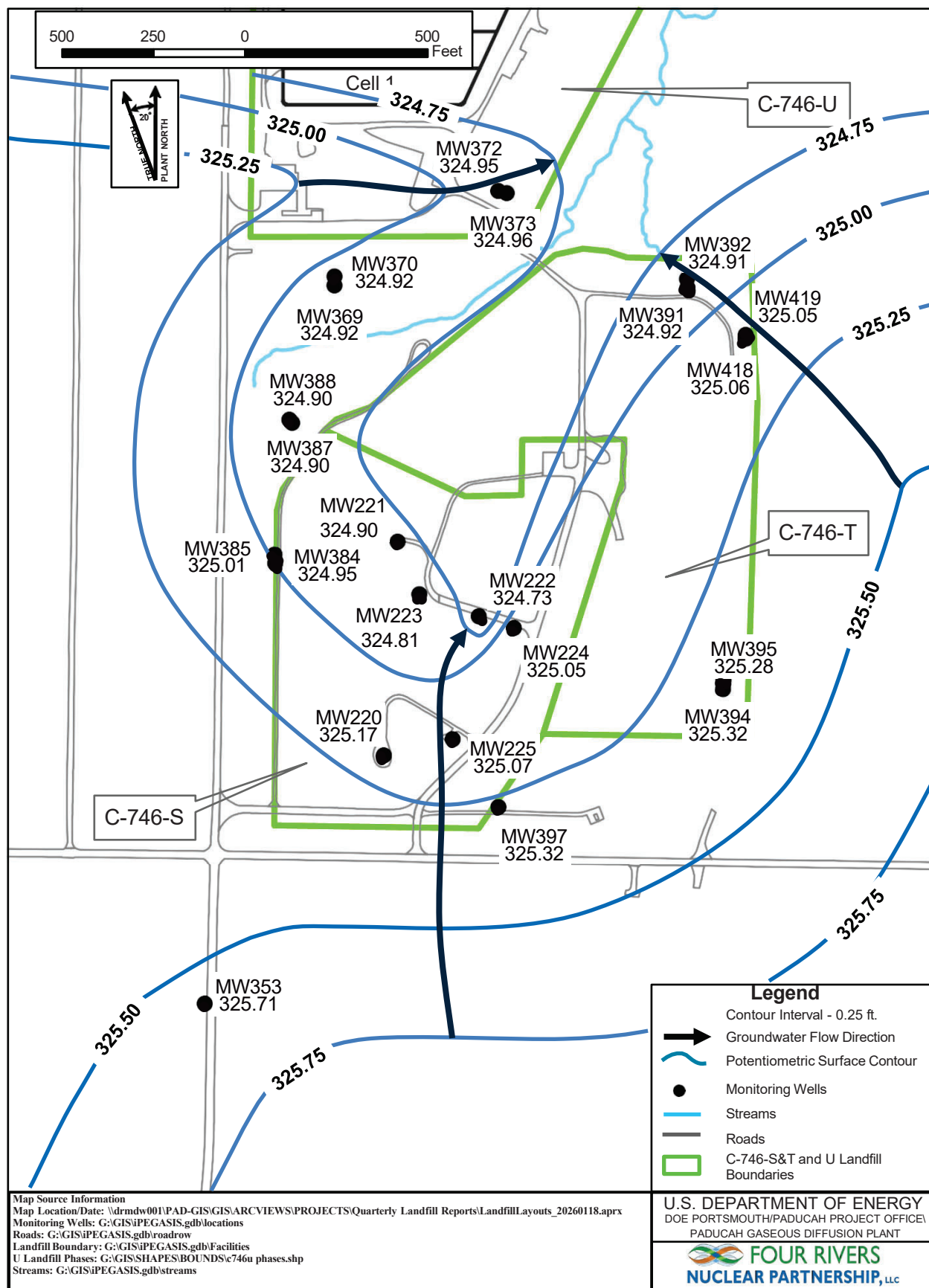


Figure E.2. Composite Potentiometric Surface of the Regional Gravel Aquifer at the C-746-S&T Landfills, October 14, 2025

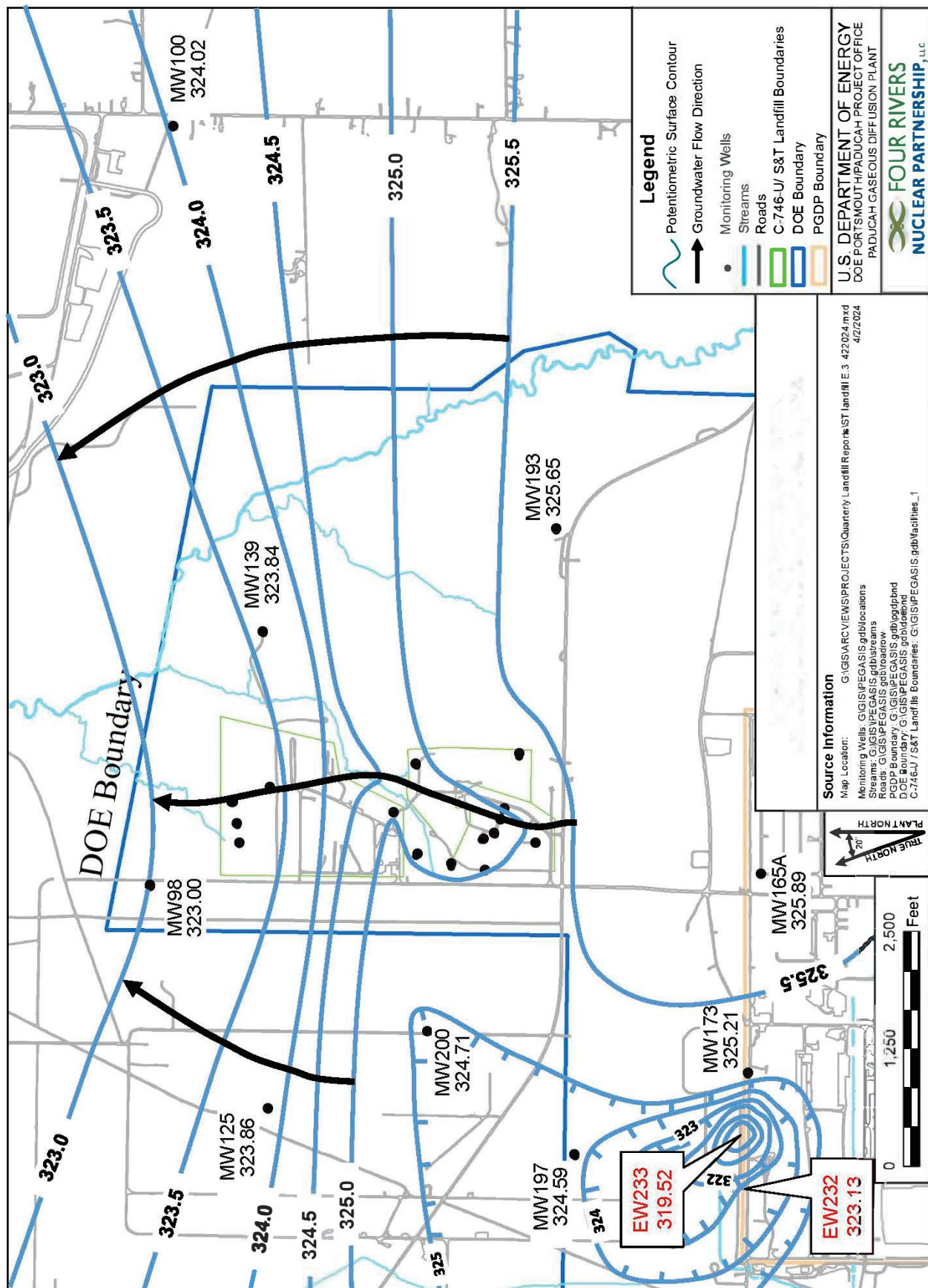


Figure E.3. Vicinity Potentiometric Surface of the Regional Gravel Aquifer, October 14, 2025

Table E.2. C-746-S&T Landfills Hydraulic Gradients

	ft/ft
Beneath Landfill Mound	7.98×10^{-4}
Vicinity	5.87×10^{-4}

Table E.3. C-746-S&T Landfills Groundwater Flow Rate

Hydraulic Conductivity (K)		Specific Discharge (q)		Average Linear Velocity (v)	
ft/day	cm/s	ft/day	cm/s	ft/day	cm/s
<u>Beneath Landfill Mound</u>					
7.25×10^2	2.56×10^{-1}	5.79×10^{-1}	2.04×10^{-4}	2.31	8.17×10^{-4}
4.25×10^2	1.50×10^{-1}	3.39×10^{-1}	1.20×10^{-4}	1.36	4.79×10^{-4}
<u>Vicinity</u>					
7.25×10^2	2.56×10^{-1}	4.26×10^{-1}	1.50×10^{-4}	1.70	6.01×10^{-4}
4.25×10^2	1.50×10^{-1}	2.49×10^{-1}	8.80×10^{-5}	9.98×10^{-1}	3.52×10^{-4}

Table E.4. Vicinity Fourth Quarter 2025 (October) Water Levels

Regional (October2025) Water Levels										
Date	Time	Well	Aquifer	Datum Elev (ft amsl)	BP (in Hg)	Delta BP (ft H2O)	Raw Data		*Corrected Data	
							DTW (ft)	Elev (ft amsl)	DTW (ft)	Elev (ft amsl)
10/14/2025	9:42	MW98	RGA	370.55	30.24	0.00	47.55	323.00	47.55	323.00
10/14/2025	10:30	MW100	RGA	373.39	30.24	0.00	49.37	324.02	49.37	324.02
10/14/2025	9:27	MW125	RGA	375.57	30.24	0.00	51.71	323.86	51.71	323.86
10/14/2025	10:03	MW139	RGA	363.75	30.24	0.00	39.91	323.84	39.91	323.84
10/14/2025	12:08	MW165A	RGA	380.94	30.24	0.00	55.05	325.89	55.05	325.89
10/14/2025	12:11	MW173	RGA	373.63	30.24	0.00	48.42	325.21	48.42	325.21
10/14/2025	10:25	MW193	RGA	368.30	30.24	0.00	42.65	325.65	42.65	325.65
10/14/2025	9:32	MW197	RGA	368.39	30.24	0.00	43.8	324.59	43.8	324.59
10/14/2025	9:37	MW200	RGA	378.70	30.24	0.00	53.99	324.71	53.99	324.71
Reference Barometric Pressure			30.24							
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 (or do not 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 fourth 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.

	<u>Parameter</u>	<u>Monitoring Well</u>
Upper Continental Recharge System	Technetium-99	MW390
Upper Regional Gravel Aquifer	Sodium Technetium-99	MW372 MW369, MW372, and MW387
Lower Regional Gravel Aquifer	Sodium Technetium-99	MW373 MW385

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.

11/18/2025

**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	93.4	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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Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills

Groundwater Flow System	UCRS					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																*									
Quarter 3, 2025											*														
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							*							*											
Quarter 4, 2004			*																						
Quarter 1, 2005			*																						
Quarter 2, 2005			*				*																		
Quarter 3, 2005			*				*			*											*				
Quarter 4, 2005			*				*			*															
Quarter 1, 2006							*					*													
Quarter 2, 2006			*				*							*											
Quarter 3, 2006							*																		
Quarter 4, 2006			*				*																		
Quarter 1, 2007							*										*								
Quarter 2, 2007							*										*								
Quarter 3, 2007							*																		
Quarter 4, 2007							*																		
Quarter 1, 2008							*							*											
Quarter 2, 2008											*														
Quarter 4, 2008							*																		
Quarter 1, 2009			*				*				*														
Quarter 1, 2010			*				*				*														
Quarter 2, 2010			*								*														
Quarter 3, 2010			*								*			*			*		*						
Quarter 1, 2011							*				*														
Quarter 2, 2011			*								*														
Quarter 2, 2012			*																						
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Quarter 4, 2014			*																						
Quarter 1, 2016							*																		
Quarter 2, 2016														*											
Quarter 1, 2017							*																		
Quarter 4, 2017																							*		
Quarter 1, 2018							*																		
Quarter 1, 2020												*													
BARIUM																									
Quarter 3, 2003							■	■																	
Quarter 4, 2003							■	■																	
BETA ACTIVITY																									
Quarter 4, 2002												■													
Quarter 1, 2003												■					■								

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
BETA ACTIVITY																							
Quarter 2, 2003																							
Quarter 3, 2003																							
Quarter 4, 2003																							
Quarter 1, 2004																							
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Quarter 1, 2018																							
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Quarter 3, 2018																							

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					URGA										LRGA							
	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Gradient	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
BETA ACTIVITY																							
Quarter 4, 2018										■		■	■					■		■			
Quarter 1, 2019										■			■					■	■		■		
Quarter 2, 2019										■	■		■					■	■		■		
Quarter 3, 2019										■	■	■	■					■	■				
Quarter 4, 2019			■							■		■	■					■	■		■		
Quarter 1, 2020			■									■	■					■					
Quarter 2, 2020												■	■					■	■		■		
Quarter 3, 2020												■	■					■					
Quarter 4, 2020													■					■					
Quarter 1, 2021													■										
Quarter 2, 2021													■										
Quarter 3, 2021													■										
Quarter 4, 2021													■										
Quarter 1, 2022													■										
Quarter 2, 2022			■										■								■		
Quarter 3, 2022													■										
Quarter 1, 2025													■										
Quarter 3, 2025													■										
Quarter 4, 2025													■										
BROMIDE																							
Quarter 1, 2003			*																				
Quarter 4, 2003			*																				
Quarter 1, 2004			*																				
Quarter 2, 2004			*																				
Quarter 3, 2004			*																				
Quarter 4, 2004			*																				
Quarter 1, 2005			*																				
Quarter 3, 2006			*																				
CALCIUM																							
Quarter 1, 2003			*																				
Quarter 2, 2003			*									*											
Quarter 3, 2003			*																				
Quarter 4, 2003			*									*							*				
Quarter 1, 2004			*									*		*					*				
Quarter 2, 2004			*									*							*				
Quarter 3, 2004			*									*							*				
Quarter 4, 2004			*									*							*				
Quarter 1, 2005												*							*				
Quarter 2, 2005												*							*				
Quarter 3, 2005												*							*				
Quarter 4, 2005												*							*				
Quarter 1, 2006												*							*				
Quarter 2, 2006												*							*				
Quarter 3, 2006												*							*				
Quarter 4, 2006												*							*				
Quarter 1, 2007												*							*				
Quarter 2, 2007												*							*				
Quarter 3, 2007												*							*				
Quarter 4, 2007												*							*				
Quarter 1, 2008												*							*				
Quarter 2, 2008												*							*				
Quarter 3, 2008												*							*				
Quarter 4, 2008												*							*				
Quarter 1, 2009												*							*				
Quarter 2, 2009												*							*				
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Quarter 4, 2009												*							*				
Quarter 1, 2010												*							*				
Quarter 2, 2010												*							*				
Quarter 3, 2010												*							*				
Quarter 4, 2010												*							*				
Quarter 1, 2011												*							*				
Quarter 2, 2011												*	*						*				
Quarter 3, 2011												*							*				
Quarter 4, 2011												*							*				
Quarter 1, 2012												*							*				
Quarter 2, 2012												*							*				
Quarter 3, 2012												*							*				

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
CALCIUM																							
Quarter 4, 2012												*							*				
Quarter 1, 2013												*							*				
Quarter 2, 2013												*							*				
Quarter 3, 2013												*							*				
Quarter 4, 2013												*							*				
Quarter 1, 2014												*						*	*				
Quarter 2, 2014												*						*	*				
Quarter 3, 2014												*						*	*				
Quarter 4, 2014												*						*	*				
Quarter 1, 2015												*	*					*	*				
Quarter 2, 2015												*						*	*				
Quarter 3, 2015												*						*	*				
Quarter 4, 2015												*						*	*				
Quarter 1, 2016												*						*	*				
Quarter 2, 2016												*		*				*	*				
Quarter 3, 2016												*						*	*				
Quarter 4, 2016												*						*	*				
Quarter 1, 2017												*						*	*				
Quarter 2, 2017												*						*	*				
Quarter 3, 2017												*						*	*				
Quarter 4, 2017												*						*	*				
Quarter 1, 2018												*						*	*				
Quarter 2, 2018												*						*	*				
Quarter 4, 2018												*						*	*				
Quarter 1, 2019												*						*	*				
Quarter 2, 2019												*						*	*				
Quarter 3, 2019												*						*	*				
Quarter 4, 2019												*	*					*	*				
Quarter 1, 2020												*	*					*	*				
Quarter 2, 2020												*						*	*				
Quarter 3, 2020												*	*					*	*				
Quarter 4, 2020												*	*					*	*				
Quarter 1, 2021												*	*					*	*				
Quarter 2, 2021												*						*	*				
Quarter 3, 2021												*	*					*	*				
Quarter 4, 2021												*	*					*	*				
Quarter 1, 2022												*	*					*	*				
Quarter 2, 2022												*	*					*	*				
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												*						*	*				
Quarter 1, 2025												*						*	*				
Quarter 2, 2025												*						*	*				
Quarter 3, 2025												*						*	*				
Quarter 4, 2025												*						*	*				
CARBON DISULFIDE																							
Quarter 4, 2010											*												
Quarter 1, 2011											*										*		
Quarter 2, 2017											*							*					
CHEMICAL OXYGEN DEMAND																							
Quarter 1, 2003				*																			
Quarter 2, 2003				*																			
Quarter 3, 2003				*			*		*														
Quarter 4, 2003				*					*														
Quarter 1, 2004	*			*																			
Quarter 4, 2004	*																						
Quarter 1, 2005	*																						
Quarter 2, 2005	*																						
Quarter 3, 2005	*									*	*										*		
Quarter 4, 2005	*									*													
Quarter 1, 2006	*																						
Quarter 2, 2006	*																						
Quarter 3, 2006	*																						
Quarter 4, 2006																	*						
Quarter 1, 2007	*								*														
Quarter 2, 2007	*																						
Quarter 3, 2007	*																						
Quarter 4, 2007	*																						
Quarter 1, 2008	*																						
Quarter 2, 2008	*																						

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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		
CHEMICAL OXYGEN DEMAND																									
Quarter 3, 2008	*																								
Quarter 4, 2008	*																								
Quarter 1, 2009	*																								
Quarter 2, 2009	*																			*					
Quarter 3, 2009	*																								
Quarter 4, 2009	*																								
Quarter 1, 2010	*																								
Quarter 2, 2010	*																								
Quarter 3, 2010	*																								
Quarter 4, 2010	*																								
Quarter 3, 2011	*																								
Quarter 4, 2011	*																								
Quarter 1, 2012	*																								
Quarter 1, 2013	*																								
Quarter 3, 2013	*																								
Quarter 3, 2014	*								*				*						*						
Quarter 4, 2014							*																		
Quarter 2, 2015																*									
Quarter 3, 2015																*									
Quarter 3, 2016			*								*														
Quarter 4, 2016																			*						
Quarter 2, 2017							*																		
Quarter 3, 2017	*															*									
Quarter 4, 2017						*																			
Quarter 2, 2018														*								*			
Quarter 3, 2018												*													
Quarter 4, 2018													*										*		
Quarter 2, 2019				*								*	*	*					*						
Quarter 3, 2019								*			*	*	*					*			*	*			
Quarter 4, 2019	*		*				*			*	*					*									
Quarter 1, 2020				*					*												*				
Quarter 2, 2020															*										
Quarter 4, 2020																*									
Quarter 1, 2021												*													
Quarter 2, 2021						*									*										
Quarter 4, 2021	*																								
Quarter 1, 2022						*		*	*				*	*					*	*					
Quarter 2, 2022						*							*	*											
Quarter 4, 2022	*																								
Quarter 1, 2023																		*							
Quarter 2, 2023				*								*													
Quarter 2, 2024																*									
Quarter 3, 2024												*													
CHLORIDE																									
Quarter 1, 2003			*																						
Quarter 4, 2003			*																						
Quarter 3, 2003			*																						
Quarter 4, 2003			*																						
Quarter 1, 2004			*																						
Quarter 2, 2004			*																						
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Quarter 4, 2004			*																						
Quarter 1, 2005			*																						
Quarter 2, 2005			*																						
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Quarter 1, 2006																		*							
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Quarter 4, 2006			*																						
Quarter 1, 2007			*																						
Quarter 2, 2007			*																						
Quarter 3, 2007			*																						
Quarter 4, 2007			*																						
Quarter 1, 2008			*																						
Quarter 2, 2008			*																						
Quarter 3, 2008			*																						
Quarter 4, 2008			*																						

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					URGA										LRGA							
	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Gradient	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
CHLORIDE																							
Quarter 1, 2009			*																				
Quarter 2, 2009			*																				
Quarter 3, 2009			*																				
Quarter 4, 2009			*																				
Quarter 1, 2010			*																				
Quarter 2, 2010			*																				
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Quarter 3, 2012			*																				
Quarter 3, 2013			*																				
Quarter 4, 2013			*																				
Quarter 4, 2014			*																				
Quarter 2, 2019																					*		
CHROMIUM																							
Quarter 4, 2002																							
Quarter 1, 2003																							
Quarter 2, 2003																							
Quarter 3, 2009																							
Quarter 1, 2019																							
COBALT																							
Quarter 3, 2003							*																
CONDUCTIVITY																							
Quarter 4, 2002										*								*					
Quarter 1, 2003			*							*								*					
Quarter 2, 2003			*							*								*					
Quarter 3, 2003			*					*		*								*					
Quarter 4, 2003			*							*								*					
Quarter 1, 2004										*								*					
Quarter 2, 2004										*								*					
Quarter 3, 2004										*								*					
Quarter 4, 2004			*							*								*					
Quarter 1, 2005										*		*						*					
Quarter 2, 2005										*		*						*					
Quarter 3, 2005										*		*						*					
Quarter 4, 2005										*		*						*					
Quarter 1, 2006										*		*						*					
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Quarter 4, 2006										*		*						*					
Quarter 1, 2007										*		*						*					
Quarter 2, 2007										*		*						*					
Quarter 3, 2007										*		*						*					
Quarter 4, 2007										*		*						*					
Quarter 1, 2008										*		*						*					
Quarter 2, 2008										*		*						*					
Quarter 3, 2008										*		*						*					
Quarter 4, 2008										*		*						*					
Quarter 1, 2009										*		*						*					
Quarter 2, 2009										*		*						*					
Quarter 3, 2009										*		*						*					
Quarter 4, 2009										*		*						*					
Quarter 1, 2010										*		*						*					
Quarter 2, 2010										*		*						*					
Quarter 3, 2010										*		*						*					
Quarter 4, 2010										*		*						*					
Quarter 1, 2011										*		*						*					
Quarter 2, 2011										*		*						*					
Quarter 3, 2011										*		*						*					
Quarter 4, 2011										*		*						*					
Quarter 1, 2012										*		*						*					
Quarter 2, 2012										*		*						*					
Quarter 3, 2012										*		*						*					

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
CONDUCTIVITY																							
Quarter 4, 2012												*							*				
Quarter 1, 2013												*							*				
Quarter 2, 2013												*							*				
Quarter 3, 2013												*							*				
Quarter 4, 2013												*							*				
Quarter 1, 2014												*							*				
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Quarter 1, 2021												*							*				
Quarter 2, 2021												*							*				
Quarter 3, 2021												*							*				
Quarter 4, 2021												*							*				
Quarter 1, 2022												*							*				
Quarter 2, 2022												*							*				
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												*							*				
Quarter 1, 2025												*							*	*			
Quarter 2, 2025												*							*				
Quarter 3, 2025												*							*				
Quarter 4, 2025												*							*				
DISSOLVED OXYGEN																							
Quarter 3, 2006			*					*															
DISSOLVED SOLIDS																							
Quarter 4, 2002										*									*				
Quarter 1, 2003			*							*									*				
Quarter 2, 2003			*							*									*				
Quarter 3, 2003			*				*	*		*		*							*				
Quarter 4, 2003			*				*		*	*		*							*				
Quarter 1, 2004			*							*		*							*				
Quarter 2, 2004										*		*							*				
Quarter 3, 2004										*		*							*				
Quarter 4, 2004										*		*							*				
Quarter 1, 2005											*								*				
Quarter 2, 2005																			*				
Quarter 3, 2005																	*	*	*	*	*		
Quarter 4, 2005																	*	*	*	*	*		
Quarter 1, 2006																	*	*	*	*	*		
Quarter 2, 2006																	*	*	*	*	*		
Quarter 3, 2006																	*	*	*	*	*		
Quarter 4, 2006										*		*					*		*				
Quarter 1, 2007																			*				
Quarter 2, 2007										*		*							*				
Quarter 3, 2007										*		*							*				
Quarter 4, 2007											*								*				

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
DISSOLVED SOLIDS																							
Quarter 1, 2008												*							*				
Quarter 2, 2008												*							*				
Quarter 3, 2008												*							*				
Quarter 4, 2008										*		*							*				
Quarter 1, 2009												*							*				
Quarter 2, 2009												*	*						*				
Quarter 3, 2009												*	*						*				
Quarter 4, 2009												*	*						*				
Quarter 1, 2010												*	*						*				
Quarter 2, 2010										*		*	*						*				
Quarter 3, 2010										*		*							*				
Quarter 4, 2010										*		*							*				
Quarter 1, 2011										*		*							*				
Quarter 2, 2011												*	*						*				
Quarter 3, 2011												*							*				
Quarter 4, 2011												*							*				
Quarter 1, 2012											*	*	*						*				
Quarter 2, 2012											*	*	*						*				
Quarter 3, 2012										*		*	*						*				
Quarter 4, 2012											*	*	*						*				
Quarter 1, 2013										*		*							*				
Quarter 2, 2013												*							*				
Quarter 3, 2013												*							*				
Quarter 4, 2013												*							*				
Quarter 1, 2014												*	*						*				
Quarter 2, 2014												*	*						*				
Quarter 3, 2014									*			*	*						*				
Quarter 4, 2014												*	*	*					*				
Quarter 1, 2015												*	*						*				
Quarter 2, 2015												*	*						*				
Quarter 3, 2015												*	*						*				
Quarter 4, 2015									*			*	*					*	*				
Quarter 1, 2016												*	*					*	*				
Quarter 2, 2016												*	*	*					*				
Quarter 3, 2016												*	*						*				
Quarter 4, 2016												*	*						*				
Quarter 1, 2017												*	*						*				
Quarter 2, 2017												*	*						*				
Quarter 3, 2017												*	*	*	*				*				
Quarter 4, 2017												*	*		*	*			*				
Quarter 1, 2018												*	*						*				
Quarter 2, 2018												*	*						*				
Quarter 3, 2018												*	*	*					*				
Quarter 4, 2018												*	*						*				
Quarter 1, 2019												*	*						*				
Quarter 2, 2019												*	*						*				
Quarter 3, 2019												*	*						*				
Quarter 4, 2019												*	*						*				
Quarter 1, 2020												*	*	*					*				
Quarter 2, 2020												*	*						*				
Quarter 3, 2020										*		*	*				*		*				
Quarter 4, 2020												*	*						*				
Quarter 1, 2021												*	*						*				
Quarter 2, 2021												*	*						*				
Quarter 3, 2021												*	*						*				
Quarter 4, 2021												*	*						*				
Quarter 2, 2022												*	*						*				
Quarter 2, 2022												*	*						*				
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												*	*						*				
Quarter 1, 2025												*	*						*				
Quarter 2, 2025												*	*						*				
Quarter 3, 2025												*	*						*				
Quarter 4, 2025												*	*						*				
IODIDE																							
Quarter 4, 2002																					*		
Quarter 2, 2003						*																	
Quarter 3, 2003														*									
Quarter 1, 2004				*																			
Quarter 3, 2010																					*		
Quarter 2, 2013										*													

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
IRON																							
Quarter 1, 2003							*			*	*			*									
Quarter 2, 2003										*	*	*	*										
Quarter 3, 2003							*	*	*	*	*	*											
Quarter 4, 2003										*													
Quarter 1, 2004										*													
Quarter 2, 2004										*	*												
Quarter 3, 2004										*													
Quarter 4, 2004										*													
Quarter 1, 2005												*											
Quarter 2, 2005											*	*											
Quarter 1, 2006							*																
Quarter 2, 2006												*											
Quarter 3, 2006											*												
Quarter 1, 2007											*	*											
Quarter 2, 2007											*												
Quarter 2, 2008												*											
Quarter 3, 2008												*											
MAGNESIUM																							
Quarter 1, 2003			*																				
Quarter 2, 2003			*								*								*				
Quarter 3, 2003			*				*				*								*				
Quarter 4, 2003			*								*								*				
Quarter 1, 2004			*								*			*					*				
Quarter 2, 2004			*								*								*				
Quarter 3, 2004			*								*								*				
Quarter 4, 2004			*								*								*				
Quarter 1, 2005											*								*				
Quarter 2, 2005											*								*				
Quarter 3, 2005											*								*				
Quarter 4, 2005											*								*				
Quarter 1, 2006											*								*				
Quarter 2, 2006											*								*				
Quarter 3, 2006											*								*				
Quarter 4, 2006											*								*				
Quarter 1, 2007											*								*				
Quarter 2, 2007											*								*				
Quarter 3, 2007											*								*				
Quarter 4, 2007											*								*				
Quarter 1, 2008											*								*				
Quarter 2, 2008											*								*				
Quarter 3, 2008											*								*				
Quarter 4, 2008											*								*				
Quarter 1, 2009											*								*				
Quarter 2, 2009											*								*				
Quarter 3, 2009											*	*							*				
Quarter 4, 2009											*								*				
Quarter 1, 2010											*								*				
Quarter 2, 2010											*	*							*				
Quarter 3, 2010											*								*				
Quarter 4, 2010											*								*				
Quarter 1, 2011											*								*				
Quarter 2, 2011											*	*							*				
Quarter 3, 2011											*								*				
Quarter 4, 2011											*								*				
Quarter 1, 2012											*								*				
Quarter 2, 2012											*								*				
Quarter 3, 2012											*	*							*				
Quarter 4, 2012											*	*							*				
Quarter 1, 2013											*								*				
Quarter 2, 2013											*								*				
Quarter 3, 2013											*								*				
Quarter 4, 2013											*								*				
Quarter 1, 2014																		*	*				

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					URGA										LRGA							
	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Gradient	386	389	390	393	396	221	222	223	224	384	369	372	387	391	220	394	385	370	373	388	392	395	397
MAGNESIUM																							
Quarter 2, 2014												*	*						*				
Quarter 3, 2014												*							*				
Quarter 4, 2014												*	*						*				
Quarter 1, 2015												*	*						*				
Quarter 2, 2015												*							*				
Quarter 3, 2015												*							*				
Quarter 4, 2015												*							*				
Quarter 1, 2016												*							*				
Quarter 2, 2016												*		*					*				
Quarter 3, 2016												*							*				
Quarter 4, 2016												*		*					*				
Quarter 1, 2017												*		*					*				
Quarter 2, 2017												*							*				
Quarter 3, 2017												*		*					*				
Quarter 4, 2017												*							*				
Quarter 1, 2018												*	*						*				
Quarter 2, 2018												*							*				
Quarter 3, 2018												*							*				
Quarter 4, 2018												*	*	*					*				
Quarter 1, 2019												*		*					*				
Quarter 2, 2019												*							*				
Quarter 3, 2019												*	*						*				
Quarter 4, 2019												*	*						*				
Quarter 1, 2020												*	*						*				
Quarter 2, 2020												*	*						*				
Quarter 3, 2020												*	*						*				
Quarter 4, 2020												*	*						*				
Quarter 1, 2021												*	*						*				
Quarter 2, 2021												*	*						*				
Quarter 3, 2021												*	*						*				
Quarter 4, 2021												*	*						*				
Quarter 1, 2022												*	*						*				
Quarter 2, 2022												*	*						*				
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												*	*						*				
Quarter 1, 2025												*	*						*				
Quarter 2, 2025												*	*						*				
Quarter 3, 2025												*	*						*				
Quarter 4, 2025												*	*						*				
MANGANESE																							
Quarter 4, 2002																					*		
Quarter 3, 2003							*	*															
Quarter 4, 2003							*	*															
Quarter 1, 2004							*																
Quarter 2, 2004							*																
Quarter 4, 2004							*	*															
Quarter 1, 2005							*																
Quarter 3, 2005																					*		
Quarter 3, 2009	*																						
Quarter 1, 2022	*																						
OXIDATION-REDUCTION POTENTIAL																							
Quarter 4, 2003			*																				
Quarter 2, 2004			*																				
Quarter 3, 2004			*															*					
Quarter 4, 2004			*			*																	
Quarter 1, 2005			*																*				
Quarter 2, 2005	*		*																				
Quarter 3, 2005	*		*																				
Quarter 4, 2005			*																				
Quarter 2, 2006			*																				
Quarter 3, 2006			*															*					
Quarter 4, 2006			*																				
Quarter 1, 2007			*																				
Quarter 2, 2007			*				*																
Quarter 3, 2007			*				*																
Quarter 4, 2007			*																				
Quarter 1, 2008			*			*			*														
Quarter 2, 2008	*		*	*		*			*				*					*	*	*	*		
Quarter 3, 2008			*	*		*			*				*					*	*	*	*		
Quarter 4, 2008			*	*		*	*	*	*				*					*	*	*	*		

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
OXIDATION-REDUCTION POTENTIAL																							
Quarter 1, 2009			*	*				*	*	*				*	*			*	*	*			
Quarter 3, 2009			*	*		*											*	*	*	*			
Quarter 4, 2009			*	*		*			*									*	*	*	*		
Quarter 1, 2010	*		*	*																*	*		
Quarter 2, 2010	*		*	*					*				*				*	*	*	*			
Quarter 3, 2010	*		*	*		*											*	*	*	*			
Quarter 4, 2010			*	*				*				*		*			*	*	*	*			
Quarter 1, 2011	*		*	*		*	*	*	*			*	*	*			*	*	*	*	*		
Quarter 2, 2011	*		*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 3, 2011	*		*	*		*	*		*			*	*		*		*	*	*	*	*		
Quarter 4, 2011	*		*	*		*			*			*					*	*	*	*	*		
Quarter 1, 2012	*		*	*		*	*	*	*	*		*	*	*			*	*	*	*	*	*	
Quarter 2, 2012	*		*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 3, 2012	*		*			*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 4, 2012			*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 1, 2013			*	*		*	*	*	*	*		*	*	*			*	*	*	*	*	*	
Quarter 2, 2013	*		*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 3, 2013	*		*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 4, 2013			*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 1, 2014	*		*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 2, 2014	*		*	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	
Quarter 3, 2014	*		*	*		*											*	*	*	*	*	*	
Quarter 4, 2014	*		*	*		*					*	*	*				*	*	*	*	*	*	
Quarter 1, 2015	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2015	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2015	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2015	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2016	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2016	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2016	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2016	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2017	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2017	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2017	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2017	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2018	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2018	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2018	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2018	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2019	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2019	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2019	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2019	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2020	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2020	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2020	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2020	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2021	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2021	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2021	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2021	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2022	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2022	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 1, 2025	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 2, 2025	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 3, 2025	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Quarter 4, 2025	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
PCB-1016																							
Quarter 4, 2003								*	*	*		*						*					
Quarter 3, 2004												*											
Quarter 3, 2005								*				*											
Quarter 1, 2006												*											
Quarter 2, 2006												*											
Quarter 4, 2006												*											
Quarter 1, 2007												*	*										
Quarter 2, 2007												*	*										
Quarter 3, 2007												*	*										
Quarter 2, 2008												*	*										
Quarter 3, 2008												*	*										
Quarter 4, 2008												*	*										

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					URGA										LRGA							
	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Gradient	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																							
Quarter 1, 2009											*												
Quarter 2, 2009											*												
Quarter 3, 2009											*												
Quarter 4, 2009											*												
Quarter 1, 2010											*												
Quarter 2, 2010											*												
Quarter 3, 2010											*												
Quarter 4, 2010											*												
PCB-1232																							
Quarter 1, 2011											*												
PCB-1248																							
Quarter 2, 2008											*												
PCB-1260																							
Quarter 2, 2006																		*					
pH																							
Quarter 4, 2002																		*					
Quarter 2, 2003																		*					
Quarter 3, 2003																		*					
Quarter 4, 2003							*											*					
Quarter 1, 2004							*											*					
Quarter 2, 2004																		*					
Quarter 3, 2004																		*					
Quarter 4, 2004																		*					
Quarter 3, 2005										*								*			*		
Quarter 4, 2005										*								*					
Quarter 1, 2006																		*					
Quarter 2, 2006																		*					
Quarter 3, 2006																		*					
Quarter 3, 2007																		*					
Quarter 4, 2007																		*					
Quarter 4, 2008																		*					
Quarter 1, 2009																		*					
Quarter 1, 2011																		*					
Quarter 2, 2011											*												
Quarter 3, 2011											*												
Quarter 1, 2012														*									
Quarter 1, 2013										*			*					*					
Quarter 4, 2014																					*		
Quarter 2, 2016																		*	*				
POTASSIUM																							
Quarter 4, 2002																		*	*				
Quarter 3, 2004																		*	*				
Quarter 2, 2005																		*	*				
Quarter 3, 2005																		*	*				
Quarter 4, 2005																		*	*				
Quarter 2, 2006																		*	*				
Quarter 3, 2006																		*	*				
Quarter 4, 2006																		*	*				
Quarter 4, 2008																		*	*				
Quarter 3, 2012																		*	*				
Quarter 1, 2013																		*	*				
Quarter 2, 2013																		*	*				
Quarter 3, 2013																		*	*				
RADIUM-226																							
Quarter 4, 2002			*										*	*							*		
Quarter 2, 2004																			*				
Quarter 2, 2005									*														
Quarter 1, 2009											*												
Quarter 3, 2014									*		*												
Quarter 4, 2014			*							*	*							*					
Quarter 1, 2015			*				*			*	*							*					
Quarter 2, 2015			*				*			*	*							*					
Quarter 3, 2015			*															*					

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					URGA										LRGA							
	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Gradient	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																							
Quarter 4, 2015					*	*									*		*					*	*
Quarter 2, 2016			*						*		*	*	*	*	*	*		*					
Quarter 3, 2016																		*					
Quarter 4, 2016	*		*			*			*				*		*					*		*	
Quarter 1, 2017			*						*	*								*					
Quarter 2, 2017																	*	*		*	*		
Quarter 3, 2017					*				*	*	*									*			
Quarter 4, 2017																		*		*			
Quarter 1, 2018												*						*	*	*			
Quarter 4, 2018												*						*					
Quarter 1, 2020																		*					
Quarter 2, 2020															*								
Quarter 2, 2024																	*			*	*		
Quarter 3, 2024			*		*	*			*											*			*
RADIUM-228																							
Quarter 2, 2005																							
Quarter 3, 2005																							
Quarter 4, 2005																							
Quarter 1, 2006																							
SELENIUM																							
Quarter 4, 2002																							
Quarter 1, 2003																							
Quarter 2, 2003																							
Quarter 3, 2003																							
Quarter 4, 2003																							
SODIUM																							
Quarter 4, 2002																			*		*		
Quarter 1, 2003				*					*	*	*												
Quarter 2, 2003				*					*	*	*		*										
Quarter 3, 2003						*	*		*														
Quarter 4, 2003						*			*	*													
Quarter 1, 2004									*	*				*									
Quarter 2, 2004									*	*													
Quarter 3, 2004									*	*													
Quarter 4, 2004									*	*													
Quarter 1, 2005									*	*									*				
Quarter 2, 2005									*	*									*				
Quarter 3, 2005									*	*									*				
Quarter 4, 2005									*	*									*				
Quarter 1, 2006									*	*													
Quarter 2, 2006									*	*													
Quarter 3, 2006									*	*		*							*				
Quarter 4, 2006									*	*							*		*				
Quarter 1, 2007									*	*		*											
Quarter 2, 2007									*	*													
Quarter 3, 2007									*	*													
Quarter 4, 2007									*	*													
Quarter 1, 2008									*	*													
Quarter 3, 2008									*	*		*											
Quarter 4, 2008									*	*													
Quarter 1, 2009									*	*		*							*				
Quarter 3, 2009									*	*		*											
Quarter 4, 2009									*	*		*											
Quarter 1, 2010									*	*		*											
Quarter 2, 2010									*	*		*											
Quarter 3, 2010									*	*		*											
Quarter 4, 2010									*	*		*											
Quarter 1, 2011									*	*		*											
Quarter 2, 2011									*	*		*											
Quarter 4, 2011									*	*		*							*				
Quarter 1, 2012									*	*		*							*				
Quarter 3, 2012									*	*		*							*				
Quarter 4, 2012									*	*		*							*				

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
SODIUM																							
Quarter 1, 2013										*		*							*				
Quarter 2, 2013												*											
Quarter 3, 2013												*							*				
Quarter 4, 2013												*							*				
Quarter 1, 2014												*											
Quarter 2, 2014									*		*	*							*				
Quarter 3, 2014												*							*				
Quarter 4, 2014									*	*		*	*										
Quarter 1, 2015													*										
Quarter 2, 2015												*											
Quarter 3, 2015											*	*											
Quarter 4, 2015									*	*		*											
Quarter 2, 2016											*												
Quarter 3, 2016											*												*
Quarter 1, 2017										*	*		*					*					
Quarter 2, 2017									*	*	*												
Quarter 2, 2018													*										
Quarter 3, 2018														*									
Quarter 1, 2019													*										
Quarter 2, 2019													*										
Quarter 4, 2019												*											
Quarter 1, 2020											*	*							*				
Quarter 2, 2020											*	*	*										
Quarter 3, 2020											*	*											
Quarter 4, 2020											*	*											
Quarter 1, 2021											*	*	*						*				
Quarter 2, 2021											*	*	*										
Quarter 3, 2021											*	*	*										
Quarter 4, 2021											*	*	*										
Quarter 1, 2022											*	*	*										
Quarter 2, 2022											*	*	*						*				
Quarter 3, 2022											*	*	*										
Quarter 4, 2022											*	*	*										
Quarter 2, 2023									*		*	*	*										
Quarter 4, 2023										*	*	*	*										
Quarter 1, 2024										*	*	*	*										
Quarter 2, 2024									*	*	*	*	*						*				
Quarter 3, 2024									*	*	*	*	*						*				
Quarter 4, 2024											*	*	*						*				
Quarter 1, 2025									*	*	*	*	*						*			*	
Quarter 2, 2025											*	*	*						*				
Quarter 3, 2025											*	*	*						*				
Quarter 4, 2025											*	*	*						*				
STRONTIUM-90																							
Quarter 2, 2003										■													
Quarter 1, 2004										■													
SULFATE																							
Quarter 4, 2002																			*		*		
Quarter 1, 2003												*	*	*				*	*	*			
Quarter 2, 2003										*	*	*	*	*				*	*				
Quarter 3, 2003										*	*	*	*	*				*	*	*			
Quarter 4, 2003										*	*	*	*	*				*	*	*			
Quarter 1, 2004										*	*	*	*	*				*	*	*			
Quarter 2, 2004										*	*	*	*	*				*	*	*	*		
Quarter 3, 2004									*	*	*	*	*	*				*	*	*	*		
Quarter 4, 2004										*	*	*	*	*				*	*	*	*		
Quarter 1, 2005										*	*	*	*	*				*	*	*	*		
Quarter 2, 2005										*	*	*	*	*				*	*	*	*		
Quarter 3, 2005										*	*	*	*	*				*	*	*	*		
Quarter 4, 2005										*	*	*	*	*				*	*	*	*		
Quarter 1, 2006										*	*	*	*	*				*	*	*	*		
Quarter 2, 2006									*	*	*	*	*	*				*	*	*	*		
Quarter 3, 2006									*	*	*	*	*	*				*	*	*	*		
Quarter 4, 2006									*	*	*	*	*	*				*	*	*	*		
Quarter 1, 2007									*	*	*	*	*	*				*	*	*	*		
Quarter 2, 2007									*	*	*	*	*	*				*	*	*	*		
Quarter 3, 2007									*	*	*	*	*	*				*	*	*	*		
Quarter 4, 2007									*	*	*	*	*	*				*	*	*	*		
Quarter 1, 2008									*	*	*	*	*	*				*	*	*	*		
Quarter 2, 2008								*	*	*	*	*	*	*				*	*	*	*		
Quarter 3, 2008								*	*	*	*	*	*	*				*	*	*	*		
Quarter 4, 2008								*	*	*	*	*	*	*				*	*	*	*		
Quarter 1, 2009									*	*	*	*	*	*				*	*	*	*		
Quarter 2, 2009									*	*	*	*	*	*				*	*	*	*		
Quarter 3, 2009									*	*	*	*	*	*				*	*	*	*		
Quarter 4, 2009	*								*	*	*	*	*	*				*	*	*	*		
Quarter 1, 2010	*								*	*	*	*	*	*				*	*	*	*		

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
SULFATE																							
Quarter 2, 2010									*	*		*	*				*	*	*	*			
Quarter 3, 2010										*		*	*				*	*	*	*			
Quarter 4, 2010	*									*		*	*				*	*	*				
Quarter 1, 2011	*									*		*	*				*	*	*				
Quarter 2, 2011	*									*		*	*	*			*	*	*	*			
Quarter 3, 2011	*									*		*	*	*			*	*	*	*			
Quarter 4, 2011	*									*		*	*	*			*	*	*	*			
Quarter 1, 2012	*									*		*	*	*			*	*	*	*			
Quarter 2, 2012	*									*		*	*	*			*	*	*	*			
Quarter 3, 2012	*									*		*	*	*			*	*	*	*			
Quarter 4, 2012										*		*	*	*			*	*	*	*			
Quarter 1, 2013										*		*	*	*			*	*	*	*			
Quarter 2, 2013										*		*	*	*			*	*	*	*			
Quarter 3, 2013										*		*	*	*			*	*	*	*			
Quarter 4, 2013										*		*	*	*			*	*	*	*			
Quarter 1, 2014								*		*		*	*	*			*	*	*	*			
Quarter 2, 2014										*		*	*	*			*	*	*	*			
Quarter 3, 2014										*		*	*	*			*	*	*	*			
Quarter 4, 2014										*		*	*	*			*	*	*	*			
Quarter 1, 2015										*		*	*	*			*	*	*	*			
Quarter 2, 2015										*	*	*	*	*	*	*	*	*	*	*			
Quarter 3, 2015								*		*		*	*	*	*	*	*	*	*	*			
Quarter 4, 2015										*		*	*	*	*	*	*	*	*	*			
Quarter 1, 2016								*		*		*	*	*	*	*	*	*	*	*			
Quarter 2, 2016								*		*		*	*	*	*	*	*	*	*	*			
Quarter 3, 2016								*		*		*	*	*	*	*	*	*	*	*			
Quarter 4, 2016										*		*	*	*	*	*	*	*	*	*			
Quarter 1, 2017										*		*	*	*	*	*	*	*	*	*			
Quarter 2, 2017								*		*		*	*	*	*	*	*	*	*	*			
Quarter 3, 2017								*		*		*	*	*	*	*	*	*	*	*			
Quarter 4, 2017										*		*	*	*	*	*	*	*	*	*			
Quarter 1, 2018										*		*	*	*	*	*	*	*	*	*			
Quarter 2, 2018								*		*	*	*	*	*	*	*	*	*	*	*			
Quarter 3, 2018								*		*		*	*	*	*	*	*	*	*	*			
Quarter 4, 2018										*		*	*	*	*	*	*	*	*	*			
Quarter 1, 2019								*		*		*	*	*	*	*	*	*	*	*			
Quarter 2, 2019								*		*		*	*	*	*	*	*	*	*	*			
Quarter 3, 2019			*					*		*		*	*	*	*	*	*	*	*	*	*		
Quarter 4, 2019			*					*		*		*	*	*	*	*	*	*	*	*	*		
Quarter 1, 2020								*		*		*	*	*	*	*	*	*	*	*	*		
Quarter 2, 2020								*		*		*	*	*	*	*	*	*	*	*	*		
Quarter 3, 2020			*							*		*	*	*	*	*	*	*	*	*	*		
Quarter 4, 2020										*		*	*	*	*	*	*	*	*	*	*		
Quarter 1, 2021										*		*	*	*	*	*	*	*	*	*	*		
Quarter 2, 2021								*		*		*	*	*	*	*	*	*	*	*	*	*	
Quarter 3, 2021										*		*	*	*	*	*	*	*	*	*	*		
Quarter 4, 2021										*		*	*	*	*	*	*	*	*	*	*		
Quarter 1, 2022										*		*	*	*	*	*	*	*	*	*	*		
Quarter 2, 2022										*		*	*	*	*	*	*	*	*	*	*		
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										*		*	*	*	*	*	*	*	*	*	*		
Quarter 1, 2025										*		*	*	*	*	*	*	*	*	*	*		
Quarter 2, 2025										*	*	*	*	*	*	*	*	*	*	*	*		
Quarter 3, 2025										*	*	*	*	*	*	*	*	*	*	*	*		
Quarter 4, 2025										*	*	*	*	*	*	*	*	*	*	*	*		
TECHNETIUM-99																							
Quarter 4, 2002																			*	*			
Quarter 1, 2003													*				*		*	*			
Quarter 2, 2003	*		*							*		*	*				*		*	*			
Quarter 3, 2003			*							*		*	*				*		*	*	*		
Quarter 4, 2003			*							*		*	*				*		*	*	*		
Quarter 1, 2004			*							*		*	*				*		*	*	*		
Quarter 2, 2004			*							*		*	*				*		*	*	*		
Quarter 3, 2004			*							*		*	*				*		*	*	*		
Quarter 4, 2004			*							*		*	*				*	*	*	*	*		
Quarter 1, 2005			*							*		*	*				*		*	*	*	*	
Quarter 2, 2005			*							*		*	*				*	*	*	*	*		
Quarter 3, 2005			*							*		*	*				*	*	*	*	*		
Quarter 4, 2005			*							*		*	*				*	*	*	*	*		

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
TECHNETIUM-99																							
Quarter 1, 2006										*		*	*						*	*			
Quarter 2, 2006			*							*			*					*	*	*	*		
Quarter 3, 2006			*							*			*					*	*	*	*		
Quarter 4, 2006	*									*		*	*							*	*		
Quarter 1, 2007			*							*		*	*					*		*	*		
Quarter 2, 2007			*							*		*	*					*	*		*		
Quarter 3, 2007			*							*	*	*	*					*		*	*		
Quarter 4, 2007			*							*	*	*	*					*		*	*		
Quarter 1, 2008			*							*		*	*					*	*	*	*		
Quarter 2, 2008			*							*	*	*	*					*		*	*		
Quarter 3, 2008										*		*	*					*		*	*		
Quarter 4, 2008			*							*		*	*					*	*	*	*		
Quarter 1, 2009			*							*		*	*					*		*	*		
Quarter 2, 2009			*							*		*	*					*	*		*		
Quarter 3, 2009			*							*	*	*	*					*		*	*		
Quarter 4, 2009			*							*		*	*					*		*	*		
Quarter 1, 2010			*							*	*	*	*					*		*	*		
Quarter 2, 2010			*							*		*	*					*	*		*		
Quarter 3, 2010			*							*	*	*	*					*		*	*		
Quarter 4, 2010			*							*	*	*	*					*		*	*		
Quarter 1, 2011										*		*	*					*		*	*		
Quarter 2, 2011			*							*		*	*					*		*	*		
Quarter 3, 2011			*							*		*	*					*		*	*		
Quarter 4, 2011			*							*	*	*	*					*		*	*		
Quarter 1, 2012			*							*		*	*					*		*	*		
Quarter 2, 2012			*							*	*	*	*					*	*	*	*		
Quarter 3, 2012			*							*		*	*					*		*	*		
Quarter 4, 2012										*	*	*	*					*	*	*	*		
Quarter 1, 2013										*		*	*					*	*	*	*		
Quarter 2, 2013										*	*	*	*					*	*	*	*		
Quarter 3, 2013			*							*	*	*	*					*	*	*	*		
Quarter 4, 2013			*							*	*	*	*					*	*	*	*		
Quarter 1, 2014			*							*	*	*	*					*	*	*	*		
Quarter 2, 2014			*							*	*	*	*	*				*	*	*	*		
Quarter 3, 2014			*							*	*	*	*					*	*	*	*		
Quarter 4, 2014			*							*	*	*	*					*	*	*	*		
Quarter 1, 2015			*							*	*	*	*					*	*	*	*		
Quarter 2, 2015			*							*	*	*	*					*	*	*	*		
Quarter 3, 2015			*							*	*	*	*					*	*	*	*		
Quarter 4, 2015			*							*	*	*	*					*	*	*	*		
Quarter 1, 2016			*							*	*	*	*					*	*	*	*		
Quarter 2, 2016			*			*				*	*	*	*					*	*	*	*		
Quarter 3, 2016			*							*	*	*	*					*	*	*	*		
Quarter 4, 2016			*							*	*	*	*					*	*	*	*		
Quarter 1, 2017			*							*	*	*	*					*	*	*	*		
Quarter 2, 2017			*							*	*	*	*					*	*	*	*		
Quarter 3, 2017			*							*	*	*	*					*	*	*	*		
Quarter 4, 2017			*							*	*	*	*					*	*	*	*		
Quarter 1, 2018			*							*	*	*	*					*	*	*	*		
Quarter 2, 2018			*							*	*	*	*					*	*	*	*		
Quarter 3, 2018			*							*	*	*	*					*	*	*	*		
Quarter 4, 2018			*							*	*	*	*					*	*	*	*		
Quarter 1, 2019			*							*	*	*	*					*	*	*	*		
Quarter 2, 2019			*							*	*	*	*					*	*	*	*		
Quarter 3, 2019			*							*	*	*	*					*	*	*	*		
Quarter 4, 2019			*							*	*	*	*					*	*	*	*		
Quarter 1, 2020			*							*	*	*	*					*	*	*	*		
Quarter 2, 2020			*							*	*	*	*					*	*	*	*		
Quarter 3, 2020			*							*	*	*	*					*	*	*	*		
Quarter 4, 2020			*							*	*	*	*					*	*	*	*		
Quarter 1, 2021			*							*	*	*	*					*	*	*	*		
Quarter 2, 2021			*							*	*	*	*					*	*	*	*		
Quarter 3, 2021			*							*	*	*	*					*	*	*	*		
Quarter 4, 2021			*							*	*	*	*					*	*	*	*		

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
TECHNETIUM-99																							
Quarter 1, 2022			*							*	*	*	*				*						
Quarter 2, 2022			*							*	*	*	*				*			*			
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			*							*	*	*	*				*						
Quarter 1, 2025			*							*	*	*	*				*			*			
Quarter 2, 2025			*							*	*	*	*				*				*		
Quarter 3, 2025			*							*	*	*	*				*			*			
Quarter 4, 2025			*								*	*	*				*						
THORIUM-230																							
Quarter 1, 2012	*								*					*									
Quarter 4, 2014	*		*																				
Quarter 3, 2015	*								*	*			*		*								
Quarter 1, 2017			*							*							*						
Quarter 4, 2024	*												*							*			
THORIUM-234																							
Quarter 2, 2003						*			*					*									
Quarter 4, 2007									*														
TOLUENE																							
Quarter 2, 2014										*	*		*										
TOTAL ORGANIC CARBON																							
Quarter 4, 2002																						*	
Quarter 1, 2003			*							*	*							*	*		*		
Quarter 2, 2003										*	*	*	*	*							*		
Quarter 3, 2003						*	*	*	*	*	*	*	*									*	
Quarter 4, 2003						*		*	*	*	*	*	*										
Quarter 1, 2004									*														
Quarter 2, 2004									*	*													
Quarter 3, 2004									*														
Quarter 4, 2004									*														
Quarter 1, 2005									*														
Quarter 2, 2005									*													*	
Quarter 3, 2005									*		*										*		
Quarter 4, 2005									*												*		
Quarter 1, 2006									*														
Quarter 2, 2006									*		*												
Quarter 4, 2006																	*						
Quarter 1, 2007	*									*													
Quarter 3, 2007	*					*	*	*	*	*			*	*			*						
Quarter 2, 2011										*													
Quarter 3, 2012	*																						
Quarter 3, 2016																			*				
TOTAL ORGANIC HALIDES																							
Quarter 4, 2002																		*	*		*		
Quarter 1, 2003			*															*			*		
Quarter 3, 2003			*																		*		
Quarter 2, 2004																						*	
Quarter 3, 2004	*																						
Quarter 1, 2005	*																						
Quarter 2, 2005	*																						
Quarter 3, 2005	*																						
Quarter 4, 2005	*																						
Quarter 1, 2006	*																						
Quarter 2, 2006	*																						
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Quarter 4, 2006																	*						
Quarter 1, 2007	*																						
Quarter 2, 2007	*																						
Quarter 3, 2007	*																						
Quarter 4, 2007	*																				*		
Quarter 1, 2008	*																						
Quarter 4, 2008	*																						
Quarter 4, 2008	*																						
Quarter 1, 2009	*																						
Quarter 2, 2009	*																				*		
Quarter 3, 2009	*																						
Quarter 4, 2009	*																						
Quarter 1, 2010	*																						
Quarter 2, 2010	*																						
Quarter 3, 2010	*																						

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					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
TOTAL ORGANIC HALIDES																							
Quarter 4, 2010	*																						
Quarter 1, 2011	*																						
Quarter 3, 2013																					*		
Quarter 4, 2024																						*	
TRICHLOROETHENE																							
Quarter 4, 2002																							
Quarter 1, 2003																							
Quarter 2, 2003																							
Quarter 3, 2003																							
Quarter 4, 2003																							
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Quarter 1, 2015																							
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Quarter 3, 2015																							
Quarter 4, 2015																							
Quarter 1, 2016																							
Quarter 2, 2016																							
Quarter 3, 2016																							
Quarter 4, 2016																							

Chart of MCL and Historical UTL Exceedances for the C-746-S&T Landfills (Continued)

Groundwater Flow System	UCRS					URGA										LRGA							
	S	D	D	D	U	S	S	S	S	S	D	D	D	D	U	U	S	D	D	D	D	U	U
Gradient	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																							
Quarter 2, 2017																							
Quarter 3, 2017																							
Quarter 4, 2017																							
Quarter 1, 2018																							
Quarter 2, 2018																							
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Quarter 2, 2023																							
Quarter 3, 2023																							
Quarter 4, 2023																							
Quarter 1, 2024																							
Quarter 3, 2024																							
TURBIDITY																							
Quarter 4, 2002																							
Quarter 1, 2003																							
URANIUM																							
Quarter 4, 2002																							
Quarter 1, 2003																							
Quarter 4, 2003																							
Quarter 1, 2004																							
Quarter 4, 2004																							
Quarter 4, 2006																							
ZINC																							
Quarter 3, 2003																							
Quarter 4, 2003																							
Quarter 4, 2004																							
Quarter 4, 2007																							
* Statistical test results indicate an elevated concentration (i.e., a statistically significant increase). ■ MCL Exceedance ■ Previously reported as an MCL exceedance; however, result was equal to MCL. UCRS = Upper Continental Recharge System URGA = Upper Regional Gravel Aquifer LRGA = Lower Regional Gravel Aquifer S = Sidegradient; D = Downgradient; U = Upgradient																							

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APPENDIX H
METHANE MONITORING DATA

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CP3-WM-0017-F03 - C-746-S & T LANDFILL METHANE MONITORING REPORT

Date:	October 1, 2025	Time:	0900	Monitor:	Michael Hideg														
Weather Conditions: Sunny, Approximately 77° F, humidity: 64%																			
Monitoring Equipment: Multi RAE – Serial # 11881																			
Monitoring Location					Reading (% LEL)														
Ogden Landing Road Entrance	Checked at ground level				0														
North Landfill Gate	Checked at ground level				0														
West Side of Landfill: North 37° 07.652' West 88° 48.029'	Checked at ground level				0														
East Side of Landfill: North 37° 07.628' West 88° 47.798'	Checked at ground level				0														
Cell 1 Gas Vent (17)	1 0	2 0	3 0	4 0	5 0	6 0	7 0	8 0	9 0	10 0	11 0	12 0	13 0	14 0	15 0	16 0	17 0	0	
Cell 2 Gas Vent (3)	1 0	2 0	3 0																0
Cell 3 Gas Vent (7)	1 0	2 0	3 0	4 0	5 0	6 0	7 0												0
Landfill Office	Checked at ground level																	0	
Suspect or Problem Areas	None noted																	N/A	
Remarks: All gas vents checked 1" from opening.																			
Performed by: MICHAEL HIDEG (Affiliate) Digitally signed by MICHAEL HIDEG (Affiliate) Date: 2025.10.02 15:34:50 -05'00'																			
Signature Date																			

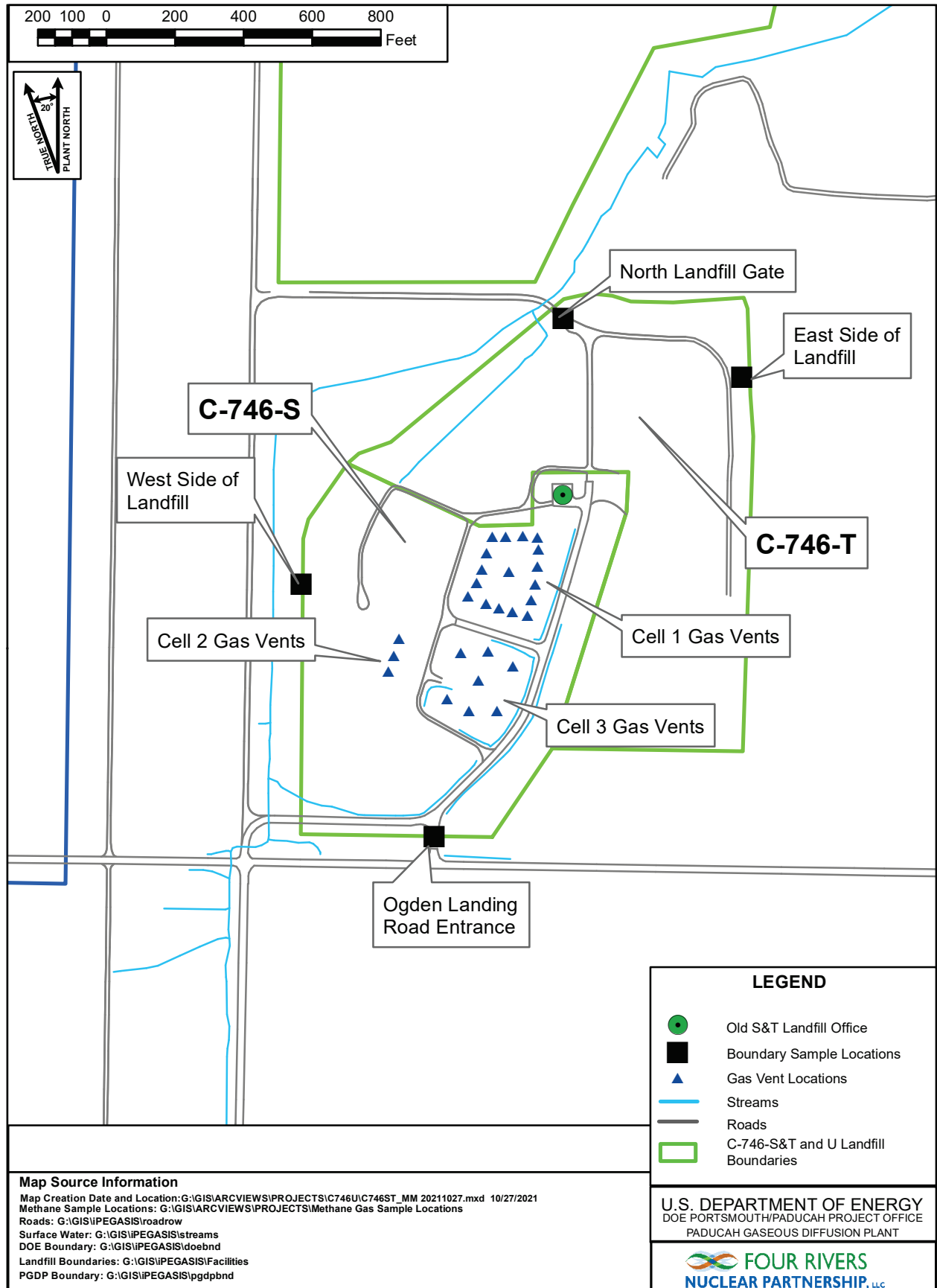


Figure H.1. C-746-S&T Landfill Methane Monitoring Locations

APPENDIX I

SURFACE WATER ANALYSES AND LABORATORY REPORTS

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Paducah OREIS
SURFACE WATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: L135 UPSTREAM **Period:** 4th Quarter 2025
SAMPLE ID: L135DSS1-26 Sample Type: FR

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloride		6.72	mg/L	0.2	10/27/2025			EPA-300.0	X
Sulfate		10.3	mg/L	0.4	10/27/2025			EPA-300.0	X
Iron		1.18	mg/L	0.1	10/27/2025			EPA-200.8	X
Sodium		7.42	mg/L	0.25	10/27/2025			EPA-200.8	X
Uranium	B	0.00515	mg/L	0.0002	10/27/2025			EPA-200.8	X
Alpha activity	U	3.96	pCi/L	7.71	10/27/2025	4.68	4.72	SW846-9310	X
Beta activity		43.6	pCi/L	10.1	10/27/2025	9.71	12.1	SW846-9310	X
Dissolved Solids	*	137	mg/L	10	10/27/2025			EPA-160.1	X
Suspended Solids		15.2	mg/L	4.1	10/27/2025			EPA-160.2	X
Chemical Oxygen Demand (COD)		26	mg/L	20	10/27/2025			EPA-410.4	X
Total Solids		158	mg/L	10	10/27/2025			SM-2540B	X
Total Organic Carbon (TOC)		10.5	mg/L	2	10/27/2025			SW846-9060A	X

Paducah OREIS
SURFACE WATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: L135 UPSTREAM **Period:** 4th Quarter 2025
SAMPLE ID: L135SS1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloride		6.74	mg/L	0.2	10/27/2025			EPA-300.0	X
Sulfate		10.2	mg/L	0.4	10/27/2025			EPA-300.0	X
Conductivity		281	µmhos/cm		10/27/2025			FS	X
pH		7.49	Std Unit		10/27/2025			FS	X
Iron		1.24	mg/L	0.1	10/27/2025			EPA-200.8	X
Sodium		7.44	mg/L	0.25	10/27/2025			EPA-200.8	X
Uranium	B	0.00496	mg/L	0.0002	10/27/2025			EPA-200.8	X
Alpha activity		8.8	pCi/L	6.35	10/27/2025	5.41	5.61	SW846-9310	X
Beta activity		33	pCi/L	9.22	10/27/2025	8.5	10.2	SW846-9310	X
Dissolved Solids	*	139	mg/L	10	10/27/2025			EPA-160.1	X
Suspended Solids		13	mg/L	4.1	10/27/2025			EPA-160.2	X
Chemical Oxygen Demand (COD)		23.8	mg/L	20	10/27/2025			EPA-410.4	X
Total Solids		169	mg/L	10	10/27/2025			SM-2540B	X
Total Organic Carbon (TOC)		11.2	mg/L	2	10/27/2025			SW846-9060A	X

Paducah OREIS
SURFACE WATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: L136 **INSTREAM** **Period:** 4th Quarter 2025
SAMPLE ID: L136SS1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloride		0.938	mg/L	0.2	10/27/2025			EPA-300.0	X
Sulfate		8.17	mg/L	0.4	10/27/2025			EPA-300.0	X
Conductivity		278	µmhos/cm		10/27/2025			FS	X
pH		7.43	Std Unit		10/27/2025			FS	X
Iron	J	0.0619	mg/L	0.1	10/27/2025			EPA-200.8	X
Sodium		1.51	mg/L	0.25	10/27/2025			EPA-200.8	X
Uranium	B	0.000531	mg/L	0.0002	10/27/2025			EPA-200.8	X
Alpha activity	U	1.08	pCi/L	7.63	10/27/2025	3.73	3.74	SW846-9310	X
Beta activity	U	6.32	pCi/L	11.7	10/27/2025	7.01	7.09	SW846-9310	X
Dissolved Solids	*	151	mg/L	10	10/27/2025			EPA-160.1	X
Suspended Solids	J	0.857	mg/L	3.57	10/27/2025			EPA-160.2	X
Chemical Oxygen Demand (COD)		35.1	mg/L	20	10/27/2025			EPA-410.4	X
Total Solids		140	mg/L	10	10/27/2025			SM-2540B	X
Total Organic Carbon (TOC)		13.8	mg/L	2	10/27/2025			SW846-9060A	X

Paducah OREIS
SURFACE WATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: L154 **INSTREAM** **Period:** 4th Quarter 2025
SAMPLE ID: L154US1-26 **Sample Type:** REG

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloride		7.65	mg/L	0.2	10/7/2025			EPA-300.0	X
Sulfate		4.66	mg/L	0.4	10/7/2025			EPA-300.0	X
Conductivity		153	µmhos/cm		10/7/2025			FS	X
pH		7.23	Std Unit		10/7/2025			FS	X
Iron		0.655	mg/L	0.1	10/7/2025			EPA-200.8	X
Sodium		5.06	mg/L	0.25	10/7/2025			EPA-200.8	X
Uranium		0.000386	mg/L	0.0002	10/7/2025			EPA-200.8	X
Alpha activity	U	0.104	pCi/L	6.92	10/7/2025	3.01	3.01	SW846-9310	X
Beta activity	U	3.51	pCi/L	10.1	10/7/2025	5.81	5.83	SW846-9310	X
Dissolved Solids	*	82	mg/L	10	10/7/2025			EPA-160.1	X
Suspended Solids	J	4.08	mg/L	5.1	10/7/2025			EPA-160.2	X
Chemical Oxygen Demand (COD)		47.1	mg/L	20	10/7/2025			EPA-410.4	X
Total Solids		101	mg/L	10	10/7/2025			SM-2540B	X
Total Organic Carbon (TOC)		14.4	mg/L	1	10/7/2025			SW846-9060A	X

Paducah OREIS
SURFACE WATER MONITORING REPORT

Facility: C-746-S&T Landfill **County:** McCracken **Permit #:** SW07300014,SW07300015,SW07300045
Sampling Point: QC **Period:** 4th Quarter 2025
SAMPLE ID: FB1SS1-26 **Sample Type:** FB

Parameter	Qualifier	Result	Units	Reporting Limit	Date Collected	Rad Error (+/-)	TPU	Method	Validation Code
Chloride	U	0.2	mg/L	0.2	10/27/2025			EPA-300.0	X
Sulfate	U	0.4	mg/L	0.4	10/27/2025			EPA-300.0	X
Iron	U	0.1	mg/L	0.1	10/27/2025			EPA-200.8	X
Sodium	U	0.25	mg/L	0.25	10/27/2025			EPA-200.8	X
Uranium	U	0.0002	mg/L	0.0002	10/27/2025			EPA-200.8	X
Alpha activity	U	-0.017	pCi/L	6.77	10/27/2025	2.98	2.99	SW846-9310	X
Beta activity	U	-0.192	pCi/L	9.18	10/27/2025	4.8	4.8	SW846-9310	X

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

Sample Type Code Definitions	
REG	Regular
FR	Field Replicate (code used for Field Duplicate)
RI	Equipment Rinsate Blank
FB	Field Blank
TB	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.
R	Result rejected by validator.
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.
X	Not validated

ATTACHMENT II

GEL LABORATORIES CERTIFICATES OF ANALYSIS

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GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-U Landfill Surface Water Quarterly(US26-01)

Client Sample ID: L154US1-26

Project: FRNP00707

Sample ID: 746293003

Client ID: FRNP007

Matrix: WS

Collect Date: 07-OCT-25

Receive Date: 08-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A/B, liquid "As Received"</i>														
Alpha	U	0.104	+/-3.01	6.92	+/-3.01	15.0	pCi/L			KP1	10/30/25	1043	2889368	1
Beta	U	3.51	+/-5.81	10.1	+/-5.83	50.0	pCi/L							

The following Analytical Methods were performed

Method	Description
1	EPA 900.0/SW846 9310

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Surface Water Quarterly(US26-01)

Client Sample ID: L154US1-26 Project: FRNP00707
Sample ID: 746293003 Client ID: FRNP007
Matrix: WS
Collect Date: 07-OCT-25 09:31
Receive Date: 08-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average		14.4	0.330	1.00	mg/L		1	KB3	10/08/25	2101	2876902	1
Ion Chromatography												
EPA 300.0 Anions (Chloride and Sulfate) "As Received"												
Chloride		7.65	0.0670	0.200	mg/L		1	CH6	10/08/25	1953	2877456	2
Sulfate		4.66	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
200.8/200.2 MIMICP Metals- Fe Na U "As Received"												
Iron		0.655	0.0330	0.100	mg/L	1.00	1	BB2	10/21/25	1657	2877170	3
Sodium		5.06	0.0800	0.250	mg/L	1.00	1					
Uranium		0.000386	0.0000670	0.000200	mg/L	1.00	1					
Solids Analysis												
EPA 160.1 Solids, Dissolved "As Received"												
Total Dissolved Solids	*	82.0	2.38	10.0	mg/L			SC1	10/13/25	1813	2879257	4
EPA 160.2 Total Suspended Liq "As Received"												
Total Suspended Solids	J	4.08	1.16	5.10	mg/L			SC1	10/09/25	1400	2877596	5
SM 2540 B Solids, Total "As Received"												
Total Solids		101	6.29	10.0	mg/L			SC1	10/09/25	1012	2877285	6
Spectrometric Analysis												
EPA 410.4 Chem. Oxygen Demand "As Received"												
COD		47.1	8.95	20.0	mg/L		1	BR2	10/14/25	1318	2880013	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	PB1	10/20/25	0905	2877169

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-U Landfill Surface Water Quarterly(US26-01)

Client Sample ID: L154US1-26
Sample ID: 746293003

Project: FRNP00707
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
The following Analytical Methods were performed:												
Method	Description		Analyst Comments									
1	SW846 9060A											
2	EPA 300.0											
3	EPA 200.8											
4	EPA 160.1											
5	EPA 160.2											
6	SM 2540B											
7	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: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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ATTACHMENT I2

GEL LABORATORIES CERTIFICATES OF ANALYSIS

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GEL LABORATORIES LLC

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

Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L135DSS1-26
Sample ID: 749461001
Matrix: WS
Collect Date: 27-OCT-25
Receive Date: 28-OCT-25
Collector: Client

Project: FRNP00706
Client ID: FRNP007

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting													
<i>GFPC, Gross A/B, liquid "As Received"</i>													
Alpha	U	3.96	+/-4.68	7.71	+/-4.72	15.0	pCi/L	CT3	11/19/25	1118	2900119	1	
Beta		43.6	+/-9.71	10.1	+/-12.1	50.0	pCi/L						

The following Analytical Methods were performed

Method	Description
1	EPA 900.0/SW846 9310

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

Notes:

The MDC is a sample specific MDC.

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

Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L135SS1-26

Project: FRNP00706

Sample ID: 749461002

Client ID: FRNP007

Matrix: WS

Collect Date: 27-OCT-25

Receive Date: 28-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A/B, liquid "As Received"</i>														
Alpha		8.80	+/-5.41	6.35	+/-5.61	15.0	pCi/L			CT3	11/19/25	1118	2900119	1
Beta		33.0	+/-8.50	9.22	+/-10.2	50.0	pCi/L							

The following Analytical Methods were performed

Method	Description
1	EPA 900.0/SW846 9310

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

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

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Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L136SS1-26

Project: FRNP00706

Sample ID: 749461003

Client ID: FRNP007

Matrix: WS

Collect Date: 27-OCT-25

Receive Date: 28-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch
Rad Gas Flow Proportional Counting													
<i>GFPC, Gross A/B, liquid "As Received"</i>													
Alpha	U	1.08	+/-3.73	7.63	+/-3.74	15.0	pCi/L			CT3	11/19/25	1118	2900119 1
Beta	U	6.32	+/-7.01	11.7	+/-7.09	50.0	pCi/L						

The following Analytical Methods were performed

Method	Description
1	EPA 900.0/SW846 9310

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

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

Certificate of Analysis

Company : Four Rivers Nuclear Partnership,
Address : LLC
5600 Hobbs Road

Kevil, Kentucky 42053

Report Date: January 21, 2026

Contact: Ms. Jaime Morrow

Project: C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: FB1SS1-26

Project: FRNP00706

Sample ID: 749461004

Client ID: FRNP007

Matrix: WATER

Collect Date: 27-OCT-25

Receive Date: 28-OCT-25

Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	TPU	RL	Units	PF	DF	Analyst	Date	Time	Batch	Mtd.
Rad Gas Flow Proportional Counting														
<i>GFPC, Gross A/B, liquid "As Received"</i>														
Alpha	U	-0.0170	+/-2.98	6.77	+/-2.99	15.0	pCi/L			CT3	11/19/25	1117	2900119	1
Beta	U	-0.192	+/-4.80	9.18	+/-4.80	50.0	pCi/L							

The following Analytical Methods were performed

Method	Description
1	EPA 900.0/SW846 9310

Surrogate/Tracer Recovery	Test	Batch ID	Recovery%	Acceptable Limits

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

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L135DSS1-26 Project: FRNP00706
Sample ID: 749461001 Client ID: FRNP007
Matrix: WS
Collect Date: 27-OCT-25 08:18
Receive Date: 28-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average		10.5	0.330	2.00	mg/L		1	KB3	11/20/25	2044	2901316	1
Ion Chromatography												
EPA 300.0 Anions (Chloride and Sulfate) "As Received"												
Chloride		6.72	0.0670	0.200	mg/L		1	CWW	10/28/25	1628	2888660	2
Sulfate		10.3	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
200.8/200.2 MIMICP Metals- Fe Na U "As Received"												
Iron		1.18	0.0330	0.100	mg/L	1.00	1	RM4	10/30/25	1606	2888630	3
Sodium		7.42	0.0800	0.250	mg/L	1.00	1					
Uranium	B	0.00515	0.0000670	0.000200	mg/L	1.00	1					
Solids Analysis												
EPA 160.1 Solids, Dissolved "As Received"												
Total Dissolved Solids	*	137	2.38	10.0	mg/L			SC1	10/30/25	1404	2888694	4
EPA 160.2 Total Suspended Liq "As Received"												
Total Suspended Solids		15.2	0.934	4.10	mg/L			SC1	10/29/25	1012	2888793	5
SM 2540 B Solids, Total "As Received"												
Total Solids		158	6.29	10.0	mg/L			SC1	10/28/25	1134	2888416	6
Spectrometric Analysis												
EPA 410.4 Chem. Oxygen Demand "As Received"												
COD		26.0	8.95	20.0	mg/L		1	BR2	10/30/25	1523	2889480	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	ES3	10/28/25	1730	2888629

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L135DSS1-26
Sample ID: 749461001

Project: FRNP00706
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
The following Analytical Methods were performed:												
Method	Description		Analyst Comments									
1	SW846 9060A											
2	EPA 300.0											
3	EPA 200.8											
4	EPA 160.1											
5	EPA 160.2											
6	SM 2540B											
7	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: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

GEL LABORATORIES LLC

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

Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L135SS1-26 Project: FRNP00706
Sample ID: 749461002 Client ID: FRNP007
Matrix: WS
Collect Date: 27-OCT-25 08:18
Receive Date: 28-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average		11.2	0.330	2.00	mg/L		1	KB3	11/21/25	1257	2901316	1
Ion Chromatography												
EPA 300.0 Anions (Chloride and Sulfate) "As Received"												
Chloride		6.74	0.0670	0.200	mg/L		1	CWW	10/28/25	1700	2888660	2
Sulfate		10.2	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
200.8/200.2 MIMICP Metals- Fe Na U "As Received"												
Iron		1.24	0.0330	0.100	mg/L	1.00	1	RM4	10/30/25	1609	2888630	3
Sodium		7.44	0.0800	0.250	mg/L	1.00	1					
Uranium	B	0.00496	0.0000670	0.000200	mg/L	1.00	1					
Solids Analysis												
EPA 160.1 Solids, Dissolved "As Received"												
Total Dissolved Solids	*	139	2.38	10.0	mg/L			SC1	10/30/25	1404	2888694	4
EPA 160.2 Total Suspended Liq "As Received"												
Total Suspended Solids		13.0	0.934	4.10	mg/L			SC1	10/29/25	1012	2888793	5
SM 2540 B Solids, Total "As Received"												
Total Solids		169	6.29	10.0	mg/L			SC1	10/28/25	1134	2888416	6
Spectrometric Analysis												
EPA 410.4 Chem. Oxygen Demand "As Received"												
COD		23.8	8.95	20.0	mg/L		1	BR2	10/30/25	1523	2889480	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	ES3	10/28/25	1730	2888629

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L135SS1-26
Sample ID: 749461002

Project: FRNP00706
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
The following Analytical Methods were performed:												
Method	Description										Analyst Comments	
1	SW846 9060A											
2	EPA 300.0											
3	EPA 200.8											
4	EPA 160.1											
5	EPA 160.2											
6	SM 2540B											
7	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: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L136SS1-26 Project: FRNP00706
Sample ID: 749461003 Client ID: FRNP007
Matrix: WS
Collect Date: 27-OCT-25 08:05
Receive Date: 28-OCT-25
Collector: Client

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Carbon Analysis												
9060A, Total Organic Carbon "As Received"												
Total Organic Carbon Average		13.8	0.330	2.00	mg/L		1	KB3	11/20/25	2324	2901316	1
Ion Chromatography												
EPA 300.0 Anions (Chloride and Sulfate) "As Received"												
Chloride		0.938	0.0670	0.200	mg/L		1	CWW	10/28/25	1835	2888660	2
Sulfate		8.17	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
200.8/200.2 MIMICP Metals- Fe Na U "As Received"												
Iron	J	0.0619	0.0330	0.100	mg/L	1.00	1	RM4	10/30/25	1621	2888630	3
Sodium		1.51	0.0800	0.250	mg/L	1.00	1					
Uranium	B	0.000531	0.0000670	0.000200	mg/L	1.00	1					
Solids Analysis												
EPA 160.1 Solids, Dissolved "As Received"												
Total Dissolved Solids	*	151	2.38	10.0	mg/L			SC1	10/30/25	1404	2888694	4
EPA 160.2 Total Suspended Liq "As Received"												
Total Suspended Solids	J	0.857	0.814	3.57	mg/L			SC1	10/29/25	1012	2888793	5
SM 2540 B Solids, Total "As Received"												
Total Solids		140	6.29	10.0	mg/L			SC1	10/28/25	1134	2888416	6
Spectrometric Analysis												
EPA 410.4 Chem. Oxygen Demand "As Received"												
COD		35.1	8.95	20.0	mg/L		1	BR2	10/30/25	1523	2889480	7

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	ES3	10/28/25	1730	2888629

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Certificate of Analysis

Report Date: January 21, 2026

Company : Four Rivers Nuclear Partnership, LLC
Address : 5600 Hobbs Road

Contact: Kevil, Kentucky 42053
Project: Ms. Jaime Morrow
C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID: L136SS1-26
Sample ID: 749461003

Project: FRNP00706
Client ID: FRNP007

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
The following Analytical Methods were performed:												
Method	Description		Analyst Comments									
1	SW846 9060A											
2	EPA 300.0											
3	EPA 200.8											
4	EPA 160.1											
5	EPA 160.2											
6	SM 2540B											
7	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: Critical Level

PF: Prep Factor

RL: Reporting Limit

SQL: Sample Quantitation Limit

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

Report Date: January 21, 2026

Contact: Kevil, Kentucky 42053
 Project: Ms. Jaime Morrow
 C-746-S&T Landfill Surface Water Quarterly(SS26-01)

Client Sample ID:	FB1SS1-26	Project:	FRNP00706
Sample ID:	749461004	Client ID:	FRNP007
Matrix:	WATER		
Collect Date:	27-OCT-25 08:20		
Receive Date:	28-OCT-25		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Ion Chromatography												
EPA 300.0 Anions (Chloride and Sulfate) "As Received"												
Chloride	U	0.200	0.0670	0.200	mg/L		1	CWW	10/28/25	1452	2888660	1
Sulfate	U	0.400	0.133	0.400	mg/L		1					
Metals Analysis-ICP-MS												
200.8/200.2 MIMICP Metals- Fe Na U "As Received"												
Iron	U	0.100	0.0330	0.100	mg/L	1.00	1	RM4	10/30/25	1624	2888630	2
Sodium	U	0.250	0.0800	0.250	mg/L	1.00	1					
Uranium	U	0.000200	0.0000670	0.000200	mg/L	1.00	1					

The following Prep Methods were performed:

Method	Description	Analyst	Date	Time	Prep Batch
EPA 200.2	ICP-MS 200.2 PREP	ES3	10/28/25	1730	2888629

The following Analytical Methods were performed:

Method	Description	Analyst Comments
1	EPA 300.0	
2	EPA 200.8	

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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APPENDIX J

ANALYTICAL LABORATORY CERTIFICATION

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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 2016 TNI Environmental Testing Laboratory Standard, and the requirements of the Department of Defense Environmental Laboratory Accreditation Program (DoD ELAP) and Department of Energy Consolidated Audit Program (DOECAP) as detailed in version 6.0 of the DoD Quality System Manual for Environmental Laboratories (QSM), the A2LA R206 – Specific Requirements – Environmental Testing Laboratory Accreditation Program, the A2LA R220 – Specific Requirements – A2LA DoD Environmental Laboratory Accreditation Program, and the A2LA R252 – Specific Requirements – A2LA DOEAP Environmental Laboratory Accreditation Program, 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 9th day of May 2025.

A blue ink signature of Mr. Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 2567.01
Valid to June 30, 2027

For the tests to which this accreditation applies, please refer to the laboratory's Environmental Scope of Accreditation.

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APPENDIX K

LABORATORY ANALYTICAL METHODS

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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)

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APPENDIX L

MICRO-PURGING STABILITY PARAMETERS

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**Micro-Purge Stability Parameters
for the C-746-S&T Landfills**

	Temperature (°F) Conductivity (µmhos/cm) pH (Std. Unit) Dissolved oxygen (mg/L) Turbidity (NTU)						Temperature (°F) Conductivity (µmhos/cm) pH (Std. Unit) Dissolved oxygen (mg/L) Turbidity (NTU)				
MW220						MW221					
Date Collected:10/15/2025						Date Collected:10/15/2025					
1230	66.7	357	6.12	6.16	3.93	0834	63.6	451	6.36	6.91	9.01
1235	66.4	359	6.11	6.01	4.23	0839	63.3	440	6.20	5.58	2.40
1240	66.3	358	6.11	5.95	4.11	0844	63.2	435	6.14	5.50	2.50
MW222						MW223					
Date Collected:10/15/2025						Date Collected:10/15/2025					
1016	67.7	388	6.22	4.44	4.87	0925	64.0	393	6.30	4.40	43.71
1021	67.5	387	6.19	4.20	5.17	0930	63.7	394	6.22	3.28	42.44
1026	67.7	388	6.18	4.17	4.93	0935	63.2	395	6.14	3.25	41.60
MW224						MW369					
Date Collected:10/20/2025						Date Collected:10/14/2025					
0646	56.1	440	6.59	6.60	5.46	0635	61.3	364	6.19	5.60	8.70
0651	56.6	443	6.23	4.80	4.75	0640	61.3	361	6.00	4.21	8.94
0656	57.0	448	6.20	4.71	4.70	0645	61.4	360	5.98	4.13	8.57
MW370						MW372					
Date Collected:10/14/2025						Date Collected:10/14/2025					
0725	62.7	437	6.07	5.98	4.08	0913	63.9	803	6.16	2.26	3.96
0730	63.0	438	6.02	5.34	3.67	0918	64.1	804	6.13	2.00	3.72
0735	63.0	438	6.00	5.24	3.55	0923	64.3	803	6.12	1.97	3.55
MW373						MW384					
Date Collected:10/14/2025						Date Collected:10/20/2025					
1003	64.3	1006	6.10	3.30	3.74	0752	58.8	446	6.24	5.88	6.00
1008	64.4	1012	6.05	1.97	3.93	0757	58.9	450	6.14	5.22	5.92
1013	64.4	1015	6.04	1.90	4.04	0802	59.0	449	6.12	5.16	5.96
MW385						MW386					
Date Collected:10/20/2025						Date Collected:10/20/2025					
0843	59.7	463	6.41	3.30	7.36	0929	61.1	585	6.84	3.10	6.09
0848	59.8	462	6.39	2.27	7.23	0934	61.2	590	6.78	2.05	6.20
0853	59.8	460	6.38	2.19	7.50	0939	61.1	591	6.77	2.00	6.27
MW387						MW388					
Date Collected:10/20/2025						Date Collected:10/20/2025					
1214	64.0	570	6.34	5.30	5.21	1305	63.2	447	6.20	5.44	6.40
1219	63.8	572	6.28	5.05	5.61	1310	63.1	446	6.14	5.01	6.47
1224	63.5	573	6.28	4.96	5.54	1315	63.3	447	6.11	5.03	6.60
MW390						MW391					
Date Collected:10/15/2025						Date Collected:10/16/2025					
0741	61.9	627	6.32	6.32	5.50	0951	64.2	535	6.38	2.00	5.79
0746	61.7	640	6.29	5.51	5.00	0956	64.3	505	6.33	2.80	5.42
0751	61.6	642	6.30	5.44	4.78	1001	64.2	502	6.31	2.88	6.06
MW392						MW393					
Date Collected:10/16/2025						Date Collected:10/16/2025					
1201	70.3	374	6.18	4.40	6.09	1247	65.6	420	6.20	2.00	9.66
1206	69.1	378	6.10	3.13	4.97	1252	66.0	410	6.18	1.28	8.99
1211	68.5	378	6.07	3.04	4.86	1257	66.4	409	6.17	1.22	8.90
MW394						MW395					
Date Collected:10/16/2025						Date Collected:10/16/2025					
0706	61.8	421	6.03	7.06	5.40	0756	61.7	407	6.18	6.11	4.20
0711	60.9	421	5.93	6.33	5.10	0801	61.7	404	6.00	5.61	4.06
0716	61.0	420	5.90	6.23	5.20	0806	61.8	404	5.96	5.52	4.14
MW396						MW397					
Date Collected:10/16/2025						Date Collected:10/15/2025					
0858	61.7	697	6.45	3.06	5.27	0637	60.9	325	5.99	7.26	9.80
0903	61.6	699	6.44	1.14	5.17	0642	61.0	326	5.89	6.77	9.98
0908	61.9	700	6.43	1.06	5.90	0647	61.0	327	5.88	6.72	9.92

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