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Arkema Quarter 4, 2025, Groundwater Monitoring Report

Arkema Inc. Facility, Portland, Oregon

PREPARED FOR
Legacy Site Services LLC

DATE
2 April 2026

REFERENCE
0815390



Arkema Quarter 4, 2025, Groundwater Monitoring Report

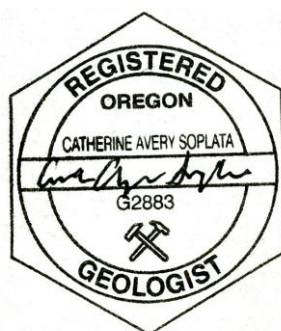
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PROJECT NO: 0815390

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VERSION: 01

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CONTENTS

1.	INTRODUCTION	1
2.	FIELD PROCEDURES	3
2.1	GROUNDWATER LEVEL MEASUREMENTS	3
2.2	GROUNDWATER SAMPLE COLLECTION PROCEDURES	3
2.3	SAMPLE SHIPPING AND INVESTIGATION-DERIVED WASTE	4
2.4	QUALITY ASSURANCE AND QUALITY CONTROL AND DATA VALIDATION	4
2.5	DEVIATIONS FROM GROUNDWATER MONITORING WORK PLAN	5
3.	GROUNDWATER MONITORING RESULTS	6
3.1	GROUNDWATER ELEVATIONS	6
3.2	GROUNDWATER SAMPLING RESULTS	6
3.2.1	Field Parameter Results	6
3.2.2	Analytical Results	6
4.	RECOMMENDATIONS	8
5.	REFERENCES	9

TABLES

FIGURES

APPENDIX A FIELD FORMS

APPENDIX B LABORATORY ANALYTICAL REPORTS

APPENDIX C DATA VALIDATION MEMOS

APPENDIX D PRIOR GROUNDWATER MONITORING PROGRAM DATA TABLES AND GRAPHS

APPENDIX E HISTORICAL DATA TABLE



LIST OF TABLES

TABLE 1	GROUNDWATER SAMPLING MATRIX
TABLE 2	GROUNDWATER ELEVATION RESULTS
TABLE 3	FIELD PARAMETERS MEASURED IN GROUNDWATER
TABLE 4	VOLATILE ORGANIC COMPOUNDS RESULTS
TABLE 5	ADDITIONAL COMPOUNDS RESULTS
TABLE 6	PESTICIDE RESULTS

LIST OF FIGURES

FIGURE 1	SITE LAYOUT
FIGURE 2	DECEMBER 2025 SHALLOW ZONE GROUNDWATER CONTOURS
FIGURE 3	DECEMBER 2025 INTERMEDIATE ZONE GROUNDWATER CONTOURS
FIGURE 4	DECEMBER 2025 DEEP ZONE GROUNDWATER CONTOURS
FIGURE 5	DECEMBER 2025 GRAVEL ZONE GROUNDWATER CONTOURS
FIGURE 6	DECEMBER 2025 BASALT ZONE GROUNDWATER CONTOURS
FIGURE 7	CHLOROBENZENE GROUNDWATER CONCENTRATIONS—SHALLOW ZONE
FIGURE 8	CHLOROBENZENE GROUNDWATER CONCENTRATIONS—INTERMEDIATE ZONE
FIGURE 9	CHLOROBENZENE GROUNDWATER CONCENTRATIONS—DEEP ZONE
FIGURE 10	CHLOROBENZENE GROUNDWATER CONCENTRATIONS—GRAVEL ZONE
FIGURE 11	CHLOROBENZENE GROUNDWATER CONCENTRATIONS—BASALT ZONE
FIGURE 12	1,2-DICHLOROBENZENE GROUNDWATER CONCENTRATIONS—SHALLOW ZONE
FIGURE 13	1,2-DICHLOROBENZENE GROUNDWATER CONCENTRATIONS—INTERMEDIATE ZONE
FIGURE 14	1,2-DICHLOROBENZENE GROUNDWATER CONCENTRATIONS—DEEP ZONE
FIGURE 15	1,2-DICHLOROBENZENE GROUNDWATER CONCENTRATIONS—GRAVEL ZONE
FIGURE 16	1,2-DICHLOROBENZENE GROUNDWATER CONCENTRATIONS—BASALT ZONE
FIGURE 17	PCE, TCE, CIS-1,2-DCE, AND VINYL CHLORIDE GROUNDWATER CONCENTRATIONS—SHALLOW ZONE
FIGURE 18	PCE, TCE, CIS-1,2-DCE, AND VINYL CHLORIDE GROUNDWATER CONCENTRATIONS—INTERMEDIATE ZONE
FIGURE 19	PCE, TCE, CIS-1,2-DCE, AND VINYL CHLORIDE GROUNDWATER CONCENTRATIONS—DEEP ZONE
FIGURE 20	PCE, TCE, CIS-1,2-DCE, AND VINYL CHLORIDE GROUNDWATER CONCENTRATIONS—GRAVEL ZONE
FIGURE 21	PCE, TCE, CIS-1,2-DCE, AND VINYL CHLORIDE GROUNDWATER CONCENTRATIONS—BASALT ZONE



FIGURE 22	PERCHLORATE GROUNDWATER CONCENTRATIONS—SHALLOW ZONE
FIGURE 23	PERCHLORATE GROUNDWATER CONCENTRATIONS—INTERMEDIATE ZONE
FIGURE 24	PERCHLORATE GROUNDWATER CONCENTRATIONS—DEEP ZONE
FIGURE 25	PERCHLORATE GROUNDWATER CONCENTRATIONS—GRAVEL ZONE
FIGURE 26	PERCHLORATE GROUNDWATER CONCENTRATIONS—BASALT ZONE
FIGURE 27	CHLORIDE GROUNDWATER CONCENTRATIONS—SHALLOW ZONE
FIGURE 28	CHLORIDE GROUNDWATER CONCENTRATIONS—INTERMEDIATE ZONE
FIGURE 29	CHLORIDE GROUNDWATER CONCENTRATIONS—DEEP ZONE
FIGURE 30	CHLORIDE GROUNDWATER CONCENTRATIONS—GRAVEL ZONE
FIGURE 31	CHLORIDE GROUNDWATER CONCENTRATIONS—BASALT ZONE
FIGURE 32	DDX GROUNDWATER CONCENTRATIONS—GRAVEL ZONE
FIGURE 33	DDX GROUNDWATER CONCENTRATIONS—BASALT ZONE

ACRONYMS AND ABBREVIATIONS

Acronyms	Description
µg/L	micrograms per liter
Arkema	Arkema Inc.
cis-1,2-DCE	cis-1,2-dichloroethene
COC	contaminant of concern
ERM	Environmental Resources Management, Inc.
GEE	Groundwater Extraction Enhancement
GMWP	Groundwater Monitoring Work Plan
GWBW	groundwater barrier wall
GWET	groundwater extraction and treatment
GW SCM	groundwater source control measures
IRAM 1	Interim Remedial Action Measure #1
ISS	in situ stabilization
LSS	Legacy Site Services, LLC
NTU	nephelometric turbidity unit
ODEQ	Oregon Department of Environmental Quality
PCE	tetrachloroethene



Acronyms	Description
QA/QC	quality assurance / quality control
QAPP	Quality Assurance Project Plan
Report	Quarter 4, 2025, Groundwater Monitoring Report
SEE	System Effectiveness Evaluation
Site	Former Arkema Portland Plant at 6400 NW Front Avenue, Portland, Oregon
TCE	trichloroethene
VOC	volatile organic compound



1. INTRODUCTION

Environmental Resources Management, Inc. (ERM) has prepared this *Arkema Quarter 4, 2025, Groundwater Monitoring Report* (Report) for the Arkema Inc. (Arkema) Facility (the Site) on behalf of Legacy Site Services, LLC (LSS), agent for Arkema. The Site is located at 6400 NW Front Avenue in the Northwest Industrial Area of Portland, Oregon, and is bounded by Front Avenue on the north and west, the Willamette River on the east, and an asphalt roofing manufacturer on the south. The Site lies on the southwest bank of the lower Willamette River between river mile 6.9 and river mile 7.6, immediately upstream of the Burlington Northern Santa Fe Railroad Bridge and is adjacent to the Portland Harbor Superfund site.

The Site's operational and remedial history was documented in the *Revised Upland Feasibility Study Work Plan* (ERM 2017). This Report provides the field procedures, groundwater level data, and analytical results for the Quarter 4, 2025, groundwater monitoring at the former Arkema Portland Plant at 6400 NW Front Avenue, Portland, Oregon.

The objective of this groundwater monitoring program is to evaluate the performance of the groundwater source control measure (GW SCM). The GW SCM consists of the groundwater barrier wall (GWBW) and the groundwater extraction and treatment system (GWET). The objective of the GW SCM is to achieve hydraulic containment of the alluvial sequence within the Target Capture Zone at the Site to prevent the flow of contaminants of concern (COC) to the Willamette River. The GW SCM is described in further detail in the *Revised Final Performance Monitoring Plan—Groundwater Source Control Measure* (ERM 2015). In 2022, the GWET system was upgraded by installing 14 additional extraction wells referred to as the Groundwater Extraction Enhancement (GEE). The GEE is described in further detail in the *Final Design Report* (ERM 2022).

In their 31 May 2019 review of the *Draft GWET System Effectiveness Evaluation [SEE] Report* (ODEQ 2019), the Oregon Department of Environmental Quality (ODEQ) requested the development of an analytical monitoring program for groundwater COCs. Subsequent to that letter, LSS, ERM, and the ODEQ held a meeting on 2 July 2019, during which ERM and LSS agreed to commence groundwater monitoring. Starting in October 2019 through April 2021, groundwater monitoring was conducted in accordance with the ODEQ-approved *Arkema Quarterly Groundwater Monitoring Work Plan* (GMWP), dated October 2019 (ERM 2019). This groundwater monitoring scope consisted of a sitewide assessment of groundwater COCs.

Following the ODEQ review of the *2021 GWET System Effectiveness Evaluation Report* (ODEQ 2021; ERM 2021), ERM, on behalf of LSS, requested a reduced monitoring scope in a memorandum dated 9 September 2021. The ODEQ approved the reduced monitoring scope on 14 September 2021. The objective of the reduced monitoring scope of work is to evaluate the potential for the following COCs to migrate around or below the GBW:

- Volatile organic compounds (VOC)
- Perchlorate
- Chloride



Following well decommissioning activities as described in the *Quarter 3, 2025, Groundwater Monitoring Report* (ERM 2026), the Approved Groundwater Monitoring Program includes 25 well locations in the Shallow, Intermediate, and Deep hydrogeological zones.

From 2 September 2025 through 23 December 2025, 50 monitoring wells were installed in preparation for the implementation of the Interim Remedial Action Measure 1 (IRAM 1) in situ stabilization (ISS) remedy, in accordance with the *IRAM 1 Performance Monitoring Well Network Installation Work Plan* (ERM 2025) submitted to the ODEQ on 22 August 2025. The well installation effort included installation of monitoring wells in the Shallow, Intermediate, Deep Gravel, and Basalt hydrogeological zones. In addition to well locations sampled under the Approved Groundwater Monitoring Program, 17 new well locations in the Gravel and Basalt hydrogeological zones were sampled during Quarter 4, 2025 to support sitewide decision-making purposes. Details regarding the installation of the new monitoring wells in preparation for the implementation of IRAM 1 will be included in the forthcoming Quarter 1, 2026 Groundwater Monitoring Report.

ERM conducts groundwater monitoring events on a quarterly basis and assesses historical and current groundwater analytical trends in the area of the GWBW on an annual basis. The annual assessment is included in the Annual SEE Report.



2. FIELD PROCEDURES

ERM collected groundwater elevation data from 109 well locations on 4 November 2025 and 7 December 2025. ERM collected groundwater samples from 9 well locations between 4 and 7 November 2025 and from 32 well locations between 8 and 15 December 2025. As described in Section 1, 50 new monitoring well locations were installed during Quarters 3 and 4 in preparation for the implementation of the IRAM 1 ISS remedy. Seventeen newly installed Gravel and Basalt hydrogeological zone monitoring well locations were sampled during Quarter 4, 2025, to support sitewide decision-making. The 17 new well locations were sampled and analyzed for VOCs, perchlorate, chloride, and organochlorine pesticides. The locations of all monitoring wells and piezometers are presented on Figure 1. A summary of groundwater level and sampling locations and analyses are displayed in Table 1.

ERM performed field sampling in accordance with the procedures outlined in the GMWP and addenda, with exception of deviations further described in Section 2.5. These procedures cover well purging, field parameter collection, analytical requirements, and quality assurance / quality control (QA/QC) protocols.

Groundwater monitoring fieldwork included collecting groundwater level measurements, water quality parameters, and groundwater samples for laboratory analysis.

2.1 GROUNDWATER LEVEL MEASUREMENTS

As shown in Table 1, ERM collected groundwater elevation data on 4 November 2025 and 7 December 2025 from 109 well locations using manual measurements. Manual measurements were measured to the nearest 0.01 foot using a water level indicator in accordance with the GMWP. Transducer data were not collected during the Quarter 4, 2025, groundwater sampling event due to the GWET plant shutdown in preparation for the implementation of the IRAM 1 remedy.

2.2 GROUNDWATER SAMPLE COLLECTION PROCEDURES

During Quarter 4, 2025, ERM collected groundwater samples from 41 well locations. One piezometer (PA-16i) in the monitoring program was not sampled during the Quarter 4, 2025, event due to a stuck transducer that prevented access down the well. The Quarter 4, 2025, monitoring well network included 24 monitoring wells and 17 piezometers (Table 1).

Sample collection procedures pertaining to the 41 well locations are included below.

All wells and piezometers were sampled with a bladder or peristaltic pump using low-flow techniques and sample collection procedures as described in the GMWP. Field water quality measurements (i.e., temperature, pH, specific conductivity, dissolved oxygen, oxygen-reduction potential, turbidity) were collected with calibrated field water quality meters. ERM recorded field notes taken during sampling in field logs; field forms are provided as Appendix A.

After well-purging criteria were satisfied, ERM disconnected the in-line flow cell and collected groundwater samples in the appropriate containers for the analyses as shown in Table 1. For



pesticide samples, if turbidity was greater than 5 nephelometric turbidity units (NTUs), samples were field filtered using a 0.45-micron filter and analyzed for dissolved phase constituents. For VOCs, low level analyses were performed if historical results were non-detected by standard methods. After sampling, ERM removed the pump and associated tubing from the well, discarded disposable tubing, and decontaminated reusable equipment as described in the GMWP.

2.3 SAMPLE SHIPPING AND INVESTIGATION-DERIVED WASTE

After sample collection, ERM labeled samples with the required data and entered the data into the chain-of-custody record to facilitate proper tracking and control. Samples were delivered under chain-of-custody to the Eurofins Wilsonville Service Center and then shipped to their respective Eurofins laboratory in sealed containers, accompanied by the chain-of-custody record.

Investigation-derived waste generated during the groundwater monitoring included groundwater purged from monitoring wells, personal protective equipment, and disposable sampling equipment. Decontamination fluids and purge water were contained in 5-gallon buckets and then processed in the GWET system. Disposable sampling equipment and used personal protective equipment were disposed of as non-hazardous solid waste.

2.4 QUALITY ASSURANCE AND QUALITY CONTROL AND DATA VALIDATION

As described in the GMWP, the analyses were performed in accordance with the Quality Assurance Project Plan (QAPP) and the 2009 and 2011 QAPP addenda, as described in the GMWP.

ERM collected field QA/QC samples in accordance with the QAPP and associated addenda (listed below). QA/QC samples—including trip blanks, field duplicates, and rinsate samples—were collected, controlled, and shipped in the same manner as normal field samples.

- Trip blanks were included in each cooler that contained VOC samples.
- Field duplicate samples were collected for every 20 samples.
- Rinsate blank samples were collected for every 20 samples to verify efficacy of sampling equipment decontamination.

ERM completed data validation after receiving the laboratory analytical reports. Appendix B includes laboratory analytical reports and Appendix C includes data validation memos. QA/QC sample results were reviewed during data validation and additional details are included in the data validation memos (Appendix C). Based on the results of the data validation, qualifiers were assigned to the data, and select analytes were rejected. The following VOC results were rejected due to low matrix spike/matrix spike duplicate recoveries:

- Methylene chloride in samples PMW-09B-121025 and PMW-20G-110625

It was determined that, excluding rejected data, the qualified data are acceptable for decision-making and meet the overall objectives of the monitoring program.



2.5 DEVIATIONS FROM GROUNDWATER MONITORING WORK PLAN

Deviations outside of the Approved Groundwater Monitoring Program include the following:

- Well PA-16i was not sampled during Quarter 4, 2025, because the transducer was stuck and could not be removed. The transducer was removed following the groundwater sampling event, and the well will be sampled in Quarter 1, 2026.
- Select wells sampled during Quarter 4, 2025, had unstable field parameters and drawdown over 1 foot. Additional details are provided below in Section 3.2.1.
- Seventeen new well locations were sampled during Quarter 4, 2025, as described in Section 1, and the new well locations were sampled for regular organochlorine pesticides in addition to the analytes listed in the GWMP (VOC, perchlorate, and chloride). On 31 October 2025, ERM, on behalf of LSS, submitted a sampling protocol request to the ODEQ regarding pesticide sample collection. The requested sampling protocol included if turbidity was less than or equal to 5 NTUs, a normal pesticide sample would be collected, and if turbidity was greater than 5 NTUs, a filtered pesticide sample would be collected using a 0.45-micron filter. The ODEQ approved the sampling protocol request on 3 November 2025.



3. GROUNDWATER MONITORING RESULTS

3.1 GROUNDWATER ELEVATIONS

On 7 December 2025, ERM manually measured depth to groundwater to the nearest 0.01 foot in 109 wells at the Site using an electronic water level indicator. Table 2 presents groundwater elevation data for all 109 well locations. These data were used to develop potentiometric surface maps for the Shallow, Intermediate, Deep, Gravel, and Basalt hydrogeological zones. These maps are presented on Figures 2 through 6, respectively.

3.2 GROUNDWATER SAMPLING RESULTS

ERM personnel completed groundwater sampling between 4 and 7 November 2025 and between 8 and 15 December 2025 at 41 monitoring well and piezometer locations, in accordance with the Approved Groundwater Monitoring Program and ODEQ-approved updated sampling protocol as described above in Section 2.5. Results from the groundwater sampling and analyses of the well locations included in ERM's monitoring program are presented in further detail below.

3.2.1 FIELD PARAMETER RESULTS

ERM measured and recorded field parameters during well purging. Table 3 presents the results of the field parameter measurements. The following well locations did not stabilize for select field parameters during the Quarter 4, 2025, groundwater monitoring event:

- Seventeen monitoring locations (MWA-63, MWA-82, PA-10i, PA-18d, PA-22d, PA-26d, PA-32i, PMW-02b, PMW-04b, PMW-05b2, PMW-06b, PMW-06b2, PMW-09b, PMW-09g, PMW-19b, PMW-19g, and PMW-20g) did not stabilize for turbidity.
- One monitoring location (PA-23d) did not stabilize for temperature.
- One monitoring location (PMW-20g) had drawdown greater than 1 foot.

Three well volumes were not purged prior to sampling at locations PA-10i, PA-18d, PA-22d, PA-23d, PA-26d, PA-27d, PA-32i, MWA-63, MWA-82, PMW-02b, PMW-04b, PMW-05b2, PMW-06b, PMW-06b2, PMW-09b, PMW-09g, PMW-19b, and PMW-19g.

At the listed well locations where three well volumes were not purged, field parameters were close to stabilization, and the quality of the data is not considered to be affected. Field staff will receive additional training regarding field parameter stabilization prior to the next groundwater monitoring event.

3.2.2 ANALYTICAL RESULTS

Tables 4, 5, and 6 present the analytical results for VOCs, perchlorate and chloride, and organochlorine pesticides, respectively, from the Quarter 4, 2025, groundwater monitoring event. Appendix B presents laboratory analytical reports. Appendix D includes previous groundwater monitoring data, beginning in October 2019, from well locations associated with the Approved



Groundwater Monitoring Program. Appendix E includes historical groundwater data associated with the Site prior to implementation of the groundwater monitoring program in October 2019.

3.2.2.1 VOCS

The results for chlorobenzene in the Shallow, Intermediate, Deep, Gravel, and Basalt Zones are presented on Figures 7 through 11, respectively. Chlorobenzene was detected in 19 out of 41 samples. The highest detected concentration of chlorobenzene was 41,000 micrograms per liter (µg/L) at Basalt Zone monitoring well PMW-04b.

The results for 1,2-dichlorobenzene in the Shallow, Intermediate, and Deep Zones are presented on Figures 12 through 16, respectively. 1,2-dichlorobenzene was detected in 3 out of 41 samples. The highest detected concentration of 1,2-dichlorobenzene was 4.6 µg/L at Basalt Zone monitoring well PMW-04b.

The results for tetrachloroethene (PCE), trichloroethene (TCE), and their de-chlorination daughter-products cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride, in the Shallow, Intermediate, and Deep Zones, are presented on Figures 17 through 21, respectively:

- PCE was detected in 9 out of 41 samples. The highest detected concentration of PCE was 45 µg/L at Basalt Zone monitoring well PMW-04b.
- TCE was detected in 5 out of 41 samples. The highest detected concentration of TCE was 3.6 µg/L at both Shallow Zone monitoring well MWA-63 and Basalt Zone monitoring well PMW-04b.
- cis-1,2-DCE was detected in 7 out of 41 samples. The highest detected concentration of cis-1,2-DCE was 5.1 µg/L at Shallow Zone monitoring well MWA-63.
- Vinyl chloride was detected in 0 out of 41 samples.

3.2.2.2 PERCHLORATE

Perchlorate results for the Shallow, Intermediate, and Deep Zones are presented on Figures 22 through 26, respectively. Perchlorate was detected in 16 out of 41 samples. The highest detected concentration of perchlorate was 120,000 µg/L at Deep Zone monitoring well MWA-31i(d).

3.2.2.3 CHLORIDE

Chloride results for the Shallow, Intermediate, and Deep Zones are presented on Figures 27 through 31, respectively. Chloride was detected in 41 out of 41 samples. The highest detected concentration of chloride was 180,000 milligrams per liter at Deep Zone monitoring well MWA-58d.

3.2.2.4 ORGANOCHLORINE PESTICIDES

Dichlorodiphenyltrichloroethane (2,4- and 4,4-DDT) and associated breakdown products dichlorophenyldichloroethane (2,4- and 4,4-DDD) and dichlorophenyldichloroethylene (2,4- and 4,4-DDE) (collectively DDx) results for the Gravel and Basalt Zones are presented on Figures 32



through 33, respectively. DDx was detected in 7 out of 19 samples. The highest detected concentration of DDx was 1.4385 µg/L at Basalt Zone monitoring well PMW-06b.

4. RECOMMENDATIONS

Following the Quarter 4, 2025, groundwater monitoring event, the following changes are recommended to the GMWP at this time:

- As described in Section 1, 50 monitoring wells were installed in preparation for the implementation of the IRAM 1 ISS remedy and will be sampled in addition to the wells included in the Approved Groundwater Monitoring Program during Quarter 1, 2026.

ERM will conduct the Quarter 1, 2026, groundwater monitoring event according to the following schedule:

- Water levels will be measured on 12 January 2026.
- Sampling will begin on 13 January 2026 and is expected to be completed over a 3-week period.
- Receipt of analytical results is anticipated to be completed over a period of 5 weeks or less from the completion of the sampling event (February 2026).

The Quarter 1, 2026, Groundwater Monitoring Report will be submitted to the ODEQ within 60 days after data validation (April 2026).



5. REFERENCES

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TABLES

Table 1
Groundwater Sampling Matrix
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte			Volatile Organic Compounds	Volatile Organic Compounds	Chloride	Perchlorate	Regular Organochlorine Pesticides	Comments
Analytical Method			8260C	8260C_LL ^a	300	314	8081B	
Location ID	Aquifer Classification	Groundwater Level Measurement						
MWA-02 ^c	Shallow	--	--	--	--	--	--	
MWA-15r ^c	Shallow	--	--	--	--	--	--	
MWA-18	Shallow	X	--	--	--	--	--	
MWA-19	Shallow	X	--	--	--	--	--	
MWA-20	Shallow	X	--	--	--	--	--	
MWA-22	Shallow	X	--	--	--	--	--	
MWA-24	Shallow	X	--	--	--	--	--	
MWA-29	Shallow	X	--	--	--	--	--	
MWA-33	Shallow	X	--	--	--	--	--	
MWA-40	Shallow	X	--	--	--	--	--	
MWA-41	Shallow	X	--	X	X	X	--	
MWA-42	Shallow	X	--	--	--	--	--	
MWA-43	Shallow	X	--	--	--	--	--	
MWA-46	Shallow	X	--	--	--	--	--	
MWA-47	Shallow	X	--	--	--	--	--	
MWA-61 ^c	Shallow	--	--	--	--	--	--	
MWA-63	Shallow	X	X	--	X	X	--	
MWA-69 ^c	Shallow	--	--	--	--	--	--	
MWA-71	Shallow	X	--	--	--	--	--	
MWA-72	Shallow	X	--	--	--	--	--	
MWA-73	Shallow	X	--	--	--	--	--	
MWA-82	Shallow	X	--	X	X	X	--	
PA-03	Shallow	X	--	X	X	X	--	
PA-04	Shallow	X	--	X	X	X	--	
PA-05 ^c	Shallow	--	--	--	--	--	--	
PA-06 ^c	Shallow	--	--	--	--	--	--	
PA-07	Shallow	X	--	--	--	--	--	
PA-08	Shallow	X	--	X	X	X	--	
PA-09	Shallow	X	--	X	X	X	--	
PA-28	Shallow	X	--	--	--	--	--	
PA-31	Shallow	X	--	X	X	X	--	
PA-33	Shallow	X	--	--	--	--	--	
PA-35	Shallow	X	--	--	--	--	--	
PA-36	Shallow	X	--	--	--	--	--	
PA-38	Shallow	X	--	--	--	--	--	
PA-41	Shallow	X	--	--	--	--	--	
PA-42	Shallow	X	--	--	--	--	--	
PA-43	Shallow	X	--	--	--	--	--	
RP-02-31	Shallow	X	--	--	--	--	--	
RP-10-30	Shallow	X	--	--	--	--	--	
RW-05	Shallow	X	--	--	--	--	--	
RW-07	Shallow	X	--	--	--	--	--	
RW-08 ^c	Shallow	--	--	--	--	--	--	
RW-10 ^c	Shallow	--	--	--	--	--	--	
RW-12	Shallow	X	--	--	--	--	--	
RW-14	Shallow	X	--	--	--	--	--	
RW-15	Shallow	X	--	--	--	--	--	
RW-17	Shallow	X	--	--	--	--	--	
RW-18	Shallow	X	--	--	--	--	--	
RW-20	Shallow	X	--	--	--	--	--	
RW-22	Shallow	X	--	--	--	--	--	
RW-23	Shallow	--	--	--	--	--	--	
RW-25	Shallow	X	--	--	--	--	--	
EW-1	Shallow/Intermediate	--	--	--	--	--	--	

Table 1
Groundwater Sampling Matrix
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte			Volatiles Organic Compounds	Volatiles Organic Compounds	Chloride	Perchlorate	Regular Organochlorine Pesticides	Comments
Analytical Method			8260C	8260C_LL ^a	300	314	8081B	
Location ID	Aquifer Classification	Groundwater Level Measurement						
EW-2	Shallow/Intermediate	--	--	--	--	--	--	
EW-3	Shallow/Intermediate	--	--	--	--	--	--	
EW-4	Shallow/Intermediate	--	--	--	--	--	--	
EW-5	Shallow/Intermediate	--	--	--	--	--	--	
EW-6	Shallow/Intermediate	--	--	--	--	--	--	
EW-7	Shallow/Intermediate	--	--	--	--	--	--	
EW-8	Shallow/Intermediate	--	--	--	--	--	--	
EW-9	Shallow/Intermediate	--	--	--	--	--	--	
EW-10	Shallow/Intermediate	--	--	--	--	--	--	
EW-11	Shallow/Intermediate	--	--	--	--	--	--	
EW-12	Shallow/Intermediate	--	--	--	--	--	--	
EW-13	Shallow/Intermediate	--	--	--	--	--	--	
EW-14	Shallow/Intermediate	--	--	--	--	--	--	
MWA-83	Shallow/Intermediate	X	--	--	--	--	--	
MWA-84	Shallow/Intermediate	X	--	--	--	--	--	
MWA-85	Shallow/Intermediate	X	--	--	--	--	--	
MWA-86	Shallow/Intermediate	X	--	--	--	--	--	
MWA-87	Shallow/Intermediate	X	--	--	--	--	--	
MWA-88	Shallow/Intermediate	X	--	--	--	--	--	
MWA-89	Shallow/Intermediate	X	--	--	--	--	--	
MWA-07(i)	Intermediate	X	--	--	--	--	--	
MWA-08i ^c	Intermediate	--	--	--	--	--	--	
MWA-16i	Intermediate	X	--	--	--	--	--	
MWA-34iR ^b	Intermediate	X	--	--	--	--	--	
MWA-49i	Intermediate	X	--	--	--	--	--	
MWA-53i	Intermediate	X	--	--	--	--	--	
MWA-54i	Intermediate	X	--	--	--	--	--	
MWA-66i ^c	Intermediate	--	--	--	--	--	--	
MWA-70i	Intermediate	X	--	--	--	--	--	
MWA-74i	Intermediate	X	--	--	--	--	--	
MWA-75i	Intermediate	X	--	--	--	--	--	
MWA-81i	Intermediate	X	--	X	X	X	--	
PA-10i	Intermediate	X	--	X	X	X	--	
PA-11i ^c	Intermediate	--	--	--	--	--	--	
PA-12i ^c	Intermediate	--	--	--	--	--	--	
PA-13i	Intermediate	X	--	--	--	--	--	
PA-14i	Intermediate	X	--	--	--	--	--	
PA-15i	Intermediate	X	--	X	X	X	--	
PA-16i	Intermediate	X	--	--	--	--	--	Not sampled due to obstruction
PA-17iR	Intermediate	X	--	X	X	X	--	
PA-29i	Intermediate	X	--	--	--	--	--	
PA-32i	Intermediate	X	--	X	X	X	--	
PA-34i	Intermediate	X	--	--	--	--	--	
PA-37i	Intermediate	X	--	--	--	--	--	
PA-39i	Intermediate	X	--	--	--	--	--	
PA-40i	Intermediate	X	--	--	--	--	--	
PA-44i	Intermediate	X	--	X	X	X	--	
RW-06i	Intermediate	X	--	--	--	--	--	
RW-09i ^c	Intermediate	--	--	--	--	--	--	
RW-11i	Intermediate	--	--	--	--	--	--	
RW-13i	Intermediate	X	--	--	--	--	--	
RW-16i	Intermediate	X	--	--	--	--	--	
RW-19i	Intermediate	X	--	--	--	--	--	
RW-21i	Intermediate	X	--	--	--	--	--	

Table 1
Groundwater Sampling Matrix
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte			Volatile Organic Compounds	Volatile Organic Compounds	Chloride	Perchlorate	Regular Organochlorine Pesticides	Comments
Analytical Method			8260C	8260C_LL ^a	300	314	8081B	
Location ID	Aquifer Classification	Groundwater Level Measurement						
RW-24i ^c	Intermediate	--	--	--	--	--	--	
RW-26i	Intermediate	X	--	--	--	--	--	
MWA-11i(d) ^c	Deep	--	--	--	--	--	--	
MWA-12i(d)	Deep	X	--	--	--	--	--	
MWA-31i(d)	Deep	X	X	--	X	X	--	
MWA-56d	Deep	X	X	--	X	X	--	
MWA-58d	Deep	X	X	--	X	X	--	
PA-18d	Deep	X	X	--	X	X	--	
PA-19d ^c	Deep	--	--	--	--	--	--	
PA-20d ^c	Deep	--	--	--	--	--	--	
PA-21d ^c	Deep	--	--	--	--	--	--	
PA-22d	Deep	X	X	--	X	X	--	
PA-23d	Deep	X	X	--	X	X	--	
PA-24d	Deep	X	X	--	X	X	--	
PA-25d	Deep	X	--	X	X	X	--	
PA-26d	Deep	X	--	X	X	X	--	
PA-27d	Deep	X	X	--	X	X	--	
PA-30d ^c	Deep	--	--	--	--	--	--	
MWA-76g	Gravel	X	--	--	--	--	--	
MWA-77g	Gravel	X	--	--	--	--	--	
PMW-01g	Gravel	X	X	--	X	X	X	
PMW-08g	Gravel	X	X	--	X	X	X	
PMW-09g	Gravel	X	X	--	X	X	X	
PMW-19g	Gravel	X	X	--	X	X	X	
PMW-20g	Gravel	X	X	--	X	X	X	
PMW-01b	Basalt	X	X	--	X	X	X	
PMW-02b	Basalt	X	X	--	X	X	X	
PMW-03b	Basalt	X	X	--	X	X	X	
PMW-04b	Basalt	X	X	--	X	X	X	
PMW-05b	Basalt	X	X	--	X	X	X	
PMW-05b2	Basalt	X	X	--	X	X	X	
PMW-06b	Basalt	X	X	--	X	X	X	
PMW-06b2	Basalt	X	X	--	X	X	X	
PMW-08b	Basalt	X	X	--	X	X	X	
PMW-09b	Basalt	X	X	--	X	X	X	
PMW-18b	Basalt	X	X	--	X	X	X	
PMW-19b	Basalt	X	X	--	X	X	X	

Notes:

^a low level test

^b MWA-34i was abandoned on 30 May 2024 and reinstalled as MWA-34iR on 29 May 2024.

^c Abandoned in August through December 2025 or unable to be accessed due to well abandonment activities.

All groundwater levels were measured manually in Quarter 4, 2025.

NTU = nephelometric turbidity unit

Table 2
Groundwater Elevation Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Well ID	Date	Time	Aquifer Unit	Top of Casing Elevation (ft NAVD88)	Depth to Water (ft)	Groundwater Elevation (ft NAVD88) *
MWA-18	12/7/2025	9:17:00 AM	Shallow	39.43	29.87	9.56
MWA-19	12/7/2025	9:23:00 AM	Shallow	38.26	28.51	9.75
MWA-20	12/7/2025	11:15:00 AM	Shallow	40.95	27.55	13.4
MWA-22	12/7/2025	12:37:00 PM	Shallow	36.59	21.98	14.61
MWA-24	12/7/2025	8:19:00 AM	Shallow	37.58	23.27	14.31
MWA-29	12/7/2025	9:02:00 AM	Shallow	44.42	33.27	11.15
MWA-33	12/7/2025	8:29:00 AM	Shallow	37.26	28.35	8.91
MWA-40	12/7/2025	8:21:00 AM	Shallow	36.96	17.6	19.36
MWA-41	12/7/2025	8:35:00 AM	Shallow	45.14	32.81	12.33
MWA-42	12/7/2025	11:28:00 AM	Shallow	37.24	24.14	13.1
MWA-43	12/7/2025	8:53:00 AM	Shallow	44.53	33.26	11.27
MWA-46	12/7/2025	9:13:00 AM	Shallow	36.67	26.58	10.09
MWA-47	12/7/2025	9:57:00 AM	Shallow	39.02	28.41	10.61
MWA-63	12/7/2025	11:41:00 AM	Shallow	36.29	22.15	14.14
MWA-71	12/7/2025	8:01:00 AM	Shallow	34.82	5.46	29.36
MWA-72	12/7/2025	8:09:00 AM	Shallow	34.16	4.68	29.48
MWA-73	12/7/2025	8:12:00 AM	Shallow	36.01	6.78	29.23
MWA-82	12/7/2025	8:32:00 AM	Shallow	37.74	24.29	13.45
PA-03	12/7/2025	11:47:00 AM	Shallow	37.10	10.2	26.9
PA-04	12/7/2025	12:02:00 PM	Shallow	36.67	9.6	27.07
PA-07	12/7/2025	10:15:00 AM	Shallow	39.30	25.7	13.6
PA-08	12/7/2025	10:33:00 AM	Shallow	40.47	27.7	12.77
PA-09	12/7/2025	10:44:00 AM	Shallow	40.24	28.2	12.04
PA-28	12/7/2025	7:37:00 AM	Shallow	38.58	24.76	13.82
PA-31	12/7/2025	12:10:00 PM	Shallow	36.25	9.42	26.83
PA-33	12/7/2025	12:06:00 PM	Shallow	36.29	10.05	26.24
PA-35	12/7/2025	12:19:00 PM	Shallow	35.91	24.85	11.06
PA-36	12/7/2025	12:27:00 PM	Shallow	36.90	1.86	35.04
PA-38	12/7/2025	8:47:00 AM	Shallow	42.93	29.6	13.33
PA-41	12/7/2025	10:23:00 AM	Shallow	39.69	27.17	12.52
PA-42	12/7/2025	8:56:00 AM	Shallow	40.60	27.81	12.79
PA-43	12/7/2025	8:39:00 AM	Shallow	40.41	27.55	12.86
RP-02-31	12/7/2025	7:45:00 AM	Shallow	42.49	30.88	11.61
RP-10-30	12/7/2025	7:52:00 AM	Shallow	37.47	9.25	28.22
RW-5	12/7/2025	12:15:00 PM	Shallow	34.80	10.6	24.2
RW-7	12/7/2025	12:25:00 PM	Shallow	33.98	22.78	11.2
RW-12	12/7/2025	11:24:00 AM	Shallow	35.58	22.45	13.13
RW-14	12/7/2025	11:12:00 AM	Shallow	36.08	22.36	13.72
RW-15	12/7/2025	9:32:00 AM	Shallow	35.81	22.34	13.47
RW-17	12/7/2025	9:44:00 AM	Shallow	36.55	22.97	13.58
RW-18	12/7/2025	9:47:00 AM	Shallow	36.51	23	13.51
RW-20	12/7/2025	10:05:00 AM	Shallow	37.07	23.68	13.39
RW-22	12/7/2025	10:53:00 AM	Shallow	38.02	25	13.02
RW-23	12/7/2025	12:31:00 PM	Shallow	33.63	22.18	11.45
RW-25	12/7/2025	10:29:00 AM	Shallow	38.06	25.42	12.64
MWA-83	12/7/2025	12:21:00 PM	Shallow/Intermediate	35.82	21.88	13.94
MWA-84	12/7/2025	12:34:00 PM	Shallow/Intermediate	36.31	25.02	11.29
MWA-85	12/7/2025	11:05:00 AM	Shallow/Intermediate	36.86	24.51	12.35
MWA-86	12/7/2025	11:26:00 AM	Shallow/Intermediate	37.15	23.34	13.81
MWA-87	12/7/2025	11:17:00 AM	Shallow/Intermediate	37.68	24.23	13.45
MWA-88	12/7/2025	9:51:00 AM	Shallow/Intermediate	39.36	25.6	13.76
MWA-89	12/7/2025	8:43:00 AM	Shallow/Intermediate	41.65	28.65	13
MWA-07(i)	12/7/2025	8:14:00 AM	Intermediate	36.24	7.51	28.73
MWA-16i	12/7/2025	11:37:00 AM	Intermediate	36.58	25.85	10.73
MWA-34iR	12/7/2025	9:21:00 AM	Intermediate	37.36	27.05	10.31
MWA-49i	12/7/2025	9:15:00 AM	Intermediate	36.68	25.56	11.12
MWA-53i	12/7/2025	9:00:00 AM	Intermediate	44.63	33.55	11.08
MWA-54i	12/7/2025	11:30:00 AM	Intermediate	37.35	24.91	12.44
MWA-70i	12/7/2025	8:27:00 AM	Intermediate	37.62	21.85	15.77
MWA-74i	12/7/2025	7:59:00 AM	Intermediate	34.72	11.8	22.92
MWA-75i	12/7/2025	8:05:00 AM	Intermediate	34.09	5.62	28.47
MWA-81i	12/7/2025	8:37:00 AM	Intermediate	44.62	32.81	11.81
PA-10i	12/7/2025	12:04:00 PM	Intermediate	36.67	23.45	13.22
PA-13i	12/7/2025	7:39:00 AM	Intermediate	38.48	25.76	12.72
PA-14i	12/7/2025	10:08:00 AM	Intermediate	39.30	26.78	12.52
PA-15i	12/7/2025	10:37:00 AM	Intermediate	40.62	28	12.62

Table 2
Groundwater Elevation Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Well ID	Date	Time	Aquifer Unit	Top of Casing Elevation (ft NAVD88)	Depth to Water (ft)	Groundwater Elevation (ft NAVD88) *
PA-16i	--	--	Intermediate	40.30	NM	NM
PA-17iR	12/7/2025	11:50:00 AM	Intermediate	37.59	25.08	12.51
PA-29i	12/7/2025	9:59:00 AM	Intermediate	39.18	27.85	11.33
PA-32i	12/7/2025	12:12:00 PM	Intermediate	36.28	23.3	12.98
PA-34i	12/7/2025	12:08:00 PM	Intermediate	36.02	23.16	12.86
PA-37i	12/7/2025	12:29:00 PM	Intermediate	36.54	24.67	11.87
PA-39i	12/7/2025	8:52:00 AM	Intermediate	40.11	28.02	12.09
PA-40i	12/7/2025	8:49:00 AM	Intermediate	41.47	29.26	12.21
PA-44i	12/7/2025	8:41:00 AM	Intermediate	40.36	27.68	12.68
RW-6i	12/7/2025	12:17:00 PM	Intermediate	35.59	22.58	13.01
RW-11i	12/7/2025	11:10:00 AM	Intermediate	34.77	23.28	11.49
RW-13i	12/7/2025	11:22:00 AM	Intermediate	36.09	23.25	12.84
RW-16i	12/7/2025	9:35:00 AM	Intermediate	35.77	23.42	12.35
RW-19i	12/7/2025	9:49:00 AM	Intermediate	36.56	25.38	11.18
RW-21i	12/7/2025	10:20:00 AM	Intermediate	37.38	25.12	12.26
RW-26i	12/7/2025	10:31:00 AM	Intermediate	38.10	26.16	11.94
MWA-12i(d)	12/7/2025	8:16:00 AM	Deep	35.86	11.55	24.31
MWA-31i(d)	12/7/2025	11:00:00 AM	Deep	38.36	28	10.36
MWA-56d	12/7/2025	9:11:00 AM	Deep	36.68	25.51	11.17
MWA-58d	12/7/2025	9:19:00 AM	Deep	37.97	27.27	10.7
PA-18d	12/7/2025	11:59:00 AM	Deep	36.55	24	12.55
PA-22d	12/7/2025	9:41:00 AM	Deep	38.75	26.38	12.37
PA-23d	12/7/2025	10:12:00 AM	Deep	39.31	28.25	11.06
PA-24d	12/7/2025	10:02:00 AM	Deep	39.06	28.3	10.76
PA-25d	12/7/2025	10:35:00 AM	Deep	40.44	27.18	13.26
PA-26d	12/7/2025	10:41:00 AM	Deep	40.33	27.35	12.98
PA-27d	12/7/2025	11:44:00 AM	Deep	37.10	24.84	12.26
MWA-76g	12/7/2025	8:07:00 AM	Gravel	34.96	11.03	23.93
MWA-77g	12/7/2025	7:57:00 AM	Gravel	34.03	19.96	14.07
PMW-01q	--	--	Gravel	35.82	NM	NM
PMW-08q	11/4/2025	8:09:00 AM	Gravel	37.32	26.78	10.54
PMW-09q	12/7/2025	13:22:00 PM	Gravel	37.81	25.6	12.21
PMW-19q	11/4/2025	7:24:00 AM	Gravel	36.95	26.78	10.17
PMW-20q	11/4/2025	8:20:00 AM	Gravel	38.01	28	10.01
PMW-01b	--	--	Basalt	35.82	NM	NM
PMW-02b	11/4/2025	9:55:00 AM	Basalt	36.90	27.37	9.53
PMW-03b	11/4/2025	8:40:00 AM	Basalt	35.74	26.24	9.5
PMW-04b	11/4/2025	7:40:00 AM	Basalt	34.12	25.39	8.73
PMW-04b	12/7/2025	13:35:00 PM	Basalt	34.12	23.77	10.35
PMW-05b	12/7/2025	13:28:00 PM	Basalt	35.78	25.05	10.73
PMW-05b2	12/7/2025	13:31:00 PM	Basalt	35.79	25.22	10.57
PMW-06b	12/7/2025	13:12:00 PM	Basalt	38.23	26.85	11.38
PMW-06b2	12/7/2025	13:10:00 PM	Basalt	37.83	26.45	11.38
PMW-08b	11/4/2025	8:05:00 AM	Basalt	37.26	27.12	10.14
PMW-09b	12/7/2025	13:25:00 PM	Basalt	37.93	25.48	12.45
PMW-18b	12/7/2025	12:42:00 PM	Basalt	36.62	24.18	12.44
PMW-19b	11/4/2025	7:19:00 AM	Basalt	36.91	27.09	9.82

Notes:

* = transducer data were not used to obtain groundwater elevation

ft = feet

NAVD 88 = North American Vertical Datum 1988

Manual measurement data collected in field with tablet.

NM = water level was not measured

Table 3
Field Parameters Measured in Groundwater
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte				pH	Temperature	Specific Conductivity	Oxidation-Reduction Potential	Dissolved Oxygen	Turbidity
Method				Field Measure	Field Measure	Field Measure	Field Measure	Field Measure	Field Measure
Unit				SU	deg C	uS/cm	mV	mg/L	NTU
Location ID	Sample Date	Aquifer Classification	Sample ID						
MWA-41	08-Dec-25	Shallow	MWA-41-120825	6.56	13.98	245	89.1	0.28	4.34
MWA-63	09-Dec-25	Shallow	MWA-63-120925	6.92	14.97	593	79.5	5.83	4.61
MWA-82	08-Dec-25	Shallow	MWA-82-120825	9.91	15.07	415	21	0.2	16.5
PA-03	12-Dec-25	Shallow	PA-03-121225	10.52	14.96	672	-126.9	0.29	53.7
PA-04	12-Dec-25	Shallow	PA-04-121225	10	15.62	736	-93.1	0.32	76.1
PA-08	15-Dec-25	Shallow	PA-08-121525	6.94	14.56	241	-55.4	0.32	7.04
PA-09	15-Dec-25	Shallow	PA-09-121525	6.91	14.67	259	48.7	0.35	19.7
PA-31	12-Dec-25	Shallow	PA-31-121225	9.27	15.97	259	19.7	1.21	4.85
MWA-81i	08-Dec-25	Intermediate	MWA-81i-120825	6.58	13.66	595	-1.7	0.51	4.91
PA-10i	12-Dec-25	Intermediate	PA-10i-121225	7.76	14.74	671	-165.3	0.33	5.11
PA-15i	15-Dec-25	Intermediate	PA-15i-121525	7.6	15.11	198	23.8	0.58	4.58
PA-17iR	09-Dec-25	Intermediate	PA-17iR-120925	7.62	14.24	519	-57.9	0.24	2.99
PA-32i	12-Dec-25	Intermediate	PA-32i-121225	7.62	15.13	138	6.2	0.57	33.5
PA-44i	15-Dec-25	Intermediate	PA-44i-121525	7.58	14.43	136	103.8	2.37	4.54
MWA-31i(d)	09-Dec-25	Deep	MWA-31i(d)-120925	6.61	14.2	58560	67.1	0.42	4.86
MWA-56d	15-Dec-25	Deep	MWA-56d-121525	6.68	16.21	33500	124.6	0.36	4.37
MWA-58d	15-Dec-25	Deep	MWA-58d-121525	6.72	16.67	45320	137.9	0.38	2.55
PA-18d	12-Dec-25	Deep	PA-18d-121225	8.64	15.58	1169	-144.7	0.31	22.7
PA-22d	09-Dec-25	Deep	PA-22d-120925	7.15	14.54	15150	21.6	0.41	3.38
PA-23d	09-Dec-25	Deep	PA-23d-120925	7.12	11.59	68230	-99.9	1.52	8.71
PA-24d	09-Dec-25	Deep	PA-24d-120925	6.8	12.08	72580	-85.7	0.43	78.3
PA-25d	15-Dec-25	Deep	PA-25d-121525	7.17	14.89	158	61.9	2.4	4.33
PA-26d	15-Dec-25	Deep	PA-26d-121525	6.96	14.92	215	18.2	0.54	7.71
PA-27d	11-Dec-25	Deep	PA-27d-121125	7	15.38	4660	-56.1	0.51	4.31
PMW-01g	07-Nov-25	Gravel	PMW-01g-110725	7.49	15.7	618	-302	0.9	137.6
PMW-08g	05-Nov-25	Gravel	PMW-08g-110525	7.57	15.8	10371	-102.8	1.02	468.9
PMW-09g	10-Dec-25	Gravel	PMW-09g-121025	8.38	16.28	1010	-165.8	0.24	865
PMW-19g	10-Nov-25	Gravel	PMW-19g-111025	7.44	15.6	1403	-140.1	0.86	345.6
PMW-20g	06-Nov-25	Gravel	PMW-20g-110625	7.26	15.8	1138	-286.6	0.79	9.82
PMW-01b	07-Nov-25	Basalt	PMW-01b-110725	7.42	12.2	624	89.7	3.45	5.52
PMW-02b	10-Nov-25	Basalt	PMW-02b-111025	7.09	14.7	2691	-94.3	0.87	71.51
PMW-03b	04-Nov-25	Basalt	PMW-03b-110425	6.96	15.6	2464	-145.2	0.98	29.03
PMW-04b	11-Dec-25	Basalt	PMW-04b-121125	6.21	14.92	4253	43.1	0.28	4.86
PMW-05b	11-Dec-25	Basalt	PMW-05b-121125	5.94	15.77	6896	14.2	0.35	4.79
PMW-05b2	10-Dec-25	Basalt	PMW-05b2-121025	6.25	16.41	7797	-16.6	0.3	3.92
PMW-06b	10-Dec-25	Basalt	PMW-06b-121025	6.22	16.84	4065	8.9	0.34	4.12
PMW-06b2	10-Dec-25	Basalt	PMW-06b2-121025	6.8	17.15	12700	7.3	0.29	4.73
PMW-08b	05-Nov-25	Basalt	PMW-08b-110525	7.01	15.9	34110	-85.8	0.69	3.39
PMW-09b	10-Dec-25	Basalt	PMW-09b-121025	8.52	15.98	958	-142.3	0.29	28.7
PMW-19b	10-Nov-25	Basalt	PMW-19b-111025	7.46	15.7	1955	-97.6	0.73	310.9
PMW-18b	10-Dec-25	Basalt	PMW-18b-121025	6.88	15.48	4611	-27.2	0.5	2.26

Notes:

uS/cm = microSiemens per centimeter
deg C = degrees Celsius
mg/L = milligrams per liter
mV = millivolts
NTU = nephelometric turbidity units
SU = standard units

Table 4
Volatile Organic Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte					1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane
Unit					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FSWP SHSC (shaded values indicate results above the value shown)					NE	11	0.4	1.6	47	710	NE	NE	NE	0.076	NE	NE	14	3.7	1.5
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID															
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	< 0.25 U	< 0.18 U	0.22 j	0.54 j	0.56 j	0.26 j	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	0.77 j	< 0.23 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-03	12/12/2025	N	Shallow	PA-03-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	0.22	0.17 j	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-09	12/15/2025	N	Shallow	PA-09-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-31	12/12/2025	N	Shallow	PA-31-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.38	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.084 j	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	0.15 j	< 0.12 U	< 0.060 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	0.052 j	< 0.12 U	< 0.060 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.46 j	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PA-18d	12/12/2025	N	Deep	PA-18d-121225	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PA-23d	12/9/2025	N	Deep	PA-23d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	0.94 j	< 0.23 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.084 U	< 0.47 U	< 0.050 U	< 0.36 U	< 0.23 U	< 0.48 U	< 0.038 U	< 0.12 U	< 0.060 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.40 j	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.8	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	4.6	2.1	< 0.23 U
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	0.57 j	< 0.23 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	0.55 j	< 0.23 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.2	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	0.40 j	< 0.23 U
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.4	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.32 j	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.18 U	< 0.83 U	< 0.24 U	< 0.67 U	< 0.57 U	< 0.91 U	< 0.19 U	< 0.16 U	< 0.23 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Method Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8260D analyses performed by TestAmerica - Seattle, WA of Seattle.

Qualifiers - Organic:
j = The analyte was positively identified below the RDL; associated numerical value is the approximate concentration of the analyte in the sample.
results
are outside the lower control limits.
results
exceed the upper control limits.
U = Analyte was analyzed for, but not detected above, the limit displayed.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Analyte was rejected due to low matrix spike.matrix spike duplicate recoveries.

Table 4
Volatile Organic Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte					1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (Methyl ethyl ketone)	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone
Unit					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FSWP SHSC (shaded values indicate results above the value shown)					NE	11	0.4	1.6	47	710	NE	10	NE	15	NE	14000	NE	NE	NE
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID															
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	< 0.25 U	< 0.18 U	0.22 j	0.54 j	0.56 j	0.26 j	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
PA-03	12/12/2025	N	Shallow	PA-03-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	0.29 j	< 2.7 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	0.22	0.17 j	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	0.27 j	< 2.7 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
PA-09	12/15/2025	N	Shallow	PA-09-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
PA-31	12/12/2025	N	Shallow	PA-31-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.38	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.50 U	< 2.7 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.084 j	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	0.27 j	< 2.7 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.50 U	< 2.7 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.50 U	< 2.7 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.50 U	< 2.7 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.46 j	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PA-18d	12/12/2025	N	Deep	PA-18d-121225	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PA-23d	12/9/2025	N	Deep	PA-23d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.50 U	< 2.7 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.19 U	< 0.050 U	< 0.056 U	< 0.050 U	< 0.060 U	< 2.5 U	< 0.12 U	< 0.25 U	< 2.7 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.40 j	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.8	< 0.23 U	< 0.58 U	0.26 J+	< 0.13 U	11 J+	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	3.2 J
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	0.26 j	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	0.26 j	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.2	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.4	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.32 j	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.58 U	< 0.19 U	< 0.13 U	< 0.18 U	< 0.36 U	< 3.1 U	< 0.21 U	< 0.69 U	< 1.4 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Method Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8260D analyses performed by TestAmerica - Seattle, WA of Seattle.

Qualifiers - Organic:
j = The analyte was positively identified below the RDL; associated numerical value is the approximate concentration of the analyte in the sample.
results
are outside the lower control limits.
results
exceed the upper control limits.
U = Analyte was analyzed for, but not detected above, the limit displayed.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Analyte was rejected due to low matrix spike.matrix spike duplicate recoveries.

Table 4
Volatile Organic Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte					1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Benzene	Bromobenzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene
Unit					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FSWP SHSC (shaded values indicate results above the value shown)					NE	11	0.4	1.6	47	710	1500	1.4	NE	1.7	14	150	0.92	0.16	64
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID															
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 UJ	< 0.20 U	< 0.025 U	< 0.060 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	< 0.25 U	< 0.18 U	0.22 j	0.54 j	0.56 j	0.26 j	< 11 U	< 0.47 U	< 0.18 U	1.3	< 0.46 U	< 0.35 UJ	< 0.69 U	< 0.22 U	< 0.22 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 UJ	< 0.20 U	< 0.025 U	< 0.060 U
PA-03	12/12/2025	N	Shallow	PA-03-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	0.051 j	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	0.22	0.17 j	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	0.060 j
PA-09	12/15/2025	N	Shallow	PA-09-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	0.061 j
PA-31	12/12/2025	N	Shallow	PA-31-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.38	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 UJ	< 0.20 U	< 0.025 U	< 0.060 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.084 j	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 UJ	< 0.20 U	< 0.025 U	< 0.060 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 UJ	< 0.20 U	< 0.025 U	< 0.060 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	3.6 j	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.46 j	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	0.19 j	< 0.46 U	< 0.35 UJ	< 0.69 U	< 0.22 U	0.28 j
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.23 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.46 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	< 0.22 U
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	0.54 j	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	< 0.22 U
PA-18d	12/12/2025	N	Deep	PA-18d-121225	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	< 0.22 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 UJ	< 0.69 U	< 0.22 U	< 0.22 U
PA-23d	12/9/2025	N	Deep	PA-23d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 UJ	< 0.69 U	< 0.22 U	< 0.22 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 UJ	< 0.69 U	< 0.22 U	< 0.22 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 UJ	< 0.060 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 3.1 U	< 0.030 U	< 0.038 U	< 0.060 U	< 0.16 U	< 0.13 U	< 0.20 U	< 0.025 U	< 0.060 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.40 j	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	0.43 j
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 UJ	< 0.35 U	< 0.69 U	< 0.22 UJ	2.7
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	4.6
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	4.5
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	4.8
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	< 0.22 U
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	1.2
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 UJ	< 0.35 U	< 0.69 U	< 0.22 UJ	1.8
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	2.3
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	71
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	< 0.25 UJ	< 0.18 U	< 0.18 U	< 0.16 UJ	1.8	< 0.23 U	< 11 U	2.5	< 0.18 U	< 0.18 U	< 0.46 UJ	< 0.35 U	< 0.69 U	< 0.22 UJ	41,000
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 11 U	2.6	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	2,000
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 11 U	2.5	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	2,000
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.2	< 0.23 U	< 11 U	2.6	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	1,300
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.4	< 0.23 U	< 11 U	0.80 j	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	120
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.32 j	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	22
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 U	1.6
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	2.6
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 U	< 0.35 U	< 0.69 U	< 0.22 UJ	0.23 j
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 11 U	< 0.47 U	< 0.18 U	< 0.18 U	< 0.46 UJ	< 0.35 U	< 0.69 U	< 0.22 UJ	< 0.22 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Method Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8260D analyses performed by TestAmerica - Seattle, WA of Seattle.

Qualifiers - Organic:
j = The analyte was positively identified below the RDL; associated numerical value is the approximate concentration of the analyte in the sample.
results
are outside the lower control limits.
results
exceed the upper control limits.
U = Analyte was analyzed for, but not detected above, the limit displayed.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Analyte was rejected due to low matrix spike.matrix spike duplicate recoveries.

Table 4
Volatile Organic Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte					1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Chlorobromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane (Freon 12)
Unit					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FSWP SHSC (shaded values indicate results above the value shown)					NE	11	0.4	1.6	47	710	NE	NE	28	NE	590	NE	1.3	NE	NE
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID															
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	< 0.25 U	< 0.18 U	0.22 j	0.54 j	0.56 j	0.26 j	< 0.21 U	< 0.34 U	1,600	< 0.23 U	5.1	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	1.4	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-03	12/12/2025	N	Shallow	PA-03-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	0.26	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	0.22	0.17 j	< 0.050 U	< 0.24 U	0.038 j	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-09	12/15/2025	N	Shallow	PA-09-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	0.088 j	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-31	12/12/2025	N	Shallow	PA-31-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.38	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.084 j	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	0.16 j	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.46 j	< 0.23 U	< 0.21 U	< 0.34 U	77	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	100	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	79	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PA-18d	12/12/2025	N	Deep	PA-18d-121225	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	19	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PA-23d	12/9/2025	N	Deep	PA-23d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	0.36 j	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.050 U	< 0.24 U	< 0.030 U	< 0.14 U	< 0.055 U	< 0.090 U	< 0.055 U	< 0.062 U	< 0.13 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.40 j	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	0.73 j	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	1.5	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	1.4	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	0.16 j	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.8	< 0.23 U	< 0.21 U	3.0	40	< 0.23 U	0.86 j	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.21 U	< 0.34 U	4.5	< 0.23 U	0.92 j	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.21 U	< 0.34 U	4.4	< 0.23 U	0.90 j	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.2	< 0.23 U	< 0.21 U	< 0.34 U	4.6	< 0.23 U	0.79 j	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.4	< 0.23 U	< 0.21 U	< 0.34 U	1.8	< 0.23 U	0.19 j	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.32 j	< 0.23 U	< 0.21 U	< 0.34 U	11	0.35 j	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	2.6	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	0.27 j	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	< 0.11 U	0.28 j	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.21 U	< 0.34 U	0.43 j	< 0.23 U	< 0.17 U	< 0.28 U	< 0.46 U	< 0.28 U	< 0.33 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Method Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8260D analyses performed by TestAmerica - Seattle, WA of Seattle.

Qualifiers - Organic:
j = The analyte was positively identified below the RDL; associated numerical value is the approximate concentration of the analyte in the sample.
results
are outside the lower control limits.
results
exceed the upper control limits.
U = Analyte was analyzed for, but not detected above, the limit displayed.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Analyte was rejected due to low matrix spike.matrix spike duplicate recoveries.

Table 4
Volatile Organic Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
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Portland, Oregon

Analyte					1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Ethylbenzene	Ethylene dibromide	Hexachlorobutadiene	Isopropylbenzene (Cumene)	m,p-Xylenes	Methyl tert-butyl ether	Methylene chloride	Naphthalene	n-Butylbenzene
Unit					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FSWP SHSC (shaded values indicate results above the value shown)					NE	11	0.4	1.6	47	710	7.3	NE	0.01	NE	1.8	NE	59	12	NE
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID															
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	< 0.25 U	< 0.18 U	0.22 j	0.54 j	0.56 j	0.26 j	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-03	12/12/2025	N	Shallow	PA-03-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	0.22	0.17 j	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-09	12/15/2025	N	Shallow	PA-09-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-31	12/12/2025	N	Shallow	PA-31-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.38	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.084 j	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.46 j	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PA-18d	12/12/2025	N	Deep	PA-18d-121225	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PA-23d	12/9/2025	N	Deep	PA-23d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.082 U	< 0.067 U	< 0.16 U	< 0.27 U	< 0.12 U	< 0.070 U	< 1.2 U	< 0.52 U	< 0.35 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.40 j	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 UJ	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 UJ	< 0.61 UJ
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	R	< 1.4 U	< 0.61 U
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 UJ	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 UJ	< 0.61 UJ
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	< 0.25 UJ	< 0.18 U	< 0.18 U	< 0.16 UJ	1.8	< 0.23 U	< 0.16 UJ	< 0.18 UJ	< 0.67 U	0.75 J	< 0.27 UJ	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.2	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.4	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.32 j	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	0.16 j	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	R	< 1.4 U	< 0.61 U
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 U	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 U	< 0.61 U
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 0.16 U	< 0.18 UJ	< 0.67 U	< 0.45 U	< 0.27 U	< 0.15 U	< 6.8 U	< 1.4 UJ	< 0.61 UJ

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Method Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8260D analyses performed by TestAmerica - Seattle, WA of Seattle.

Qualifiers - Organic:
j = The analyte was positively identified below the RDL; associated numerical value is the approximate concentration of the analyte in the sample.
results
are outside the lower control limits.
results
exceed the upper control limits.
U = Analyte was analyzed for, but not detected above, the limit displayed.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Analyte was rejected due to low matrix spike.matrix spike duplicate recoveries.

Table 4
Volatile Organic Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte					1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	n-Propylbenzene	o-Chlorotoluene (2-Chlorotoluene)	o-Xylene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene
Unit					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FSWP SHSC (shaded values indicate results above the value shown)					NE	11	0.4	1.6	47	710	NE	NE	13	NE	NE	NE	0.33	9.8	1000
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID															
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	< 0.25 U	< 0.18 U	0.22 j	0.54 j	0.56 j	0.26 j	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	23	< 0.21 U	< 0.18 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	0.42 j	< 0.050 U	< 0.033 U
PA-03	12/12/2025	N	Shallow	PA-03-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	0.15 j	< 0.033 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	0.22	0.17 j	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	0.15 j	< 0.050 U	< 0.033 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	0.10 j	< 0.050 U	< 0.033 U
PA-09	12/15/2025	N	Shallow	PA-09-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	0.25 j	< 0.050 U	< 0.033 U
PA-31	12/12/2025	N	Shallow	PA-31-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.38	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	0.085 j	< 0.050 U	< 0.033 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.084 j	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	0.11 j	< 0.20 U	< 0.033 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.20 U	< 0.033 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.46 j	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PA-18d	12/12/2025	N	Deep	PA-18d-121225	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PA-23d	12/9/2025	N	Deep	PA-23d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.091 U	< 0.12 U	< 0.23 U	< 0.17 U	< 0.33 U	< 0.26 U	< 0.084 U	< 0.050 U	< 0.033 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.40 j	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	0.23 j	< 0.18 U
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.8	< 0.23 U	< 0.26 U	< 0.27 U	1.6 J	< 0.27 U	0.79 J	< 0.34 U	45 J	16 J	< 0.18 U
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	0.68 J+	< 0.18 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	0.68 J+	< 0.18 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.2	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	0.50 J+	< 0.21 U	< 0.18 U
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.4	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.32 j	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	1.5	< 0.18 U
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	1.2	< 0.18 U
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	0.74 j	< 0.18 U
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.26 U	< 0.27 U	< 0.22 U	< 0.27 U	< 0.41 U	< 0.34 U	< 0.43 U	< 0.21 U	< 0.18 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Method Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8260D analyses performed by TestAmerica - Seattle, WA of Seattle.

Qualifiers - Organic:
j = The analyte was positively identified below the RDL; associated numerical value is the approximate concentration of the analyte in the sample.
results
are outside the lower control limits.
results
exceed the upper control limits.
U = Analyte was analyzed for, but not detected above, the limit displayed.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Analyte was rejected due to low matrix spike.matrix spike duplicate recoveries.

Table 4
Volatile Organic Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte					1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane (Freon 11)	Vinyl chloride
Unit					µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
FSWP SHSC (shaded values indicate results above the value shown)					NE	11	0.4	1.6	47	710	NE	3	NE	0.24
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID										
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	< 0.25 U	< 0.18 U	0.22 j	0.54 j	0.56 j	0.26 j	< 0.46 U	3.6	< 0.21 U	< 0.29 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-03	12/12/2025	N	Shallow	PA-03-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	0.22	0.17 j	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-09	12/15/2025	N	Shallow	PA-09-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-31	12/12/2025	N	Shallow	PA-31-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.38	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	0.084 j	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.46 j	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PA-18d	12/12/2025	N	Deep	PA-18d-121225	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PA-23d	12/9/2025	N	Deep	PA-23d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	< 0.11 U	< 0.025 U	< 0.056 U	< 0.070 U	< 0.064 U	< 0.035 U	< 0.092 U	< 0.066 U	< 0.12 U	< 0.040 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.40 j	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 0.46 UJ	< 0.27 U	< 0.21 U	< 0.29 U
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 0.46 UJ	< 0.27 U	< 0.21 U	< 0.29 U
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	< 0.25 UJ	< 0.18 U	< 0.18 U	< 0.16 UJ	1.8	< 0.23 U	< 0.46 UJ	3.6	< 0.21 U	< 0.29 U
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.46 U	1.0	< 0.21 U	< 0.29 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.7	< 0.23 U	< 0.46 U	0.97 j	< 0.21 U	< 0.29 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.2	< 0.23 U	< 0.46 U	0.69 j	< 0.21 U	< 0.29 U
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	1.4	< 0.23 U	< 0.46 U	0.37 j	< 0.21 U	< 0.29 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	0.32 j	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	< 0.25 U	< 0.18 U	< 0.18 U	< 0.16 U	< 0.22 U	< 0.23 U	< 0.46 U	< 0.27 U	< 0.21 U	< 0.29 U
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	< 0.25 UJ	< 0.18 U	< 0.18 UJ	< 0.16 UJ	< 0.22 U	< 0.23 U	< 0.46 UJ	< 0.27 U	< 0.21 U	< 0.29 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Method Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8260D analyses performed by TestAmerica - Seattle, WA of Seattle.

Qualifiers - Organic:
j = The analyte was positively identified below the RDL; associated numerical value is the approximate concentration of the analyte in the sample.
results
are outside the lower control limits.
results
exceed the upper control limits.
U = Analyte was analyzed for, but not detected above, the limit displayed.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Analyte was rejected due to low matrix spike.matrix spike duplicate recoveries.

Table 5
Additional Compounds Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte					Chloride	Perchlorate
Unit					mg / L	µg / L
FSWP SHSC (shaded values indicate results above the value shown)					230	1,800
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID		
MWA-41	12/8/2025	N	Shallow	MWA-41-120825	4.3	< 0.43 U
MWA-63	12/9/2025	N	Shallow	MWA-63-120925	14	< 0.43 U
MWA-82	12/8/2025	N	Shallow	MWA-82-120825	8.5	5.6
PA-03	12/12/2025	N	Shallow	PA-03-121225	4.4	< 17 U
PA-04	12/12/2025	N	Shallow	PA-04-121225	5.8	< 17 U
PA-08	12/15/2025	N	Shallow	PA-08-121525	38	< 4.3 U
PA-09	12/15/2025	N	Shallow	PA-09-121525	12	68
PA-31	12/12/2025	N	Shallow	PA-31-121225	2.2	< 4.3 U
MWA-81i	12/8/2025	N	Intermediate	MWA-81i-120825	42	< 8.6 U
PA-10i	12/12/2025	N	Intermediate	PA-10i-121225	12	< 17 U
PA-15i	12/15/2025	N	Intermediate	PA-15i-121525	14	< 4.3 U
PA-17iR	12/9/2025	N	Intermediate	PA-17iR-120925	24	< 17 U
PA-17iR	12/9/2025	FD	Intermediate	DUP-01-120925	24	< 17 U
PA-32i	12/12/2025	N	Intermediate	PA-32i-121225	4.7	< 17 U
PA-44i	12/15/2025	N	Intermediate	PA-44i-121525	2.5	< 4.3 U
MWA-31i(d)	12/9/2025	N	Deep	MWA-31i(d)-120925	23,000	120,000
MWA-56d	12/15/2025	N	Deep	MWA-56d-121525	130,000	13,000
MWA-58d	12/15/2025	N	Deep	MWA-58d-121525	180,000	55,000
PA-18d	12/12/2025	N	Deep	PA-18d-121225	60	< 17 U
PA-22d	12/9/2025	N	Deep	PA-22d-120925	4,600	10,000
PA-23d	12/9/2025	N	Deep	PA-23d-120925	29,000	< 17 U
PA-24d	12/9/2025	N	Deep	PA-24d-120925	32,000	< 17 U
PA-25d	12/15/2025	N	Deep	PA-25d-121525	11	< 0.43 U
PA-26d	12/15/2025	N	Deep	PA-26d-121525	18	< 4.3 U
PA-27d	12/11/2025	N	Deep	PA-27d-121125	4,600	< 0.43 U
PMW-01g	11/7/2025	N	Gravel	PMW-01g-110725	76	2.2
PMW-08g	11/5/2025	N	Gravel	PMW-08g-110525	3,800	< 4.3 U
PMW-08g	11/5/2025	FD	Gravel	DUP-01-110525	3,800	< 4.3 U
PMW-09g	12/10/2025	N	Gravel	PMW-09g-121025	160	22
PMW-19g	11/6/2025	N	Gravel	PMW-19g-110625	260	1.9 j
PMW-20g	11/6/2025	N	Gravel	PMW-20g-110625	180 J-	4.0 J-
PMW-01b	11/7/2025	N	Basalt	PMW-01b-110725	77	< 0.43 U
PMW-02b	11/4/2025	N	Basalt	PMW-02b-110425	510	< 4.3 U
PMW-03b	11/4/2025	N	Basalt	PMW-03b-110425	610	< 2.1 U
PMW-04b	12/11/2025	N	Basalt	PMW-04b-121125	460	2,100
PMW-05b	12/11/2025	N	Basalt	PMW-05b-121125	1,700	6,200
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	1,700	6,400
PMW-05b2	12/10/2025	N	Basalt	PMW-05b2-121025	2,400	4,900
PMW-06b	12/10/2025	N	Basalt	PMW-06b-121025	1,100	710
PMW-06b2	12/10/2025	N	Basalt	PMW-06b2-121025	3,900	5,100
PMW-08b	11/5/2025	N	Basalt	PMW-08b-110525	14,000	< 17 U
PMW-09b	12/10/2025	N	Basalt	PMW-09b-121025	140 J-	23
PMW-18b	12/10/2025	N	Basalt	PMW-18b-121025	1,400	< 2.1 U
PMW-19b	11/6/2025	N	Basalt	PMW-19b-110625	400	< 0.43 U

Notes:

Bolded values indicate concentrations above the Method Detection Limit (MDL).

Shaded values indicate concentrations above the FSWP SHSC.

< = Compound not detected. MDL shown.

µg/L = micrograms per liter

mg/L = milligrams per liter

FD = Field Duplicate Sample

FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria

N = Normal Environmental Sample

E300 analyses performed by TestAmerica - Seattle, WA of Seattle.

E314.0 analyses performed by TestAmerica - Sacramento, CA of West Sacramento.

U = Analyte was analyzed for, but not detected above, the limit displayed.

J- = The result is an estimated concentration, but may be biased low

j = Result is less than the Reporting Limit but greater than or equal to the MDL and the concentration is an approximate value.

UJ = Estimated reporting limit

Table 6
Pesticide Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte						2,4'-DDE	2,4'-DDT	2,4'-DDD	4,4'-DDD	4,4'-DDE	4,4'-DDT	DDX	Aldrin	alpha-BHC/HCH
Units						ug / L	ug / L	ug / L	ug / L	ug / L	ug / L	ug / L	ug / L	ug / L
FSWP SHSC (shaded values indicate results above the value shown)						NE	NE	NE	3.1E-05	1.8E-05	2.2E-05	1.8E-05	7E-07	0.00039
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID	Turbidity (NTU)									
PMW-01g	11/07/2025	N	Gravel	PMW-01G-110725	137.6	< 0.0047 U	< 0.0085 U	< 0.0085 U	< 0.0056 U	< 0.0028 U	< 0.0047 U	<0.0085	< 0.0066 U	< 0.0038 U
PMW-08g	11/05/2025	N	Gravel	PMW-08G-110525	468.9	< 0.0048 U	< 0.0086 U	< 0.0086 U	< 0.0057 U	< 0.0029 U	< 0.0048 U	<0.0086	< 0.0067 U	< 0.0038 U
PMW-08g	11/05/2025	FD	Gravel	DUP-01-110525	468.9	< 0.0048 U	< 0.0087 U	< 0.0087 U	< 0.0058 U	< 0.0029 U	< 0.0048 U	<0.0087	< 0.0068 U	< 0.0039 U
PMW-09g	12/10/2025	N	Gravel	PMW-09G-121025	865	< 0.0050 U	< 0.0089 U	< 0.0089 U	< 0.0060 U	< 0.0030 U	< 0.0050 U	<0.0089	< 0.0070 U	< 0.0040 U
PMW-19g	11/06/2025	N	Gravel	PMW-19G-110625	345.6	< 0.0052 U	< 0.0093 U	< 0.0093 U	< 0.0062 U	< 0.0031 U	< 0.0052 U	<0.0093	< 0.0072 U	< 0.0041 U
PMW-20g	11/06/2025	N	Gravel	PMW-20G-110625	9.82	< 0.0046 U	< 0.0083 U	< 0.0083 U	< 0.0056 U	< 0.0028 U	< 0.0046 U	<0.0093	< 0.0065 U	< 0.0037 U
PMW-01b	11/07/2025	N	Basalt	PMW-01B-110725	5.52	< 0.0051 U	< 0.0091 U	< 0.0091 U	< 0.0061 U	< 0.0030 U	< 0.0051 U	<0.0091	< 0.0071 U	< 0.0040 U
PMW-02b	11/04/2025	N	Basalt	PMW-02B-110425	71.51	< 0.0047 UJ	< 0.0084 UJ	< 0.0084 UJ	< 0.0056 UJ	< 0.0028 UJ	< 0.0047 UJ	<0.0084	< 0.0065 UJ	< 0.0037 UJ
PMW-03b	11/04/2025	N	Basalt	PMW-03B-110425	29.03	< 0.0049 U	< 0.0088 U	< 0.0088 U	< 0.0058 U	< 0.0029 U	< 0.0049 U	<0.0088	< 0.0068 U	< 0.0039 U
PMW-04b	12/11/2025	N	Basalt	PMW-04B-121125	4.86	< 0.0049 U	< 0.0088 U	0.039	< 0.0059 U	< 0.0029 U	0.027	0.066	< 0.0069 U	< 0.0039 U
PMW-05b	12/11/2025	N	Basalt	PMW-05B-121125	4.79	< 0.0050 U	< 0.0090 U	< 0.0090 U	< 0.0060 U	< 0.0030 U	0.036	0.036	< 0.0070 U	< 0.0040 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	4.79	< 0.0049 U	< 0.0089 U	< 0.0089 U	< 0.0059 U	< 0.0030 U	0.0084 j	0.0084	< 0.0069 U	< 0.0039 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05B2-121025	3.92	< 0.0050 U	0.048	0.011 j	0.024	< 0.0030 U	0.12	0.203	< 0.0071 U	< 0.0040 U
PMW-06b	12/10/2025	N	Basalt	PMW-06B-121025	4.12	0.0085 j	0.31	0.067	0.093	0.030	0.93	1.4385	< 0.0069 U	< 0.0040 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06B2-121025	4.73	< 0.0050 U	0.016 j	< 0.0090 U	0.0094 j	< 0.0030 U	0.044	0.0694	< 0.0070 U	< 0.0040 U
PMW-08b	11/05/2025	N	Basalt	PMW-08B-110525	3.39	< 0.0047 UJ	< 0.0084 UJ	< 0.0084 UJ	0.0056 J-	< 0.0028 UJ	< 0.0047 UJ	0.0056	< 0.0066 UJ	< 0.0037 UJ
PMW-09b	12/10/2025	N	Basalt	PMW-09B-121025	28.7	< 0.0050 U	< 0.0089 U	< 0.0089 U	< 0.0060 U	< 0.0030 U	< 0.0050 U	<0.0089	< 0.0069 U	< 0.0040 U
PMW-18b	12/10/2025	N	Basalt	PMW-18B-121025	2.26	< 0.0050 U	< 0.0089 U	< 0.0089 U	< 0.0060 U	< 0.0030 U	< 0.0050 U	<0.0089	< 0.0069 U	< 0.0040 U
PMW-19b	11/06/2025	N	Basalt	PMW-19B-110625	310.9	< 0.0049 U	< 0.0088 U	< 0.0088 U	< 0.0059 U	< 0.0029 U	< 0.0049 U	<0.0088	< 0.0068 U	< 0.0039 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
NE = Not Established
SW8180B analyses performed by TestAmerica - Seattle, WA of Seattle.

Validated Qualifier Definition(s):
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j = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the limit displayed.
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Table 6
Pesticide Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte						beta-BHC/HCH	Chlordane, Total	cis-Chlordane	trans- Chlordane	Chlorinated camphene/ Toxaphene	cis-Heptachlor epoxide	delta- BHC/HCH
Units						ug / L	ug / L	ug / L	ug / L	ug / L	ug / L	ug / L
FSWP SHSC (shaded values indicate results above the value shown)						0.0017	NE	NE	NE	2.8E-05	3.9E-06	NE
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID	Turbidity (NTU)							
PMW-01g	11/07/2025	N	Gravel	PMW-01G-110725	137.6	< 0.0047 U	< 0.058 U	< 0.0075 U	< 0.0028 U	< 0.43 U	< 0.0028 U	< 0.0047 U
PMW-08g	11/05/2025	N	Gravel	PMW-08G-110525	468.9	< 0.0048 U	< 0.059 U	< 0.0077 U	< 0.0029 U	< 0.44 U	< 0.0029 U	< 0.0048 U
PMW-08g	11/05/2025	FD	Gravel	DUP-01-110525	468.9	< 0.0048 U	< 0.060 U	< 0.0077 U	< 0.0029 U	< 0.45 U	< 0.0029 U	< 0.0048 U
PMW-09g	12/10/2025	N	Gravel	PMW-09G-121025	865	< 0.0050 U	< 0.062 U	< 0.0079 U	< 0.0030 U	< 0.46 U	< 0.0030 U	< 0.0050 U
PMW-19g	11/06/2025	N	Gravel	PMW-19G-110625	345.6	< 0.0052 U	< 0.064 U	< 0.0083 U	< 0.0031 U	< 0.48 U	< 0.0031 U	< 0.0052 U
PMW-20g	11/06/2025	N	Gravel	PMW-20G-110625	9.82	< 0.0046 U	< 0.057 U	< 0.0074 U	< 0.0028 U	< 0.43 U	< 0.0028 U	< 0.0046 U
PMW-01b	11/07/2025	N	Basalt	PMW-01B-110725	5.52	< 0.0051 U	< 0.063 U	< 0.0081 U	< 0.0030 U	< 0.47 U	< 0.0030 U	< 0.0051 U
PMW-02b	11/04/2025	N	Basalt	PMW-02B-110425	71.51	< 0.0047 UJ	< 0.058 UJ	< 0.0075 UJ	< 0.0028 UJ	< 0.43 UJ	< 0.0028 UJ	< 0.0047 UJ
PMW-03b	11/04/2025	N	Basalt	PMW-03B-110425	29.03	< 0.0049 U	< 0.060 U	< 0.0078 U	< 0.0029 U	< 0.45 U	< 0.0029 U	< 0.0049 U
PMW-04b	12/11/2025	N	Basalt	PMW-04B-121125	4.86	< 0.0049 U	< 0.061 U	< 0.0078 U	< 0.0029 U	< 0.45 U	< 0.0029 U	< 0.0049 U
PMW-05b	12/11/2025	N	Basalt	PMW-05B-121125	4.79	< 0.0050 U	< 0.062 U	< 0.0080 U	< 0.0030 U	< 0.46 U	< 0.0030 U	< 0.0050 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	4.79	< 0.0049 U	< 0.061 U	< 0.0079 U	< 0.0030 U	< 0.45 U	< 0.0030 U	< 0.0049 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05B2-121025	3.92	< 0.0050 U	< 0.063 U	< 0.0081 U	< 0.0030 U	< 0.46 U	< 0.0030 U	< 0.0050 U
PMW-06b	12/10/2025	N	Basalt	PMW-06B-121025	4.12	< 0.0050 U	< 0.061 U	< 0.0079 U	< 0.0030 U	< 0.46 U	< 0.0030 U	< 0.0050 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06B2-121025	4.73	< 0.0050 U	< 0.062 U	< 0.0080 U	< 0.0030 U	< 0.46 U	< 0.0030 U	< 0.0050 U
PMW-08b	11/05/2025	N	Basalt	PMW-08B-110525	3.39	< 0.0047 UJ	< 0.058 UJ	< 0.0075 UJ	< 0.0028 UJ	< 0.43 UJ	< 0.0028 UJ	< 0.0047 UJ
PMW-09b	12/10/2025	N	Basalt	PMW-09B-121025	28.7	< 0.0050 U	< 0.062 U	< 0.0079 U	< 0.0030 U	< 0.46 U	< 0.0030 U	< 0.0050 U
PMW-18b	12/10/2025	N	Basalt	PMW-18B-121025	2.26	< 0.0050 U	< 0.062 U	< 0.0079 U	< 0.0030 U	< 0.46 U	< 0.0030 U	< 0.0050 U
PMW-19b	11/06/2025	N	Basalt	PMW-19B-110625	310.9	< 0.0049 U	< 0.061 U	< 0.0078 U	< 0.0029 U	< 0.45 U	< 0.0029 U	< 0.0049 U

Notes:
Bolded values indicate concentrations above the Method Detection Limit.
Shaded values indicate concentrations above the FSWP SHSC.
< = Compound not detected. Detection Limit shown.
µg/L = micrograms per liter
FD = Field Duplicate Sample
FSWP SHSC = Feasibility Study Work Plan Indirect Exposure Pathway Selected Hot Spot Criteria
N = Normal Environmental Sample
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SW8180B analyses performed by TestAmerica - Seattle, WA of Seattle.

Validated Qualifier Definition(s):
J- = The result is an estimated quantity, but the result may be biased low.
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Table 6
Pesticide Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte						Dieldrin	Endosulfan I (Alpha)	Endosulfan II (Beta)	Endosulfan sulfate	Endrin	Endrin aldehyde	Endrin ketone	gamma- BHC/HCH (Lindane)
Units						ug / L	ug / L	ug / L	ug / L	ug / L	ug / L	ug / L	ug / L
FSWP SHSC (shaded values indicate results above the value shown)						1.2E-06	0.056	0.056	8.9	0.024	0.03	NE	0.08
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID	Turbidity (NTU)								
PMW-01g	11/07/2025	N	Gravel	PMW-01G-110725	137.6	< 0.0047 U	< 0.0028 U	< 0.0047 U	< 0.0028 U	< 0.0028 U	< 0.032 U	< 0.0066 U	< 0.0047 U
PMW-08g	11/05/2025	N	Gravel	PMW-08G-110525	468.9	< 0.0048 U	< 0.0029 U	< 0.0048 U	< 0.0029 U	< 0.0029 U	< 0.033 U	< 0.0067 U	< 0.0048 U
PMW-08g	11/05/2025	FD	Gravel	DUP-01-110525	468.9	< 0.0048 U	< 0.0029 U	< 0.0048 U	< 0.0029 U	< 0.0029 U	< 0.033 U	< 0.0068 U	< 0.0048 U
PMW-09g	12/10/2025	N	Gravel	PMW-09G-121025	865	< 0.0050 U	< 0.0030 U	< 0.0050 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0070 U	< 0.0050 U
PMW-19g	11/06/2025	N	Gravel	PMW-19G-110625	345.6	< 0.0052 U	< 0.0031 U	< 0.0052 U	< 0.0031 U	< 0.0031 U	< 0.035 U	< 0.0072 U	< 0.0052 U
PMW-20g	11/06/2025	N	Gravel	PMW-20G-110625	9.82	< 0.0046 U	< 0.0028 U	< 0.0046 U	< 0.0028 U	< 0.0028 U	< 0.031 U	< 0.0065 U	< 0.0046 U
PMW-01b	11/07/2025	N	Basalt	PMW-01B-110725	5.52	< 0.0051 U	< 0.0030 U	< 0.0051 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0071 U	< 0.0051 U
PMW-02b	11/04/2025	N	Basalt	PMW-02B-110425	71.51	< 0.0047 UJ	< 0.0028 UJ	< 0.0047 UJ	< 0.0028 UJ	< 0.0028 UJ	< 0.032 UJ	< 0.0065 UJ	< 0.0047 UJ
PMW-03b	11/04/2025	N	Basalt	PMW-03B-110425	29.03	< 0.0049 U	< 0.0029 U	< 0.0049 U	< 0.0029 U	< 0.0029 U	< 0.033 U	< 0.0068 U	< 0.0049 U
PMW-04b	12/11/2025	N	Basalt	PMW-04B-121125	4.86	< 0.0049 U	< 0.0029 U	< 0.0049 U	< 0.0029 U	< 0.0029 U	< 0.033 U	< 0.0069 U	< 0.0049 U
PMW-05b	12/11/2025	N	Basalt	PMW-05B-121125	4.79	< 0.0050 U	< 0.0030 U	< 0.0050 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0070 U	< 0.0050 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	4.79	< 0.0049 U	< 0.0030 U	< 0.0049 U	< 0.0030 U	< 0.0030 U	< 0.033 U	< 0.0069 U	< 0.0049 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05B2-121025	3.92	< 0.0050 U	< 0.0030 U	< 0.0050 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0071 U	< 0.0050 U
PMW-06b	12/10/2025	N	Basalt	PMW-06B-121025	4.12	< 0.0050 U	< 0.0030 U	< 0.0050 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0069 U	< 0.0050 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06B2-121025	4.73	< 0.0050 U	< 0.0030 U	< 0.0050 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0070 U	< 0.0050 U
PMW-08b	11/05/2025	N	Basalt	PMW-08B-110525	3.39	< 0.0047 UJ	< 0.0028 UJ	< 0.0047 UJ	< 0.0028 UJ	< 0.0028 UJ	< 0.032 UJ	< 0.0066 UJ	< 0.0047 UJ
PMW-09b	12/10/2025	N	Basalt	PMW-09B-121025	28.7	< 0.0050 U	< 0.0030 U	< 0.0050 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0069 U	< 0.0050 U
PMW-18b	12/10/2025	N	Basalt	PMW-18B-121025	2.26	< 0.0050 U	< 0.0030 U	< 0.0050 U	< 0.0030 U	< 0.0030 U	< 0.034 U	< 0.0069 U	< 0.0050 U
PMW-19b	11/06/2025	N	Basalt	PMW-19B-110625	310.9	< 0.0049 U	< 0.0029 U	< 0.0049 U	< 0.0029 U	< 0.0029 U	< 0.033 U	< 0.0068 U	< 0.0049 U

Notes:
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SW8180B analyses performed by TestAmerica - Seattle, WA of Seattle.

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Table 6
Pesticide Results
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Analyte						Heptachlor	Methoxychlor
Units						ug / L	ug / L
FSWP SHSC (shaded values indicate results above the value shown)						5.9E-06	0.02
Location ID	Sample Date	Sample Type	Aquifer Classification	Sample ID	Turbidity (NTU)		
PMW-01g	11/07/2025	N	Gravel	PMW-01G-110725	137.6	< 0.0038 U	< 0.0047 U
PMW-08g	11/05/2025	N	Gravel	PMW-08G-110525	468.9	< 0.0038 U	< 0.0048 U
PMW-08g	11/05/2025	FD	Gravel	DUP-01-110525	468.9	< 0.0039 U	< 0.0048 U
PMW-09g	12/10/2025	N	Gravel	PMW-09G-121025	865	< 0.0040 U	< 0.0050 U
PMW-19g	11/06/2025	N	Gravel	PMW-19G-110625	345.6	< 0.0041 U	< 0.0052 U
PMW-20g	11/06/2025	N	Gravel	PMW-20G-110625	9.82	< 0.0037 U	< 0.0046 U
PMW-01b	11/07/2025	N	Basalt	PMW-01B-110725	5.52	< 0.0040 U	< 0.0051 U
PMW-02b	11/04/2025	N	Basalt	PMW-02B-110425	71.51	< 0.0037 UJ	< 0.0047 UJ
PMW-03b	11/04/2025	N	Basalt	PMW-03B-110425	29.03	< 0.0039 U	< 0.0049 U
PMW-04b	12/11/2025	N	Basalt	PMW-04B-121125	4.86	< 0.0039 U	< 0.0049 U
PMW-05b	12/11/2025	N	Basalt	PMW-05B-121125	4.79	< 0.0040 U	< 0.0050 U
PMW-05b	12/11/2025	FD	Basalt	DUP-02-121125	4.79	< 0.0039 U	< 0.0049 U
PMW-05b2	12/10/2025	N	Basalt	PMW-05B2-121025	3.92	< 0.0040 U	< 0.0050 U
PMW-06b	12/10/2025	N	Basalt	PMW-06B-121025	4.12	< 0.0040 U	< 0.0050 U
PMW-06b2	12/10/2025	N	Basalt	PMW-06B2-121025	4.73	< 0.0040 U	< 0.0050 U
PMW-08b	11/05/2025	N	Basalt	PMW-08B-110525	3.39	< 0.0037 UJ	< 0.0047 UJ
PMW-09b	12/10/2025	N	Basalt	PMW-09B-121025	28.7	< 0.0040 U	< 0.0050 U
PMW-18b	12/10/2025	N	Basalt	PMW-18B-121025	2.26	< 0.0040 U	< 0.0050 U
PMW-19b	11/06/2025	N	Basalt	PMW-19B-110625	310.9	< 0.0039 U	< 0.0049 U

Notes:
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FIGURES



Legend

 Shallow Zone Monitoring Well	 Intermediate Zone Piezometer	 Abandoned Monitoring Well
 Intermediate Zone Monitoring Well	 Deep Zone Piezometer	 Abandoned Piezometer
 Shallow-Intermediate Zone Monitoring Well	 Shallow Zone Recovery Well	 Abandoned Recovery Well
 Deep Zone Monitoring Well	 Intermediate Zone Recovery Well	 Extraction Trench (Not To Scale)
 Gravel Zone Monitoring Well	 Trench Extraction Well	 Gradient Cluster
 Basalt Zone Monitoring Well	 River Gauge	 Target Capture Zone
 Shallow Zone Piezometer	 Abandoned Extraction Well	 Barrier Wall Alignment
		 Parcel and Property Boundaries

Notes:
GCC = Gradient Control Cluster.
GWBW = Ground water barrier wall.

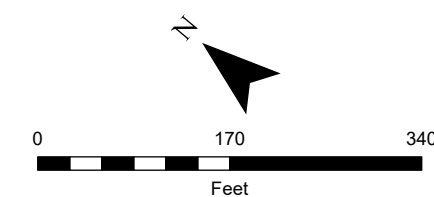
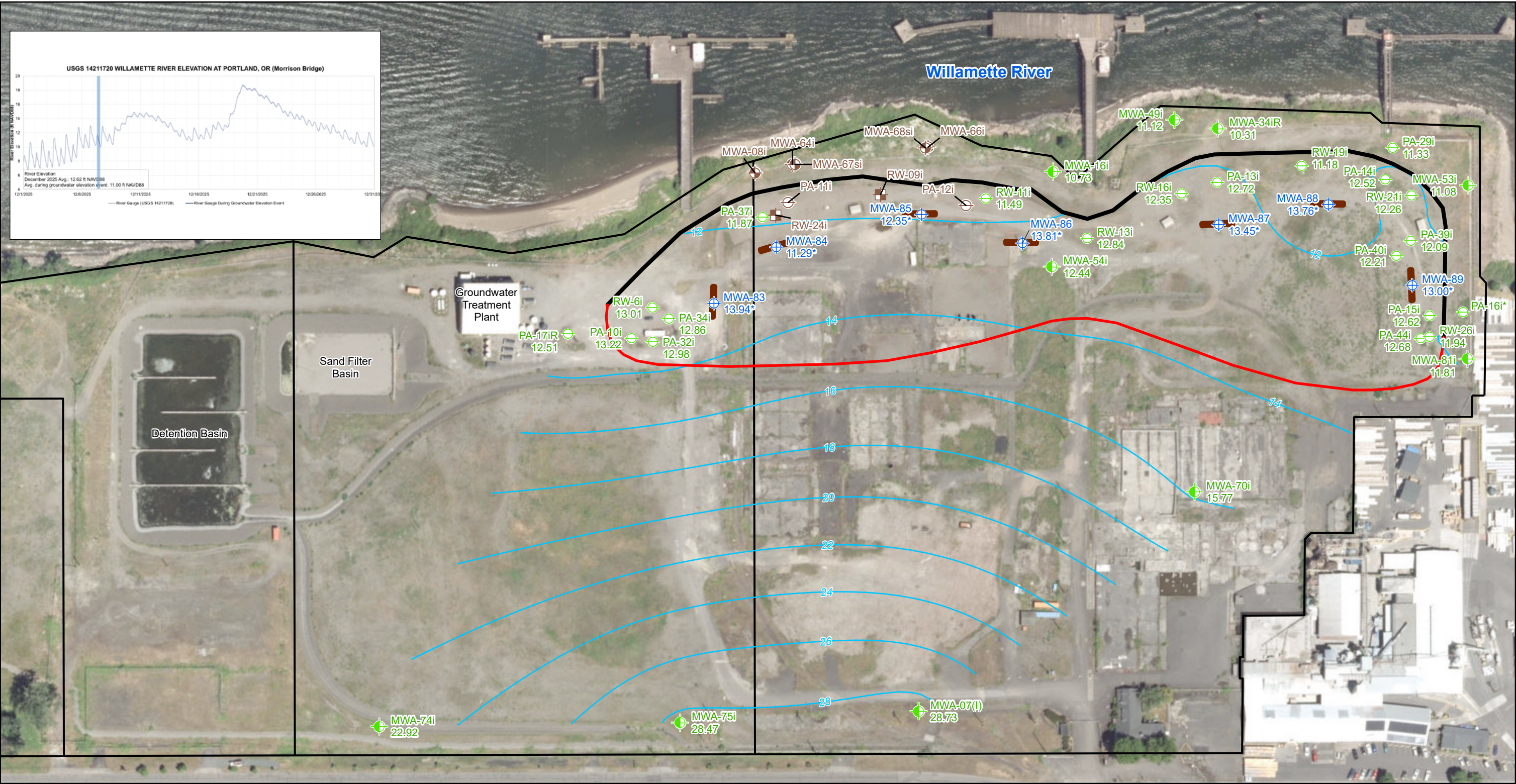


Figure 1
Site Layout
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon

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DRAWN BY: GIS



Legend

	Intermediate Zone Piezometer		Abandoned Recovery Well
	Intermediate Zone Monitoring Well		Intermediate Zone Groundwater Contours (ft NAVD88) Dashed where Inferred
	Shallow-Intermediate Zone Monitoring Well		Target Capture Zone
	27.70 Groundwater Elevation (ft NAVD88)		Barrier Wall Alignment
	Abandoned Monitoring Well		Extraction Trench (Not To Scale)
	Abandoned Piezometer		

Notes:

- * Value not used for contouring.
- Water levels collected December 7, 2025.
- ft NAVD88: feet North American Vertical Datum of 1988.
- Aerial Photo: City of Portland, Summer 2017.

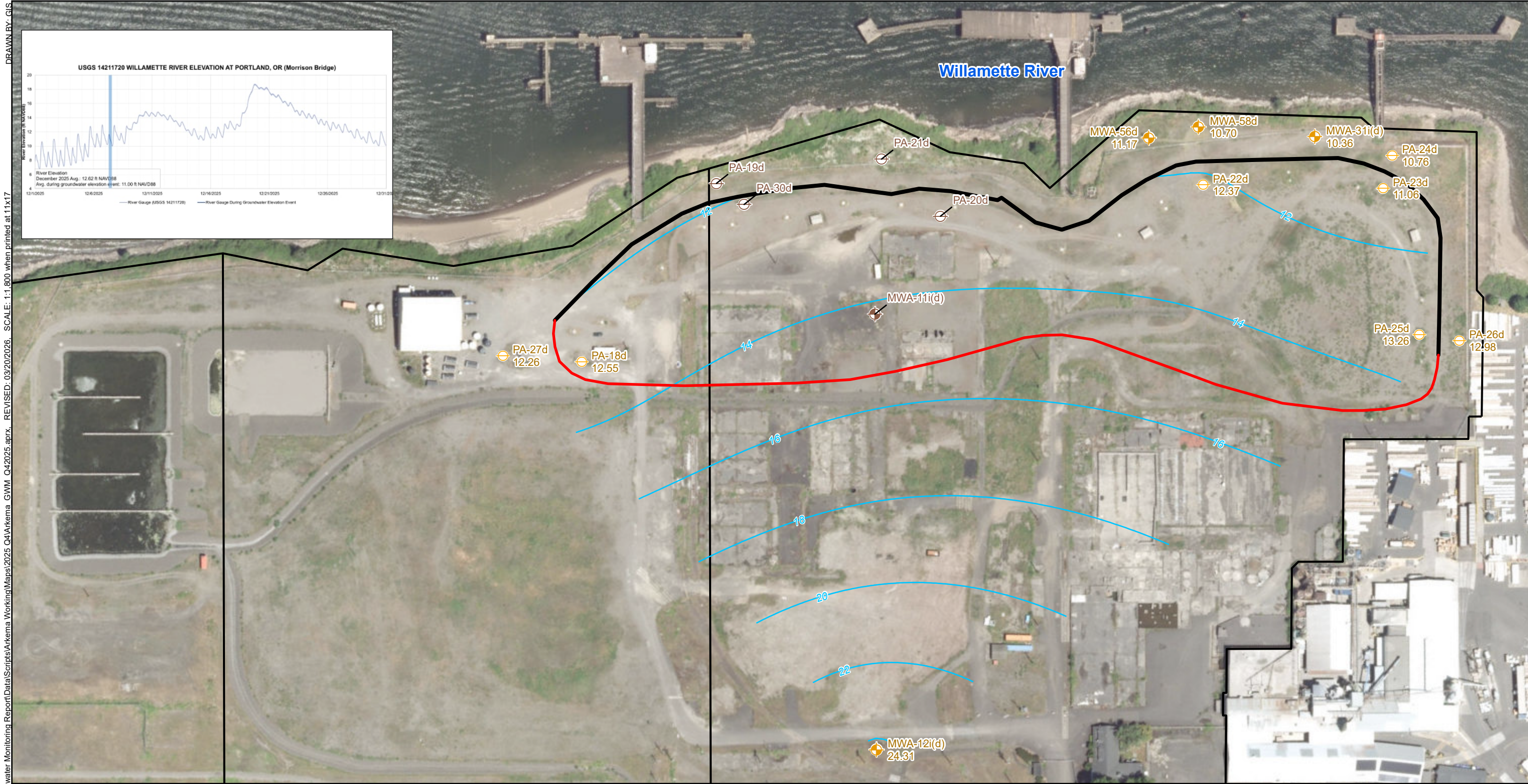
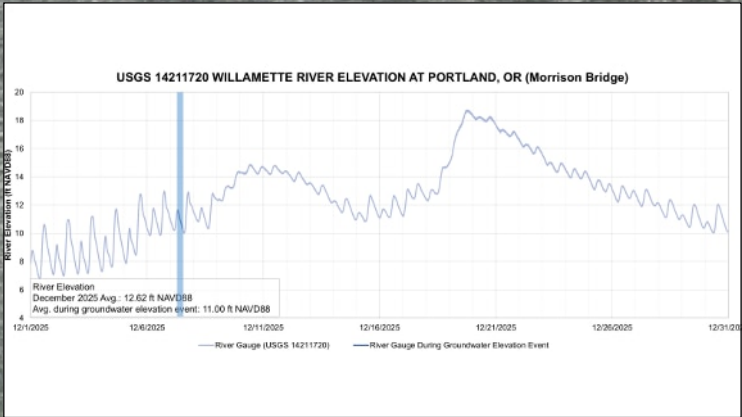
0 160 320
Feet

Figure 3

December 2025 Intermediate Zone Groundwater Contours
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon

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Legend

- Deep Zone Piezometer
- Deep Zone Monitoring Well
- 27.70 Groundwater Elevation (ft NAVD88)
- Abandoned Piezometer
- Abandoned Monitoring Well
- Deep Zone Groundwater Contours (ft NAVD88)
Dashed where Inferred
- Target Capture Zone
- Barrier Wall Alignment

Notes:
* Value not used for contouring.
Water levels collected December 7, 2025.
ft NAVD88: feet North American Vertical Datum
of 1988.
Aerial Photo: City of Portland, Summer 2017.

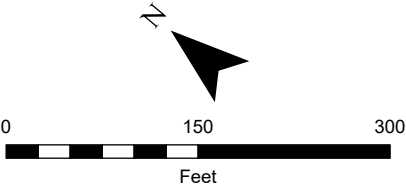


Figure 4
December 2025 Deep Zone Groundwater Contours
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon

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Legend

	Gravel Zone Monitoring Well		Dashed
	Groundwater Elevation (ft NAVD88)		<all other values>
Type			Target Capture Zone
	Solid		Barrier Wall Alignment

Notes:

- * Value not used for contouring.
- NM = Well not measured during this monitoring period.
- Water levels collected November 4 and December 7, 2025.
- ft NAVD88: feet North American Vertical Datum of 1988.
- Aerial Photo: City of Portland, Summer 2017.

Feet

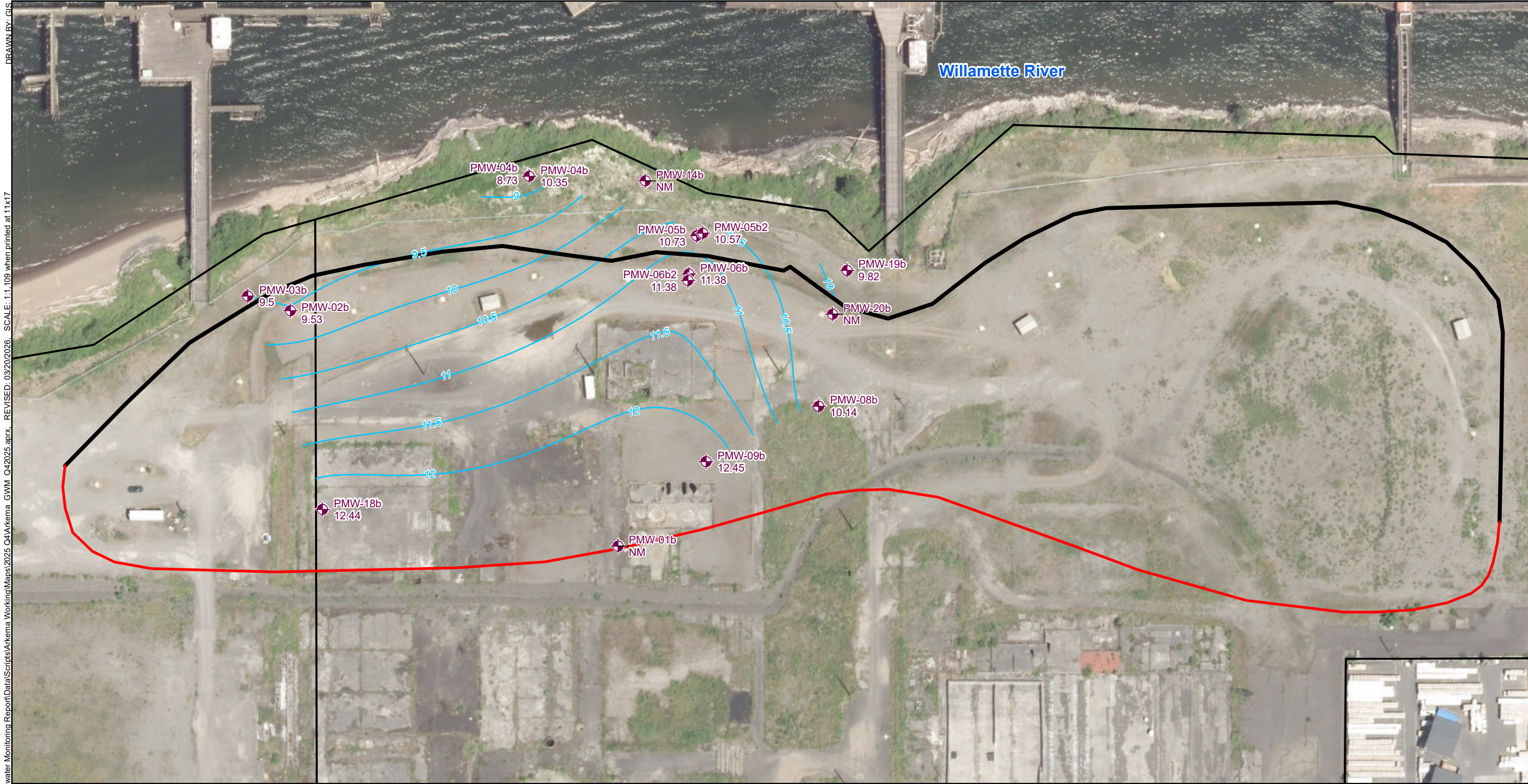
Figure 5

December 2025 Gravel Zone Groundwater Contours

Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon

Environmental Resources Management
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- Legend**
- Basalt Zone Monitoring Well
 - 1245 Groundwater Elevation (ft NAVD88)
 - Basalt Zone Groundwater Contours (ft NAVD88) Dashed Where Inferred
 - Target Capture Zone
 - Barrier Wall Alignment

Notes:

- * Value not used for contouring.
- NM = Well not measured during this monitoring period.
- Water levels collected November 4 and December 7, 2025.
- ft NAVD88: feet North American Vertical Datum of 1988.
- Aerial Photo: City of Portland, Summer 2017.

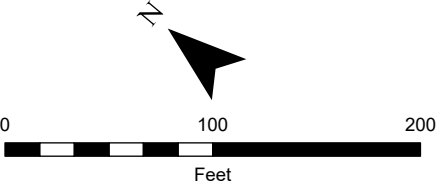
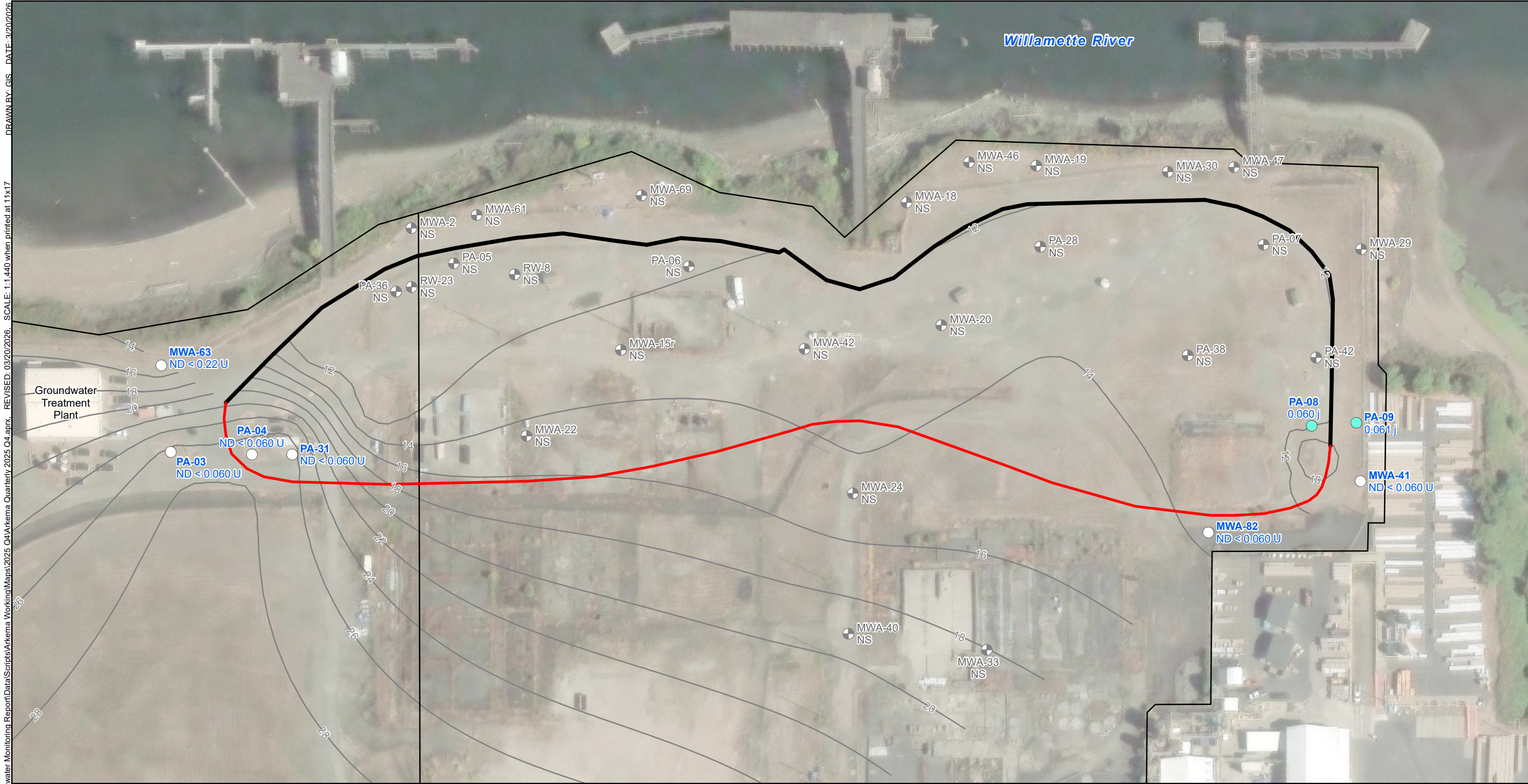


Figure 6
December 2025 Basalt Zone Groundwater Contours
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon

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Legend

- > 6400 µg/l
- >= 6400 - 640 µg/l
- >= 640 - 64 µg/l
- > 64 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Shallow Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chlorobenzene = 64 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

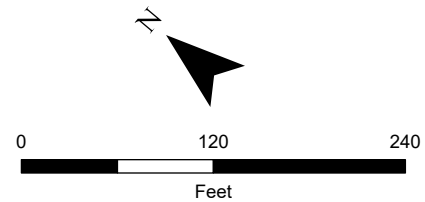


Figure 7
Chlorobenzene Groundwater Concentrations
Shallow Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 6400 µg/l
- ≥ 6400 - 640 µg/l
- ≥ 640 - 64 µg/l
- > 64 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Intermediate Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chlorobenzene = 64 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

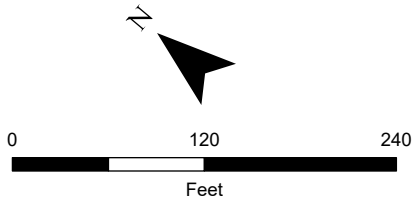


Figure 8
Chlorobenzene Groundwater Concentrations
Intermediate Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 6400 µg/l
- >= 6400 - 640 µg/l
- >= 640 - 64 µg/l
- > 64 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Deep Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 9-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chlorobenzene = 64 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

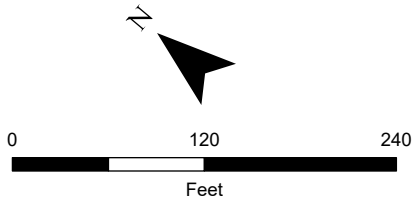


Figure 9
Chlorobenzene Groundwater Concentrations
Deep Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 6400 µg/l
- >= 6400 - 640 µg/l
- >= 640 - 64 µg/l
- > 64 µg/l
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Gravel Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 5-Dec 10, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chlorobenzene = 64 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

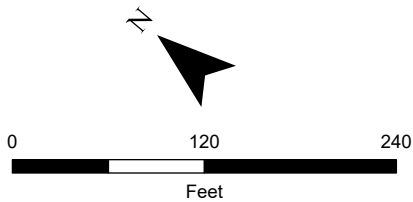


Figure 10
Chlorobenzene Groundwater Concentrations
Gravel Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 6400 µg/l
- ≥ 6400 - 640 µg/l
- ≥ 640 - 64 µg/l
- > 64 µg/l
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Basalt Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 4-Dec 11, 2025.
All results in micrograms per liter (µg/L).
Results in red exceed screening criteria.
Screening criteria for Chlorobenzene = 64 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

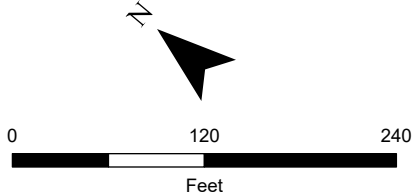
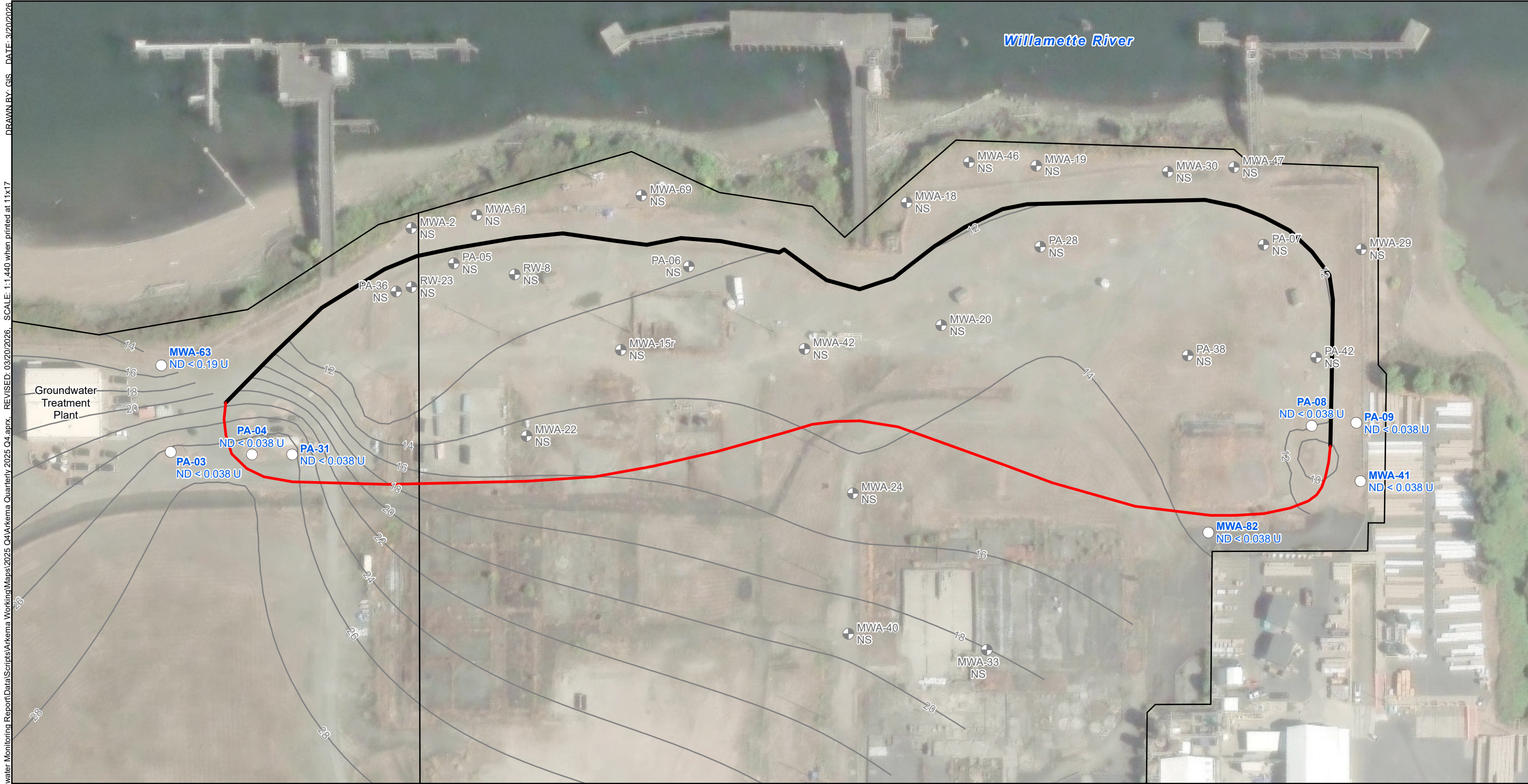


Figure 11
Chlorobenzene Groundwater Concentrations
Basalt Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 1400 µg/l
- >= 1400 - 140 µg/l
- >= 140 - 14 µg/l
- > 14 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Shallow Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for 1,2-Dichlorobenzene = 14 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

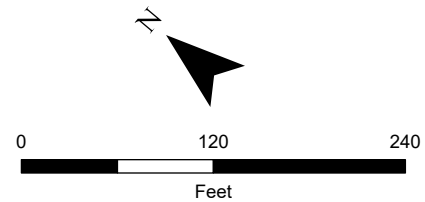


Figure 12
1,2-Dichlorobenzene Groundwater Concentrations
Shallow Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 1400 µg/l
- >= 1400 - 140 µg/l
- >= 140 - 14 µg/l
- > 14 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Intermediate Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for 1,2-Dichlorobenzene = 14 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

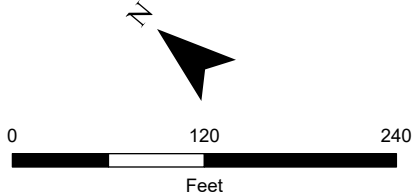


Figure 13
1,2-Dichlorobenzene Groundwater Concentrations
Intermediate Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 1400 µg/l
- >= 1400 - 140 µg/l
- >= 140 - 14 µg/l
- > 14 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Deep Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 9-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for 1,2-Dichlorobenzene = 14 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

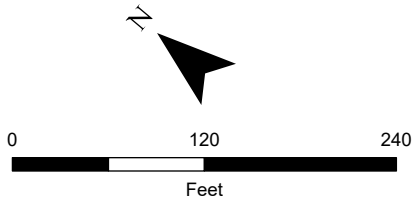


Figure 14
1,2-Dichlorobenzene Groundwater Concentrations
Deep Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 1400 µg/l
- >= 1400 - 140 µg/l
- >= 140 - 14 µg/l
- > 14 µg/l
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Gravel Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 5-Dec 10, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for 1,2-Dichlorobenzene = 14 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

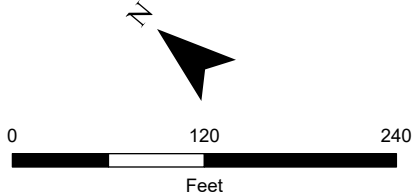


Figure 15
1,2-Dichlorobenzene Groundwater Concentrations
Gravel Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 1400 µg/l
- >= 1400 - 140 µg/l
- >= 140 - 14 µg/l
- > 14 µg/l
- Not Detected

- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Basalt Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 4-Dec 11, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for 1,2-Dichlorobenzene = 14 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

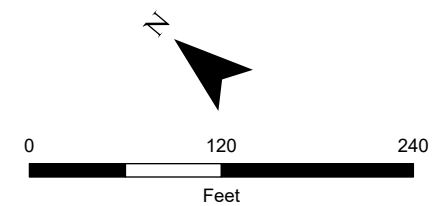


Figure 16
1,2-Dichlorobenzene Groundwater Concentrations
Basalt Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

Molar Ratio

- Tetrachloroethene
- Trichloroethene
- cis-1,2-Dichloroethene
- Vinyl chloride
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Shallow Zone Groundwater Contours (ft NAVD88) December 2025

Notes:

Samples collected Dec 8-15, 2025

All results in micrograms per liter (µg/L).

Results in **red** exceed screening criteria.

Screening criteria for tetrachloroethene (PCE) = 0.33 µg/L

Screening criteria for trichloroethene (TCE) = 3 µg/L

Screening criteria for cis-1,2-dichloroethene (Cis-1,2) = 590 µg/L

Screening criteria for vinyl chloride (VC) = 0.24 µg/L.

ND: Non-Detect

Figure 17

PCE, TCE, cis-1,2-DCE and Vinyl Chloride Groundwater Concentrations Shallow Zone

Quarter 4, 2025

Groundwater Monitoring Report

Arkema Inc.

Portland, Oregon

0 120 240 Feet

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Legend

Molar Ratio

- Tetrachloroethene
- Trichloroethene
- cis-1,2-Dichloroethene
- Vinyl chloride

- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Intermediate Zone Groundwater
- Contours (ft NAVD88) December 2025

Notes:

Samples collected Dec 8-15, 2025

All results in micrograms per liter (µg/L).

Results in **red** exceed screening criteria.

Screening criteria for tetrachloroethene (PCE) = 0.33 µg/L

Screening criteria for trichloroethene (TCE) = 3 µg/L

Screening criteria for cis-1,2-dichloroethene (Cis-1,2) = 590 µg/L

Screening criteria for vinyl chloride (VC) = 0.24 µg/L.

ND: Non-Detect

0 120 240

Feet

Figure 18

PCE, TCE, cis-1,2-DCE and Vinyl Chloride Groundwater Concentrations Intermediate Zone

Quarter 4, 2025

Groundwater Monitoring Report

Arkema Inc.

Portland, Oregon

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Legend

Molar Ratio

- Tetrachloroethene
- Trichloroethene
- cis-1,2-Dichloroethene

- Vinyl chloride
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Deep Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 9-15, 2025
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for tetrachloroethene (PCE) = 0.33 µg/L
Screening criteria for trichloroethene (TCE) = 3 µg/L
Screening criteria for cis-1,2-dichloroethene (Cis-1,2) = 590 µg/L
Screening criteria for vinyl chloride (VC) = 0.24 µg/L.
ND: Non-Detect

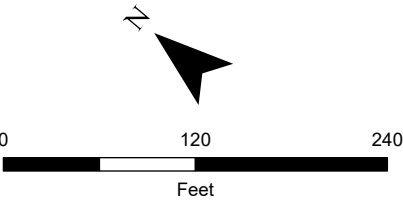


Figure 19
PCE, TCE, cis-1,2-DCE and
Vinyl Chloride Groundwater Concentrations
Deep Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

Molar Ratio

- Tetrachloroethene
- Trichloroethene
- cis-1,2-Dichloroethene

- Vinyl chloride
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Gravel Zone Groundwater Contours (ft NAVD88) December 2025

Notes:

Samples collected Nov 5-Dec 10, 2025

All results in micrograms per liter (µg/L).

Results in **red** exceed screening criteria.

Screening criteria for tetrachloroethene (PCE) = 0.33 µg/L

Screening criteria for trichloroethene (TCE) = 3 µg/L

Screening criteria for cis-1,2-dichloroethene (Cis-1,2) = 590 µg/L

Screening criteria for vinyl chloride (VC) = 0.24 µg/L.

ND: Non-Detect

Figure 20

PCE, TCE, cis-1,2-DCE and Vinyl Chloride Groundwater Concentrations

Gravel Zone

Quarter 4, 2025

Groundwater Monitoring Report

Arkema Inc.

Portland, Oregon

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Legend

Molar Ratio



 Tetrachloroethene

 Trichloroethene

 cis-1,2-Dichloroethene

-  Vinyl chloride
-  Not Detected
-  Target Capture Zone
-  Barrier Wall Alignment
-  Parcel and Property Boundaries
-  Basalt Zone Groundwater Contours (ft NAVD88) December 2025

Notes:

Samples collected Nov 4-Dec 11, 2025

All results in micrograms per liter (µg/L).

Results in **red** exceed screening criteria.

Screening criteria for tetrachloroethene (PCE) = 0.33 µg/L

Screening criteria for trichloroethene (TCE) = 3 µg/L

Screening criteria for cis-1,2-dichloroethene (Cis-1,2) = 590 µg/L

Screening criteria for vinyl chloride (VC) = 0.24 µg/L.

ND: Non-Detect

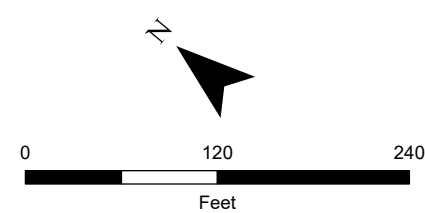


Figure 21

PCE, TCE, cis-1,2-DCE and Vinyl Chloride Groundwater Concentrations Basalt Zone

Quarter 4, 2025

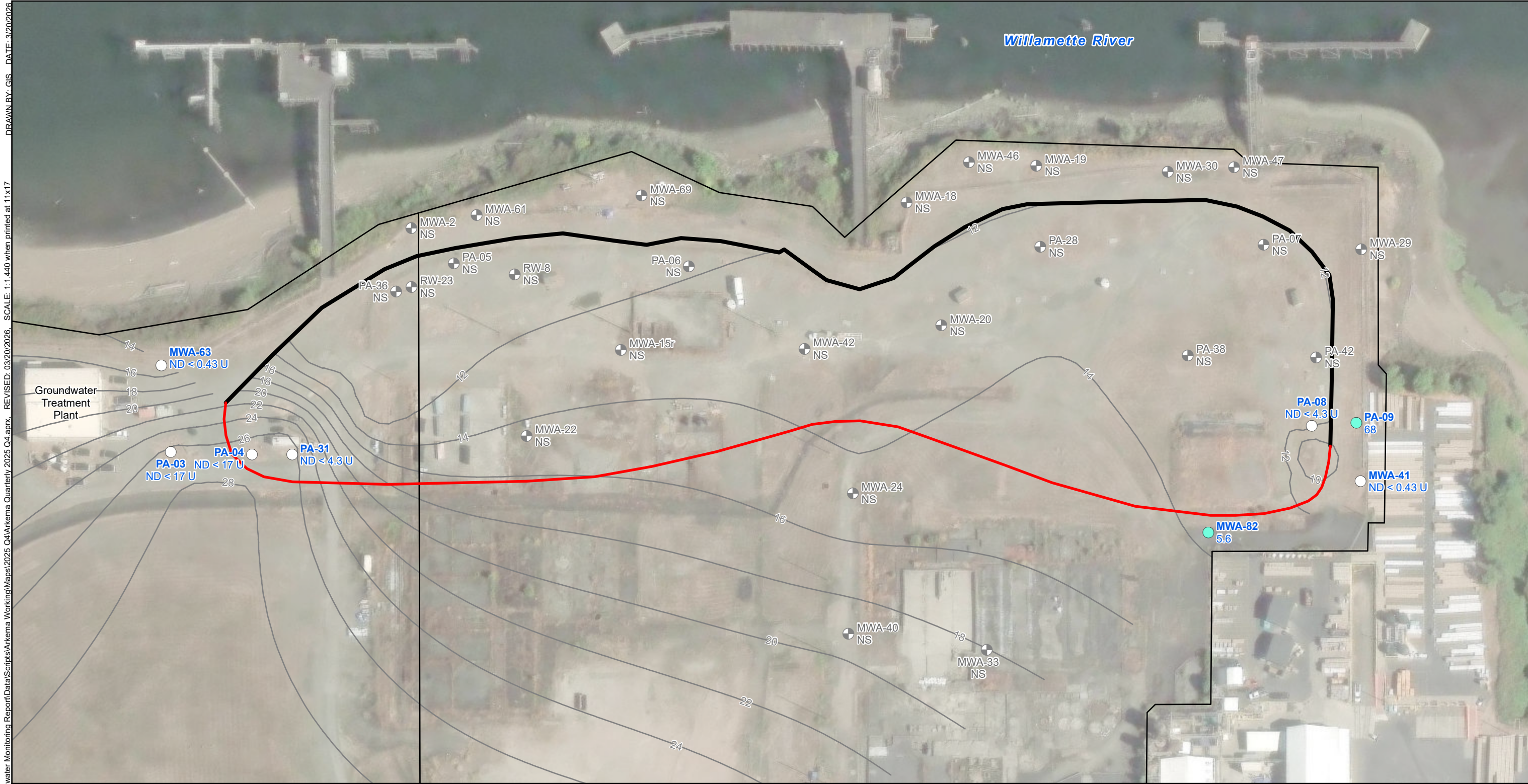
Groundwater Monitoring Report

Arkema Inc.

Portland, Oregon



M:\US\Projects\S-U\Total\Arkema - Portland\Groundwater Monitoring Report\Data\Scripts\Arkema Working\Maps\2025 Q4\Arkema Quarterly 2025 Q4.aprx. REVISED: 03/20/2026. SCALE: 1:1,440 when printed at 11x17. DRAWN BY: GIS. DATE: 3/20/2026



Legend

- > 180000 µg/l
- >= 180000 - 18000 µg/l
- >= 18000 - 1800 µg/l
- > 1800 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Shallow Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Perchlorate = 1800 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

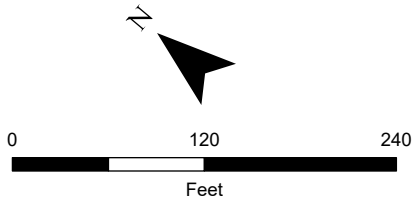


Figure 22
Perchlorate Groundwater Concentrations
Shallow Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



M:\US\Projects\S-U\Total\Arkema Portland\Groundwater Monitoring Report\Data\Scripts\Arkema Working\Maps\2025 Q4\Arkema Quarterly 2025 Q4.aprx. REVISED: 03/20/2026. SCALE: 1:1,440 when printed at 11x17. DRAWN BY: GIS. DATE: 3/20/2026



Legend

- > 180000 µg/l
- >= 180000 - 18000 µg/l
- >= 18000 - 1800 µg/l
- > 1800 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Intermediate Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Perchlorate = 1800 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

Figure 23
Perchlorate Groundwater Concentrations
Intermediate Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



M:\US\Projects\S-U\Total\Arkema Portland\Groundwater Monitoring Report\Data\Scripts\Arkema Working\Maps\2025 Q4\Arkema Quarterly 2025 Q4.aprx. REVISED: 03/20/2026. SCALE: 1:1,440 when printed at 11x17. DRAWN BY: GIS. DATE: 3/20/2026



Legend

- > 180000 µg/l
- >= 180000 - 18000 µg/l
- >= 18000 - 1800 µg/l
- > 1800 µg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Deep Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 9-15, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Perchlorate = 1800 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

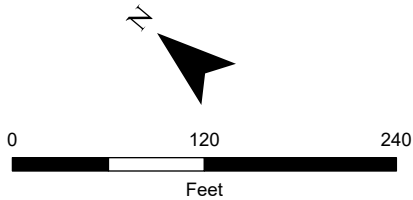


Figure 24
Perchlorate Groundwater Concentrations
Deep Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 180000 µg/l
- >= 180000 - 18000 µg/l
- >= 18000 - 1800 µg/l
- > 1800 µg/l
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Gravel Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 5-Dec 10, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Perchlorate = 1800 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

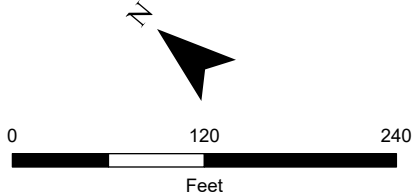


Figure 25
Perchlorate Groundwater Concentrations
Gravel Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



M:\US\Projects\S-U\Total\Arkema Portland\Groundwater Monitoring Report\Data\Scripts\Arkema Working\Maps\2025 Q4\Arkema Quarterly 2025 Q4.aprx. REVISED: 03/20/2026. SCALE: 1:1,440 when printed at 11x17. DRAWN BY: GIS. DATE: 3/20/2026



Legend

- > 180000 µg/l
 - >= 180000 - 18000 µg/l
 - >= 18000 - 1800 µg/l
 - > 1800 µg/l
 - Not Detected
- Target Capture Zone
 - Barrier Wall Alignment
 - Parcel and Property Boundaries
 - Basalt Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 4-Dec 11, 2025.
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for Perchlorate = 1800 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

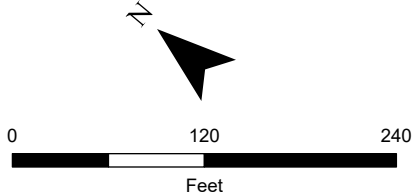


Figure 26
Perchlorate Groundwater Concentrations
Basalt Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



M:\US\Projects\S-U\Total\Arkema Portland\Groundwater Monitoring Report\Data\Scripts\Arkema Working\Maps\2025 Q4\Arkema Quarterly 2025 Q4.aprx. REVISED: 03/20/2026. SCALE: 1:1,440 when printed at 11x17 DRAWN BY: GIS DATE: 3/20/2026



Legend

- > 23000 mg/l
- >= 23000 - 2300 mg/l
- >= 2300 - 230 mg/l
- > 230 mg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Shallow Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in milligrams per liter (mg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chloride = 230 mg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

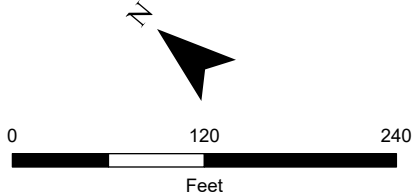


Figure 27
Chloride Groundwater Concentrations
Shallow Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 23000 mg/l
- >= 23000 - 2300 mg/l
- >= 2300 - 230 mg/l
- > 230 mg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Intermediate Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 8-15, 2025.
All results in milligrams per liter (mg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chloride = 230 mg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

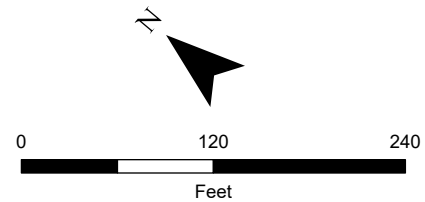
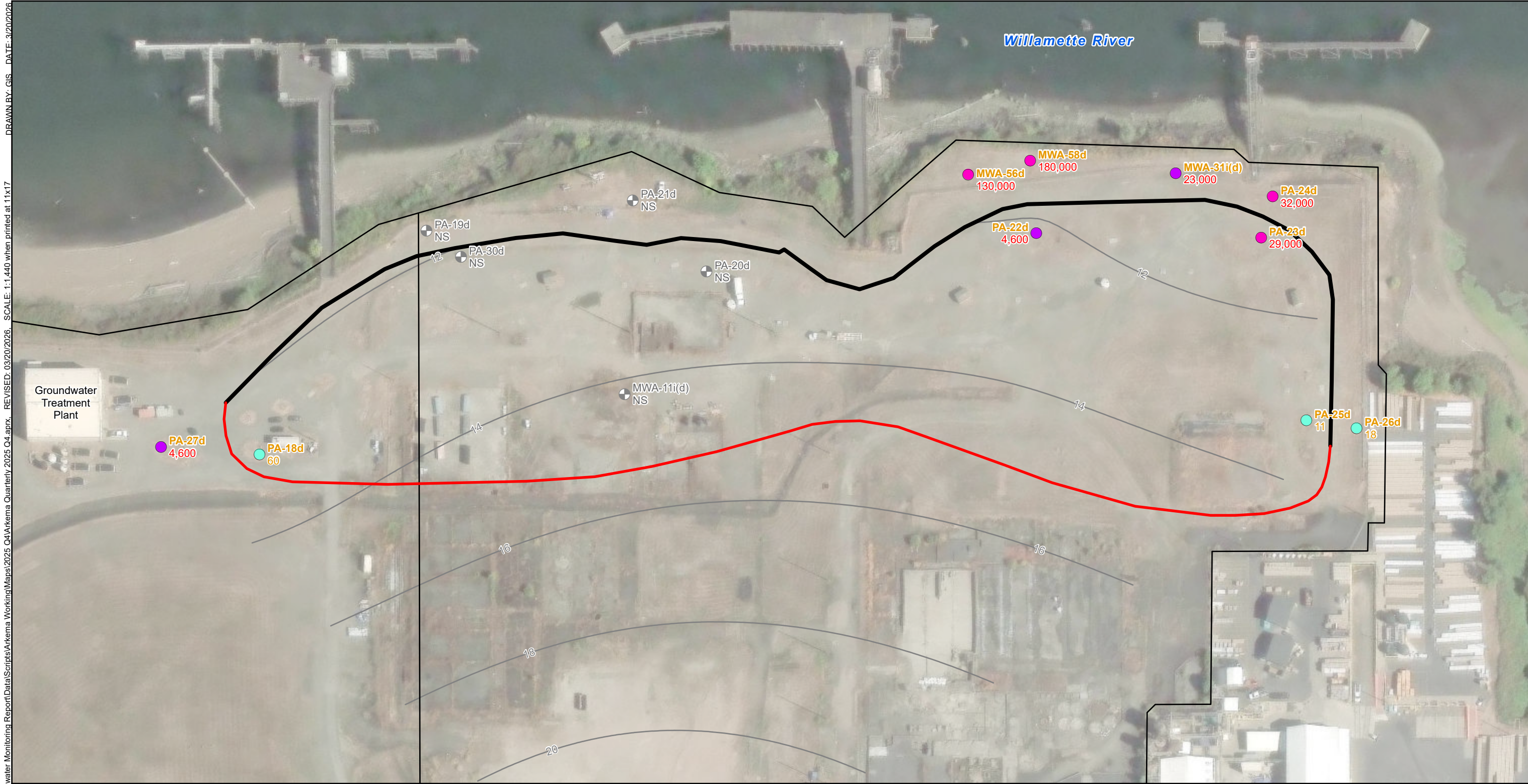


Figure 28
Chloride Groundwater Concentrations
Intermediate Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 23000 mg/l
- >= 23000 - 2300 mg/l
- >= 2300 - 230 mg/l
- > 230 mg/l
- Not Detected
- ⊕ Not Sampled
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Deep Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Dec 9-15, 2025.
All results in milligrams per liter (mg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chloride = 230 mg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

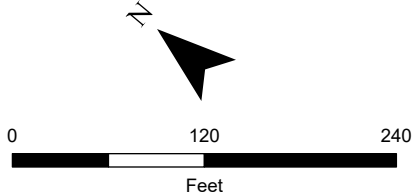


Figure 29
Chloride Groundwater Concentrations
Deep Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



M:\US\Projects\S-U\Total\Arkema Portland\Groundwater Monitoring Report\Data\Scripts\Arkema Working\Maps\2025 Q4\Arkema Quarterly 2025 Q4.aprx. REVISED: 03/20/2026. SCALE: 1:1,440 when printed at 11x17. DRAWN BY: GIS. DATE: 3/20/2026



Legend

- > 23000 mg/l
- >= 23000 - 2300 mg/l
- >= 2300 - 230 mg/l
- > 230 mg/l
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Gravel Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 5-Dec 10, 2025.
All results in milligrams per liter (mg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chloride = 230 mg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

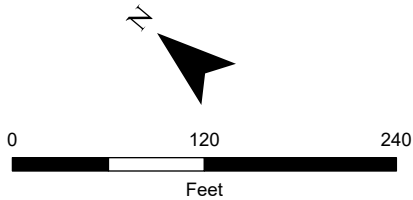


Figure 30
Chloride Groundwater Concentrations
Gravel Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 23000 mg/l
 - >= 23000 - 2300 mg/l
 - >= 2300 - 230 mg/l
 - > 230 mg/l
 - Not Detected
- Target Capture Zone
 - Barrier Wall Alignment
 - Parcel and Property Boundaries
 - Basalt Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 4-Dec 11, 2025.
All results in milligrams per liter (mg/L).
Results in **red** exceed screening criteria.
Screening criteria for Chloride = 230 mg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

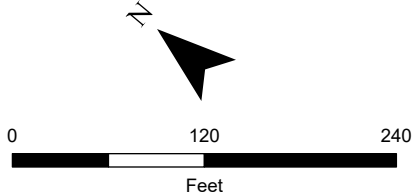
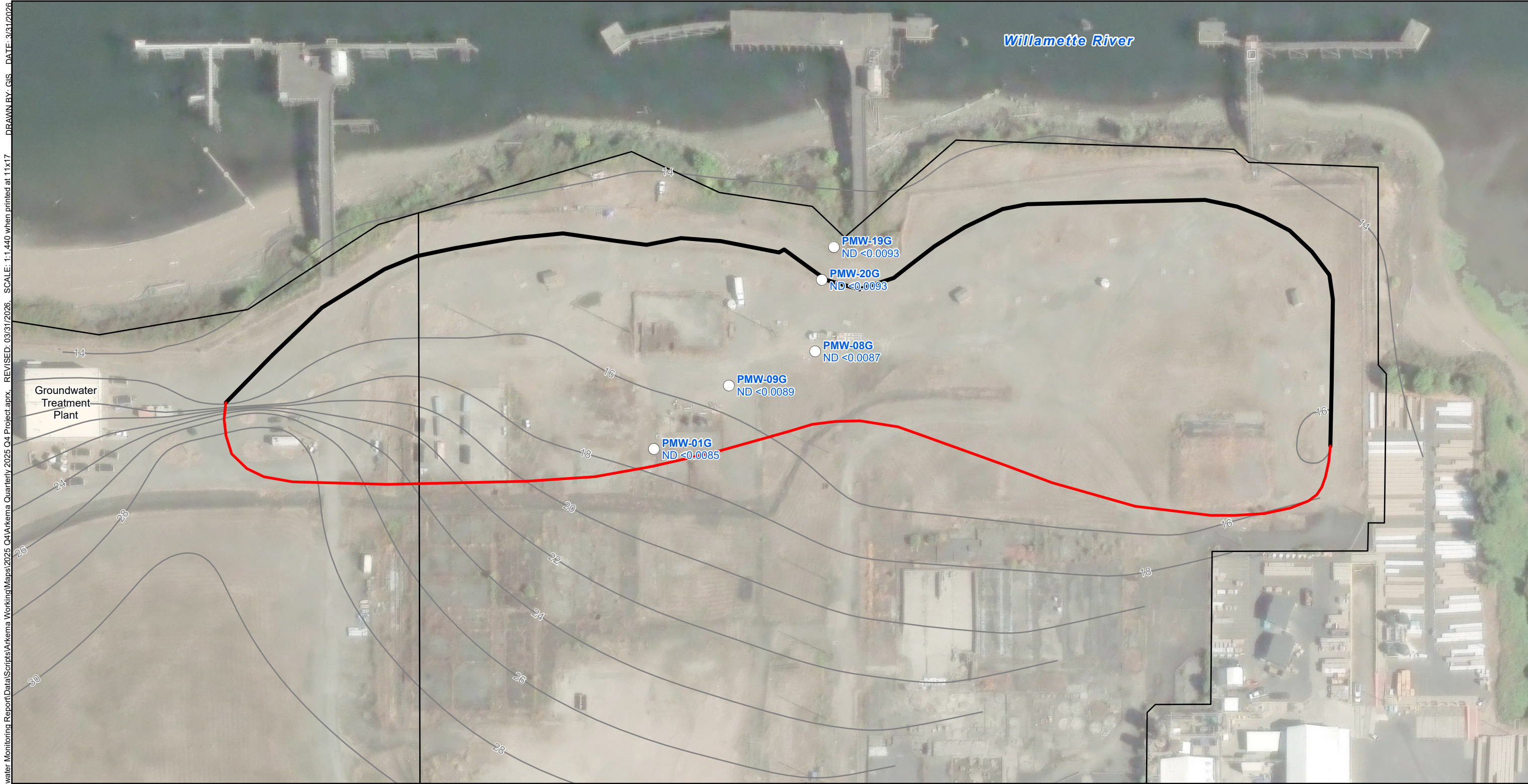


Figure 31
Chloride Groundwater Concentrations
Basalt Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- $> 1.8 \mu\text{g/L}$
- $\geq 1.8 - 0.18 \mu\text{g/L}$
- $\geq 0.18 - 0.018 \mu\text{g/L}$
- $> 0.018 \mu\text{g/L}$
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Gravel Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 6-Dec 10, 2025
All results in micrograms per liter ($\mu\text{g/L}$).
Results in **red** exceed screening criteria.
Screening criteria for DDx = $0.018 \mu\text{g/L}$.
ND: Not detected.
See Table 3 for definition of qualifiers.

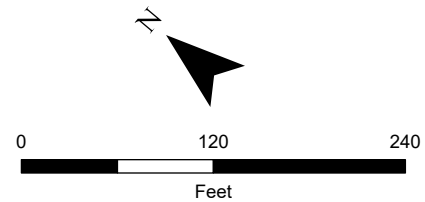


Figure 32
DDx Groundwater Concentrations
Gravel Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon



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Legend

- > 1.8 µg/l
- >= 1.8 - 0.18 µg/l
- >= 0.18 - 0.018 µg/l
- > 0.018 µg/l
- Not Detected
- Target Capture Zone
- Barrier Wall Alignment
- Parcel and Property Boundaries
- Basalt Zone Groundwater Contours (ft NAVD88) December 2025

Notes:
Samples collected Nov 6-Dec 10, 2025
All results in micrograms per liter (µg/L).
Results in **red** exceed screening criteria.
Screening criteria for DDx = 0.018 µg/l.
ND: Not detected.
See Table 3 for definition of qualifiers.

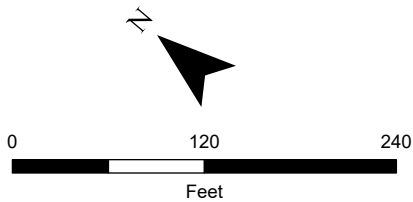


Figure 33
DDx Groundwater Concentrations
Basalt Zone
Quarter 4, 2025
Groundwater Monitoring Report
Arkema Inc.
Portland, Oregon





APPENDIX A FIELD FORMS



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-01B
Well Permit No:

Date: 2025/11/07
Rainy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 93 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 25.9 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 96.6 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 150 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 11.54 (l) / 9.45 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
07:56	25.95	150	0.45	13.4	7.46	633	NM	3.58	81.2	13.91	NM	
07:59	25.84	150	0.9	13.3	7.45	631	NM	3.47	83.5	12.21	NM	
08:02	25.78	150	1.35	13.2	7.45	630	NM	3.46	84.6	10.53	NM	
08:05	25.66	150	1.8	13.1	7.44	626	NM	3.61	86.8	10.84	NM	
08:08	25.59	150	2.25	13.1	7.45	626	NM	3.68	86.8	10.8	NM	
08:12	25.56	150	2.7	13	7.45	626	NM	3.73	86.9	11.1	NM	
08:16	25.52	150	3.15	12.8	7.45	626	NM	3.7	87.4	9.01	NM	
08:19	25.49	150	3.6	13.1	7.41	623	NM	3.36	87	6.02	NM	
08:22	25.49	150	4.05	13.2	7.41	624	NM	3.28	86.3	5.82	NM	
08:25	25.42	150	4.5	12.9	7.41	624	NM	3.23	85.9	5.87	NM	
08:28	25.37	150	4.95	12.8	7.41	624	NM	3.21	85.5	6.05	NM	
08:31	25.37	150	5.4	12.6	7.42	624	NM	3.2	85.3	5.94	NM	
08:34	25.41	150	5.85	12.5	7.42	624	NM	3.2	85.6	6.8	NM	
08:37	25.34	150	6.2	12.2	7.42	624	NM	3.21	85.9	6.33	NM	
08:40	25.26	150	6.75	12.2	7.42	624	NM	3.21	86.5	6.21	NM	
08:43	25.34	150	7.2	12.4	7.42	625	NM	3.19	86.6	5.97	NM	
08:46	25.42	150	7.65	12.4	7.42	626	NM	3.23	86.6	6.17	NM	
08:49	25.41	150	8.1	12.7	7.43	629	NM	3.35	87.8	6.34	NM	
08:52	25.41	150	8.55	12.3	7.42	624	NM	3.4	88.5	5.64	NM	
08:55	25.43	150	9	12.4	7.42	621	NM	3.46	89.2	5.63	NM	
08:58	25.4	150	9.45	12.2	7.42	624	NM	3.45	89.7	5.52	NM	

Sample ID(s): PMW-01B-110725	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 in bkadder pump. Field filter used, case/batch number	Fp 	11/10/2025 20:41



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-01G
Well Permit No:

Date: 2025/11/07

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 86.5 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 28.3 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 87.5 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 200 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 36.57 (l) / 13.2 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
10:13	24.97	200	0.6	15.6	7.52	627	NM	1.47	-267.3	221.08	NM	
10:16	24.89	200	1.2	15.7	7.52	627	NM	1.35	-273.9	216.96	NM	
10:19	24.89	200	1.8	15.8	7.52	626	NM	1.28	-278.6	215.7	NM	
10:22	24.9	200	2.4	15.8	7.52	623	NM	1.23	-282.7	201.9	NM	
10:25	24.87	200	3	15.5	7.53	627	NM	1.13	-298.6	181.53	NM	
10:28	24.81	200	3.6	15.6	7.51	626	NM	1.1	-309.9	172.3	NM	
10:31	24.8	200	4.2	15.5	7.52	626	NM	1.05	-316.9	171.17	NM	
10:34	24.87	200	4.8	15.5	7.53	626	NM	1.04	-318.3	166.53	NM	
10:37	24.89	200	5.4	15.6	7.53	626	NM	1.02	-322.6	16.18	NM	
10:40	24.89	200	6	15.6	7.53	626	NM	1.03	-316.1	155.15	NM	
10:43	24.81	200	6.6	15.5	7.53	626	NM	1.01	-320.4	161.74	NM	
10:46	24.81	200	7.2	15.5	7.53	625	NM	0.97	-324.3	145.99	NM	
10:49	25.01	200	7.8	15.6	7.53	625	NM	0.97	-321.6	144.05	NM	
10:52	24.91	200	8.4	15.6	7.52	624	NM	1.01	-311	134.68	NM	
10:55	24.88	200	9	15.5	7.51	624	NM	1.03	-303.5	118.91	NM	
10:58	24.81	200	9.6	15.5	7.51	624	NM	1.06	-304.9	122.09	NM	
11:01	25.31	200	10.2	15.5	7.52	624	NM	0.99	-315.9	123.55	NM	
11:04	25.12	200	10.8	15.7	7.51	622	NM	0.93	-313.6	143.9	NM	
11:05	25.12	200	11.4	15.7	7.5	621	NM	0.92	-310.6	139.94	NM	
11:08	25.1	200	12	15.6	7.5	619	NM	0.92	-304.5	140.33	NM	
11:11	25.1	200	12.6	15.6	7.49	619	NM	0.91	-304	142.62	NM	
11:15	25.12	200	13.2	15.7	7.49	618	NM	0.9	-302	137.6	NM	

Sample ID(s): PMW-01G-110725	Additional Comments 2 in bladder pump. Field filter used, case/batch numbe	SAMPLER NAME AND SIGNATURE Fp 	Date Time 11/10/2025 20:42
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-18B
Well Permit No:

Date:

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth / ()	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product () / None
Project Number 0773746	Sample Equipment NA	Total Well Depth ()
Project Name 20251028-GWMonitor	Average Purge Rate ()	Well Diameter / Well Screen Interval (in) / - ()
Sampler	Volume of Water in Well / Total Volume Purged () / ()	Well Construction

Well Head Vapor Measurements												
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments

Sample ID(s):	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-18G
Well Permit No:

Date:

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth / ()	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product () / None
Project Number 0773746	Sample Equipment NA	Total Well Depth ()
Project Name 20251028-GWMonitor	Average Purge Rate ()	Well Diameter / Well Screen Interval (in) / - ()
Sampler	Volume of Water in Well / Total Volume Purged () / ()	Well Construction

Well Head Vapor Measurements												
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments

Sample ID(s):	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-19B
Well Permit No:

Date: 2025/11/06
Rainy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 84 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.73 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 90.19 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 200 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 10.36 (l) / 12.6 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
15:05	26.43	200	0.6	15.5	7.97	740	NM	1.39	5.5	539.99	NM	
15:08	26.45	200	1.2	15.5	7.94	742	NM	1.24	4.6	534.4	NM	
15:11	26.43	200	1.8	15.6	7.92	752	NM	1.16	3.2	526.7	NM	
15:14	26.48	200	2.4	15.5	7.88	823	NM	1.1	2.7	479.8	NM	
15:17	26.43	200	3	15.5	7.87	833	NM	1.07	1.8	471.2	NM	
15:20	26.47	200	3.6	15.5	7.85	850	NM	1.02	-1.8	474.5	NM	
15:23	26.45	200	4.2	15.4	7.85	854	NM	1.01	-2.5	475.5	NM	
15:26	26.45	200	4.8	15.4	7.85	845	NM	0.98	-4.2	488.77	NM	
15:29	26.45	200	5.4	15.5	7.86	851	NM	0.96	-6	480.1	NM	
15:32	26.46	200	6	15.5	7.83	942	NM	0.95	-6.3	436.5	NM	
15:35	26.41	200	6.6	15.5	7.75	1041	NM	0.95	-14.4	415.5	NM	
15:38	26.42	200	7.2	15.4	7.76	1004	NM	0.94	-22.2	462.3	NM	
15:41	26.44	200	7.8	15.5	7.74	1144	NM	0.93	-23.9	575.22	NM	
15:44	26.44	200	8.4	15.5	7.6	1832	NM	0.92	-34.1	479.8	NM	
15:47	26.41	200	9	15.4	7.51	2084	NM	0.92	61.7	436.7	NM	
15:50	26.41	200	9.6	15.5	7.5	2088	NM	0.9	-82.2	441.55	NM	
15:53	26.41	200	10.2	15.5	7.49	2077	NM	0.84	-85.1	438.9	NM	
15:56	26.41	200	10.8	15.6	7.49	2009	NM	0.74	-91.6	421.02	NM	
15:59	26.4	200	11.4	15.7	7.48	2010	NM	0.74	-93.8	416.81	NM	
16:02	26.4	200	12	15.7	7.47	1976	NM	0.74	-96.2	387.9	NM	
16:05	26.4	200	12.6	15.7	7.46	1955	NM	0.73	-97.6	310.9	NM	

Sample ID(s): PMW-19B-111025	Additional Comments Field filter used, case/batch number: 2023-S-4527 and	SAMPLER NAME AND SIGNATURE Fp 	Date Time 11/10/2025 21:25
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-20B
Well Permit No:

Date:

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth / ()	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product () / None
Project Number 0773746	Sample Equipment NA	Total Well Depth ()
Project Name 20251028-GWMonitor	Average Purge Rate ()	Well Diameter / Well Screen Interval (in) / - ()
Sampler	Volume of Water in Well / Total Volume Purged () / ()	Well Construction

Well Head Vapor Measurements												
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments

Sample ID(s):	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-20G
Well Permit No:

Date: 2025/11/05
Rainy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 84 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 27.84 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 84.77 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 350 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 9.29 (l) / 105.3 (l)	Well Construction

Well Head Vapor Measurements PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
07:05	28.7	300	1.5	15.7	7.46	1321	NM	1.88	-251.5	43.92	NM	
07:35	33.56	400	13.5	15.7	7.46	1242	NM	1.84	-251.3	98.5	NM	
08:05	32.8	400	25.5	15.7	7.44	1189	NM	1.48	-289	223.21	NM	
08:35	32.04	400	37.5	15.6	7.35	NM	NM	1.09	-308.2	61.14	NM	
09:05	32.2	400	49.5	15.5	7.31	1132	NM	0.86	-316.3	46.03	NM	
09:35	32.41	400	61.5	15.6	7.3	1133	NM	0.84	-306.3	27.07	NM	
10:05	32.31	400	73.5	15.7	7.28	1136	NM	0.81	-304.4	30.11	NM	
10:35	32.52	400	85.5	15.7	7.27	1136	NM	0.8	-299.9	18.54	NM	
11:05	32.89	400	97.5	15.7	7.27	1140	NM	0.8	-289.3	10.14	NM	
11:24	32.61	400	105.1	15.8	7.26	1138	NM	0.79	-286.6	9.82	NM	

Sample ID(s): PMW-20G-110625	Additional Comments 2 in bladder pump. Field filtered 8081 B samples. Ms/n	SAMPLER NAME AND SIGNATURE FP 	Date Time 11/06/2025 21:26
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-19G
Well Permit No:

Date: 2025/11/06
Overcast

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 83 (ft)	Reference Elevation ()
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 27.21 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 85.1 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 200 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 9.43 (l) / 10.8 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
13:22	27	200	0.6	16.2	7.84	1133	NM	2.52	37.9	91.8	NM	
13:25	26.94	200	1.2	16.2	7.84	1081	NM	2.48	34.2	110	NM	
13:28	26.95	200	1.8	16.2	7.84	1091	NM	2.42	28.8	113.3	NM	
13:31	26.91	200	2.4	16.1	7.75	1104	NM	1.24	-1.8	115	NM	
13:34	26.92	200	3	16.1	7.74	1105	NM	1.14	-9.2	116.74	NM	
13:37	26.93	200	3.6	16.1	7.74	1106	NM	1.1	-15.4	117.9	NM	
13:40	26.91	200	4.2	16.1	7.74	1105	NM	1.07	-19.9	122.04	NM	
13:43	26.93	200	4.8	16.1	7.73	1106	NM	1.05	-25.35	123.67	NM	
13:46	26.91	200	5.4	16.1	7.71	1140	NM	1	-46.1	92.05	NM	
13:49	26.98	200	6	16	7.57	1279	NM	0.96	-72.9	58.38	NM	
13:52	26.9	200	6.6	15.7	7.46	1360	NM	0.93	-126.2	97.42	NM	
13:55	26.93	200	7.2	15.6	7.46	1365	NM	0.94	-128.8	103.4	NM	
13:58	26.94	200	7.8	15.7	7.47	1345	NM	0.92	-134	216.6	NM	
14:01	26.93	200	8.4	15.6	7.47	1348	NM	0.9	-134.7	385.7	NM	
14:04	26.89	200	9	15.7	7.44	1394	NM	0.87	-139.8	542.8	NM	
14:07	26.89	200	9.5	15.7	7.44	1395	NM	0.88	-139.1	525.65	NM	
14:10	26.89	200	10.2	15.8	7.44	1322	NM	0.89	-139.9	344.4	NM	
14:13	26.88	200	10.8	15.7	7.53	1268	NM	0.89	-133.9	370.62	NM	
14:16	26.83	200	11.4	15.6	7.44	1392	NM	0.85	-138.4	390.1	NM	
14:19	26.86	200	12	15.6	7.44	1400	NM	0.85	-140	349.9	NM	
14:22	26.83	200	12.6	15.6	7.44	1403	NM	0.86	-140.1	345.6	NM	

Sample ID(s):
PMW-19G-111025

Analysis:

Additional Comments

2 bladder pump used. Field filter used, case/batch num

SAMPLER NAME AND SIGNATURE

Fp

Date Time

11/10/2025
21:41



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-03B

Well Permit No:

Date: 2025/11/04
Overcast

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 51 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.42 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 200 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged () / 3 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
12:47	26.48	200	0.6	15.7	7	2614	NM	1.79	-122.5	34.91	NM	
12:50	26.48	200	1.2	15.5	6.97	2576	NM	1.33	-132.9	32.64	NM	
12:53	26.46	200	1.8	15.5	6.96	2563	NM	1.09	-140.6	30.02	NM	
12:56	26.43	200	2.4	15.6	6.98	2562	NM	1.06	-142.2	30.23	NM	
12:59	26.42	200	3	15.6	6.96	2464	NM	0.98	-145.2	29.03	NM	

Sample ID(s): PMW-03B-110425	Additional Comments 2 bladder pump used. Field filtered sample case/batch	SAMPLER NAME AND SIGNATURE FP 	Date Time 11/10/2025 21:01
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-04B
Well Permit No:

Date:

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251028-GWMonitor	Average Purge Rate ()	Well Diameter / Well Screen Interval (in) / - ()
Sampler	Volume of Water in Well / Total Volume Purged () / (l)	Well Construction

Well Head Vapor Measurements												
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments

Sample ID(s):	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-08B
Well Permit No:

Date: 2025/11/05
Overcast

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 91 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.99 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 100.01 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 196.9 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 11.92 (l) / 9.6 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
11:43	27.13	200	0.6	15.9	7.14	23682	NM	1.33	-84.8	17.36	NM	
11:46	27.13	200	1.2	15.9	7.17	23687	NM	1.04	-90.6	12.32	NM	
11:49	27.18	200	1.8	16	7.2	23679	NM	1.05	-81.8	6.2	NM	
11:52	27.16	200	2.4	16	7.21	23691	NM	1.05	-91.7	5.56	NM	
11:55	27.12	200	3	16	7.21	23704	NM	1.02	-92.9	4.9	NM	
11:58	27.12	200	3.6	15	7.21	23693	NM	1.02	-92.8	4.58	NM	
12:01	27.15	200	4.2	16	7.21	23732	NM	1.01	-96.7	5.08	NM	
12:04	27.14	200	4.8	16	7.21	23879	NM	0.97	-106.8	5.88	NM	
12:07	27.21	200	5.4	15.9	7.2	24664	NM	0.94	-111.1	8.24	NM	
12:11	27.21	150	6	15.9	7.14	27390	NM	0.85	-112.1	13.82	NM	
12:14	27.21	200	6.6	15.9	7.01	32389	NM	0.73	-98.1	9.74	NM	
12:17	27.24	200	7.2	15.9	7	32933	NM	0.73	-94	6.41	NM	
12:20	27.22	200	8	15.8	7	33348	NM	0.72	-91.3	4.51	NM	
12:23	27.23	200	8.4	15.9	7.01	33653	NM	0.7	-89.4	3.81	NM	
12:26	27.19	200	9	15.9	7.01	33949	NM	0.7	-87.1	3.55	NM	
12:29	27.2	200	9.6	15.9	7.01	34110	NM	0.69	-85.8	3.39	NM	

Sample ID(s): PMW-08B-110525	Additional Comments 2 bladder pump used with intake at the bottom of the p	SAMPLER NAME AND SIGNATURE Fp 	Date Time 11/10/2025 21:09
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-02B
Well Permit No:

Date: 2025/11/04
Overcast

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 53.5 (ft)	Reference Elevation ()
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.71 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 56.13 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 250 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 18.18 (l) / 9.5 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
14:53	26.71	250	0.75	15.6	7.1	2737	NM	1.96	-62.9	16.95	NM	
14:56	26.69	250	1.5	14.7	7.07	2739	NM	1.94	-66.8	16.23	NM	
14:59	26.71	250	2.25	14.7	7.07	2746	NM	1.67	-70.5	15.71	NM	
15:02	26.68	250	3	14.7	7.07	2750	NM	2.04	-73.4	16.19	NM	
15:05	26.68	250	3.75	14.7	7.07	2752	NM	1.61	-74.6	18.06	NM	
15:08	26.59	250	4.5	14.8	7.07	2750	NM	1.59	-77.1	26.11	NM	
15:11	26.59	250	5.25	14.7	7.06	2752	NM	1.63	-78.4	48.96	NM	
15:16	26.59	250	6.5	14.7	7.06	2738	NM	1.65	-75.9	158.22	NM	
15:21	26.61	250	8	14.6	7.08	2717	NM	1.49	-86.3	192.15	NM	
15:26	26.6	250	9.5	14.6	7.09	2711	NM	1.35	-90.2	188.89	NM	
15:31	26.61	250	11	14.7	7.09	2704	NM	1.15	-93.1	153.27	NM	
15:36	26.64	250	12.5	14.6	7.09	2700	NM	1.29	-93.8	131.19	NM	
15:41	26.49	250	14	14.6	7.09	2696	NM	1.12	-94.7	105.52	NM	
15:46	26.51	250	15.5	14.6	7.09	2694	NM	0.9	-95.8	95.01	NM	
15:51	26.41	250	17	14.7	7.09	2691	NM	0.88	-94.9	74.72	NM	
15:54	26.41	250	17.75	14.7	7.09	2691	NM	0.87	-94.3	71.51	NM	

Sample ID(s): PMW-02B-111025	Additional Comments 2 bladder pump used. Field filter used, case/batch num	SAMPLER NAME AND SIGNATURE Fp 	Date Time 11/10/2025 21:04
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-08G**Well Permit No:****Date: 2025/11/05
Rainy**

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 92 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.68 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 93.48 (ft)
Project Name 20251028-GWMonitor	Average Purge Rate 200 (mL/min)	Well Diameter / Well Screen Interval 2 (in) / - ()
Sampler faye parish	Volume of Water in Well / Total Volume Purged 10.9 (l) / 12 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (uS/cm) ±3%	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(ppm) ±10%	Comments
09:28	26.64	200	0.6	15.1	7.84	8153	NM	1.4	-48.1	3.63	NM	
09:31	26.49	200	1.2	15.3	7.85	8197	NM	1.27	-72.6	3.04	NM	
09:34	26.49	200	1.8	15.4	7.84	8276	NM	1.2	-91.1	3.79	NM	
09:37	26.51	200	2.4	15.3	7.83	8497	NM	1.15	-98.9	3.8	NM	
09:41	26.53	200	3	15.4	7.81	8697	NM	1.14	-100.7	4.89	NM	
09:44	26.68	200	3.6	15.5	7.7	9110	NM	1.07	-100.6	31.75	NM	
09:47	26.61	200	4.2	15.6	7.67	9202	NM	1.06	-99.1	158.9	NM	
09:50	26.61	200	4.8	15.6	7.63	9327	NM	1.05	-97.4	243.8	NM	
09:53	26.67	200	5.4	15.5	7.54	9860	NM	1	-95.8	456.22	NM	
09:56	26.68	200	6	15.6	7.53	9975	NM	0.98	-97.1	484.82	NM	
09:59	26.65	200	6.6	15.7	7.54	10037	NM	1.06	-96.1	536.32	NM	
10:02	26.66	200	7.2	15.7	7.54	10139	NM	1	-97.8	514.55	NM	
10:05	26.61	200	7.8	15.7	7.54	10229	NM	1.01	-98.6	512.93	NM	
10:08	26.68	200	8.4	15.7	7.55	10295	NM	0.99	-100.5	495.19	NM	
10:11	26.66	200	9	15.7	7.55	10327	NM	0.99	-101.3	472.09	NM	
10:14	26.68	200	9.6	15.8	7.55	10344	NM	0.98	-101.8	478.98	NM	
10:17	26.67	200	10.2	15.8	7.55	10357	NM	0.96	-102.6	458.9	NM	
10:20	26.63	200	10.8	15.8	7.56	10375	NM	0.96	-103.1	442.79	NM	
10:23	26.67	200	11.4	15.8	7.56	10374	NM	0.98	-103.4	461.8	NM	
10:28	26.67	200	12	15.8	7.57	10371	NM	1.02	-102.8	468.9	NM	

Sample ID(s):
DUP-01-110525,PMW-08G-110525**Analysis:****Additional Comments**

2 bladder pump with intake on bottom of pump used. F

SAMPLER NAME AND SIGNATURE

Fp

**Date Time**11/10/2025
21:15



Low Flow Groundwater Sampling Field Data Form

Well ID: MWA-31I(D)
Well Permit No:

Date: 2025/12/09
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 57 (ft)	Reference Elevation 38.36 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.38 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 54.42 - 59.42 (in)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (L) / 1.99 (L)	Well Construction

Well Head Vapor Measurements PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (L)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:00	26.4	100		14.16	6.64	56750	NM	0.74	42.7	36.4	NM	
10:03	26.4			14.25	6.6	58240	NM	0.54	52.8	12.3	NM	
10:06	26.4			14.23	6.59	58460	NM	0.51	58.1	6.45	NM	
10:09	26.4			14.2	6.62	58540	NM	0.44	63.5	5.8	NM	
10:12	26.4			14.22	6.6	58550	NM	0.4	65.7	5.29	NM	
10:15	26.4	100	1.99	14.2	6.61	58560	NM	0.42	67.1	4.86	NM	

Sample ID(s): MWA-31i(d)-120925	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/09/2025 18:18



Low Flow Groundwater Sampling Field Data Form

Well ID: MWA-41
Well Permit No:

Date: 2025/12/08
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 37.5 (ft)	Reference Elevation 45.14 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 32.62 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 32.629 - 41.379 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.5 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:19	32.62	100		14	6.75	317	NM	2.1	33.9	12.4	NM	
10:22	32.62			13.87	6.46	256	NM	0.72	75.1	5.7	NM	
10:25	32.62			13.85	6.49	247	NM	0.41	89.8	4.22	NM	
10:28	32.62			13.91	6.53	246	NM	0.32	87.4	4.51	NM	
10:31	32.62	100	1.5	13.98	6.56	245	NM	0.28	89.1	4.34	NM	

Sample ID(s): MWA-41-120825	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/16/2025 16:14



Low Flow Groundwater Sampling Field Data Form

Well ID: MWA-56D
Well Permit No:

Date: 2025/12/15
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 58 (ft)	Reference Elevation 36.68 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 24.61 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 55.358 - 60.108 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.5 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:15	24.68	100		16.04	6.7	21860	NM	2.7	130.1	4.95	NM	
12:18	24.7			16.14	6.67	30800	NM	1.06	127.9	5.85	NM	
12:21	24.7			16.1	6.67	32960	NM	0.56	126.2	4.52	NM	
12:24	24.7			16.17	6.68	33320	NM	0.47	125.4	4.25	NM	
12:27	24.7	100	1.7	16.21	6.68	33500	NM	0.36	124.6	4.37	NM	

Sample ID(s): MWA-56d-121525	Additional Comments 2 pump	SAMPLER NAME AND SIGNATURE ST 	Date Time 12/15/2025 21:04
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: MWA-58D
Well Permit No:

Date: 2025/12/15
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 57 (ft)	Reference Elevation 37.97 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.1 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 55.978 - 60.728 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.7 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:15	26.1	100		16.75	6.78	39820	NM	1.58	145.7	3.36	NM	
13:18	26.1			16.62	6.73	43750	NM	0.76	142.8	2.97	NM	
13:21	26.1			16.55	6.73	44840	NM	0.5	140.6	2.77	NM	
13:24	26.1			16.61	6.73	45200	NM	0.4	138.9	2.79	NM	
13:27	26.1	100	1.7	16.67	6.72	45320	NM	0.38	137.9	2.55	NM	

Sample ID(s): MWA-58d-21525	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/15/2025 21:29



Low Flow Groundwater Sampling Field Data Form

Well ID: MWA-63
Well Permit No:

Date: 2025/12/09
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 25.5 (ft)	Reference Elevation 36.29 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 21.35 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 19.713 - 29.513 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.5 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:08	21.55	100		14.85	6.95	756	NM	5.65	74.9	14.2	NM	
12:11	21.6			14.93	6.82	613	NM	5.75	81.2	9.31	NM	
12:14	21.6			14.98	6.83	612	NM	5.78	81.3	6.53	NM	
12:17	21.6			15.04	6.94	599	NM	5.82	79.8	4.85	NM	
12:20	21.6	100	1.5	14.97	6.92	593	NM	5.83	79.5	4.61	NM	

Sample ID(s): MWA-63-120925	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/09/2025 20:22



Low Flow Groundwater Sampling Field Data Form

Well ID: MWA-81I
Well Permit No:

Date: 2025/12/08
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 47.5 (ft)	Reference Elevation 44.62 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 32.56 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 45.694 - 50.694 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.1 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:35	32.6	100		14.07	6.68	542	NM	2.17	-0.5	15.8	NM	
08:38	32.6			13.83	6.57	564	NM	1.35	3.9	7.14	NM	
08:41	32.6			13.82	6.54	570	NM	1.1	3.5	7.19	NM	
08:44	32.6			13.81	6.53	579	NM	0.85	3.9	6.24	NM	
08:47	32.6			13.72	6.63	585	NM	0.69	-2.1	5.78	NM	
08:50	32.6			13.68	6.62	591	NM	0.6	-2.5	5.37	NM	
08:53	32.6	100	2.1	13.66	6.58	595	NM	0.51	-1.7	4.91	NM	

Sample ID(s): MWA-81i-120825	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/16/2025 19:36



Low Flow Groundwater Sampling Field Data Form

Well ID: MWA-82
Well Permit No:

Date: 2025/12/08
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 27.5 (ft)	Reference Elevation 37.74 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 24.2 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 21.343 - 31.343 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.8 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
07:19	24.22	100		15.12	9.95	427	NM	1.2	14.7	18.1	NM	
07:22	24.24			15.09	9.71	417	NM	0.52	30.6	15.5	NM	
07:25	24.24			15.1	9.68	413	NM	0.34	33.5	16.9	NM	
07:28	24.24			15.12	9.76	414	NM	0.29	28.6	15.2	NM	
07:31	24.24			15.1	9.88	415	NM	0.23	22.3	17.6	NM	
07:34	24.24	100	1.8	15.07	9.91	415	NM	0.2	21	16.5	NM	

Sample ID(s): MWA-82-120825	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/16/2025 17:24



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-22D
Well Permit No:

Date: 2025/12/09
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 60 (ft)	Reference Elevation 38.75 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 25.85 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 57.39 - 62.39 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.7 (l)	Well Construction

Well Head Vapor Measurements PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:23	26.12	100		14.09	7.2	14680	NM	0.95	8.4	7.32	NM	
11:26	26.18			14.25	7.16	14660	NM	0.98	14.5	5.97	NM	
11:29	26.2			14.47	7.16	14850	NM	0.51	17.1	4.47	NM	
11:32	26.2			14.57	7.14	15070	NM	0.49	19.5	3.04	NM	
11:35	26.2	100	1.7	14.54	7.15	15150	NM	0.41	21.6	3.38	NM	

Sample ID(s): PA-22d-120925	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
	Peri pump	ST 	12/09/2025 19:37



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-23D
Well Permit No:

Date: 2025/12/09
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 80 (ft)	Reference Elevation 39.31 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 27.78 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 0 (mL/min)	Well Diameter / Well Screen Interval (in) / 77.66 - 82.66 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.12 (l)	Well Construction

Well Head Vapor Measurements PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
07:35	28.8	100		11.32	7.05	59820	NM	3.03	-83.9	9.37	NM	
07:38	28.85			11.4	7.06	64940	NM	2.24	-89.7	8.86	NM	
07:41	28.87			11.42	7.08	66780	NM	1.9	-91.8	8.64	NM	
07:44	28.89			11.25	7.1	67470	NM	1.65	-95.2	8.05	NM	
07:47	28.9			11.62	7.1	67810	NM	1.58	-97	8.48	NM	
07:50	28.92	100	2.12	11.59	7.12	68230	NM	1.52	-99.9	8.71	NM	

Sample ID(s): PA-23d-120925	Additional Comments 1 pump	SAMPLER NAME AND SIGNATURE ST 	Date Time 12/09/2025 15:52
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-24D
Well Permit No:

Date: 2025/12/09
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 80 (ft)	Reference Elevation 39.06 (ft)
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 27.18 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 0 (mL/min)	Well Diameter / Well Screen Interval (in) / 78.26 - 83.26 (in)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (L) / 2.42 (L)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (L)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:53	27.8	100		11.24	6.77	70570	NM	1.99	-72.6	139	NM	
08:56	27.84			11.14	6.77	71590	NM	1.22	-73.7	108	NM	
08:59	27.88			11.45	6.79	71810	NM	0.74	-79	70.5	NM	
09:02	27.9			11.82	6.81	72330	NM	0.37	-85.8	60.4	NM	
09:05	27.94			11.98	6.81	72520	NM	0.41	-88.5	80.7	NM	
09:08	27.98			12.04	6.81	72540	NM	0.37	-87.4	74.7	NM	
09:11	28.01	100	2.42	12.08	6.8	72580	NM	0.43	-85.7	78.3	NM	

Sample ID(s): PA-24d-120925	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	1 pump	ST 	12/09/2025 17:15



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-25D
Well Permit No:

Date: 2025/12/15
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 80 (ft)	Reference Elevation 40.44 (ft)
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.15 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 77.58 - 82.58 (in)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (L) / 2.7 (L)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (L)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
07:44	27.35	100		14.63	7.09	127	NM	5.51	55.1	8.53	NM	
07:47	27.48			14.71	6.61	90	NM	5.64	76.5	5.89	NM	
07:50	27.54			14.76	6.78	82	NM	5.59	77.9	4.77	NM	
07:53	27.56			14.77	6.79	87	NM	5.03	71.4	4.28	NM	
07:56	27.56			14.82	6.95	135	NM	2.84	56.7	4.95	NM	
07:59	27.56			14.81	7.07	146	NM	2.53	55.9	4.63	NM	
08:02	27.58			14.83	7.15	152	NM	2.46	59.8	4.62	NM	
08:05	27.58	100	2.7	14.89	7.17	158	NM	2.4	61.9	4.33	NM	

Sample ID(s): PA-25d-121525	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/15/2025 16:09



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-26D
Well Permit No:

Date: 2025/12/15
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 80 (ft)	Reference Elevation 40.33 (ft)
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.45 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 77.51 - 82.51 (in)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 3 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:08	26.97	100		15.42	7.37	157	NM	3.79	103.3	11.8	NM	
10:11	27.25			15.41	7.18	142	NM	3.21	105.4	13.4	NM	
10:14	27.31			15.38	7.23	142	NM	2.15	96.8	9.62	NM	
10:17	27.36			15.34	7.14	151	NM	1.87	91.2	7.29	NM	
10:20	27.39			15.38	7.09	163	NM	1.05	65.2	8.36	NM	
10:23	27.39			15.23	7.04	180	NM	0.63	31.8	8.58	NM	
10:26	27.39			15	6.99	196	NM	0.6	24.8	8.27	NM	
10:29	27.39			14.96	6.98	207	NM	0.57	20.4	7.15	NM	
10:32	27.39	100	3	14.92	6.96	215	NM	0.54	18.2	7.71	NM	

Sample ID(s): PA-26d-121525	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/15/2025 18:39



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-32I
Well Permit No:

Date: 2025/12/12
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 37.5 (ft)	Reference Elevation 36.28 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 21.3 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 35.135 - 40.135 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.2 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:44	21.35	100		15.26	8.44	336	NM	1.76	53.7	36.6	NM	
10:47	21.35			15.2	7.76	224	NM	0.95	50.4	39.7	NM	
10:51	21.35			15.13	7.45	185	NM	1.19	34.6	31.7	NM	
10:54	21.35			15.09	7.7	159	NM	0.58	10	32.1	NM	
10:57	21.35			15.14	7.65	143	NM	0.73	12.7	35.8	NM	
11:00	21.35			15.11	7.62	137	NM	0.56	9.7	31.5	NM	
11:03	21.35	100	2.2	15.13	7.62	138	NM	0.57	6.2	33.5	NM	

Sample ID(s): PA-32i-121225	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/12/2025 19:12



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-03
Well Permit No:

Date: 2025/12/12
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 24 (ft)	Reference Elevation 37.1 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 7.5 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 21.58 - 26.58 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.5 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
07:12	7.3	100		14.78	10.21	1021	NM	2.29	-45.9	74.9	NM	
07:15	7.4			14.82	10.36	793	NM	0.95	-82.9	53.4	NM	
07:18	7.45			14.89	10.54	734	NM	0.68	-100.8	47.9	NM	
07:21	7.48			14.9	10.56	707	NM	0.51	-109.6	52.6	NM	
07:24	7.5			14.94	10.56	689	NM	0.35	-117.8	49.6	NM	
07:27	7.5			14.92	10.57	678	NM	0.3	-120.8	55.9	NM	
07:30	7.5			14.93	10.53	675	NM	0.28	-124.6	51.4	NM	
07:33	7.5	100	2.5	14.96	10.52	672	NM	0.29	-126.9	53.7	NM	

Sample ID(s): PA-03-121225	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/12/2025 15:35



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-08
Well Permit No:

Date: 2025/12/15
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 29 (ft)	Reference Elevation 40.47 (ft)
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.4 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 26.61 - 31.61 (in)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (L) / 1.8 (L)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (L)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
06:37	26.54	100		14.32	7.13	124	NM	1.84	-1.4	6.15	NM	
06:40	26.58			14.36	6.76	145	NM	1.45	-27.6	6.14	NM	
06:43	26.6			14.51	6.9	183	NM	1.02	-48.2	7.81	NM	
06:46	26.62			14.45	6.89	216	NM	0.43	-52.3	6.41	NM	
06:49	26.62			14.58	6.92	231	NM	0.36	-54.7	6.97	NM	
06:52	26.62	100	1.8	14.56	6.94	241	NM	0.32	-55.4	7.04	NM	

Sample ID(s): PA-08-121525	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/15/2025 15:33



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-09
Well Permit No:

Date: 2025/12/15
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 28.5 (ft)	Reference Elevation 40.24 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 26.9 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 26.51 - 31.51 (in)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (in) / 1.5 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
10:59	26.96	100		14.91	6.7	161	NM	1.15	71.4	21.8	NM	
11:02	27			14.62	6.78	211	NM	0.66	52.3	20.5	NM	
11:05	27			14.65	6.9	238	NM	0.42	46.9	19.3	NM	
11:08	27			14.72	6.91	251	NM	0.36	46.9	21.1	NM	
11:11	27	100	1.5	14.67	6.91	259	NM	0.35	48.7	19.7	NM	

Sample ID(s): PA-09-121525	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/15/2025 19:14



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-10I
Well Permit No:

Date: 2025/12/12
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 35 (ft)	Reference Elevation 36.67 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 21.44 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 32.65 - 37.65 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.2 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:14	21.5	100		14.66	7.97	984	NM	1.33	-97.5	15.5	NM	
08:17	21.5			14.63	7.75	815	NM	0.98	-122.7	9.63	NM	
08:20	21.5			14.58	7.78	736	NM	0.56	-143.7	7.65	NM	
08:23	21.5			14.66	7.78	708	NM	0.42	-150.9	6.46	NM	
08:26	21.5			14.66	7.78	685	NM	0.36	-156.4	5.88	NM	
08:29	21.5			14.71	7.78	675	NM	0.4	-161.5	5.27	NM	
08:32	-156.4	100	2.2	14.74	7.76	671	NM	0.33	-165.3	5.11	NM	

Sample ID(s): PA-10i-121225	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/12/2025 16:35



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-15I
Well Permit No:

Date: 2025/12/15
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 42.5 (ft)	Reference Elevation 40.62 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 27.34 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 40.19 - 45.19 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.5 (l)	Well Construction

Well Head Vapor Measurements PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:47	27.48	100		14.98	7.42	151	NM	4.84	60.5	6.1	NM	
08:50	27.55			15.04	7.42	137	NM	4.52	46.2	5.76	NM	
08:53	27.58			15.09	7.55	145	NM	3.86	35.9	5.33	NM	
08:56	27.6			15.16	7.58	159	NM	2.25	30.7	5.21	NM	
08:59	27.6			15.15	7.61	170	NM	1.15	27.7	4.79	NM	
09:02	27.6			15.17	7.63	186	NM	0.68	26	5.08	NM	
09:05	27.6			15.14	7.61	193	NM	0.62	24.8	4.91	NM	
09:08	27.6	100	2.5	15.11	7.6	198	NM	0.58	23.8	4.58	NM	

Sample ID(s): PA-15i-121525	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/15/2025 17:11



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-16I
Well Permit No:

Date: 2025/12/15
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth / ()	Reference Elevation 40.3 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product () / DNAPL: ()
Project Number 0773746	Sample Equipment NA	Total Well Depth ()
Project Name 20251208-GWMonitor	Average Purge Rate ()	Well Diameter / Well Screen Interval () / 40.74 - 45.74 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / ()	Well Construction

Well Head Vapor Measurements												
PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA												
Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments

Sample ID(s):	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:			



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-17IR
Well Permit No:

Date: 2025/12/09
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 40 (ft)	Reference Elevation 37.59 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 23.95 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 37.774 - 42.774 (ft)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.9 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:59	24.5	100		14.31	8.79	819	NM	3.06	-75.4	4.69	NM	
13:02	24.58			14.27	9.02	869	NM	1.34	-95.8	3.22	NM	
13:05	24.63			14.27	8.91	801	NM	0.65	-100.9	2.95	NM	
13:08	24.67			14.34	7.7	532	NM	0.32	-66.7	3.17	NM	
13:11	24.69			14.31	7.67	525	NM	0.25	-60.8	2.86	NM	
13:14	24.71	100	1.9	14.24	7.62	519	NM	0.24	-57.9	2.99	NM	

Sample ID(s): DUP-01-120925,PA-17iR-120925	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/09/2025 21:19



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-18D
Well Permit No:

Date: 2025/12/12
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 42.5 (ft)	Reference Elevation 36.55 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 21.82 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 41.57 - 43.57 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.2 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:35	22.34	100		15.58	8.66	1156	NM	1.25	10.8	27.8	NM	
09:38	22.41			15.54	8.55	1167	NM	0.93	-44.8	19.8	NM	
09:41	22.48			15.51	8.58	1171	NM	0.3	-99.6	23.2	NM	
09:44	22.52			15.48	8.61	1172	NM	0.27	-130.8	21.9	NM	
09:47	22.55			15.53	8.61	1171	NM	0.3	-136.5	24.1	NM	
09:50	22.55			15.59	8.63	1168	NM	0.28	-140.9	20.5	NM	
09:53	22.58	100	2.2	15.58	8.64	1169	NM	0.31	-144.7	22.7	NM	

Sample ID(s): PA-18d-121225	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/12/2025 17:55



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-27D
Well Permit No:

Date: 2025/12/11
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 46 (ft)	Reference Elevation 37.1 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 22.7 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 45.24 - 47.24 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 1.6 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:15	22.95	100		15.43	6.95	4694	NM	1.04	-56.2	5.44	NM	
09:19	23.05			15.42	6.99	4835	NM	0.62	-57.1	4.73	NM	
09:22	23.09			15.45	6.99	4860	NM	0.51	-56.6	5.22	NM	
09:25	23.12			15.45	7	4796	NM	0.48	-56.1	4.61	NM	
09:28	23.15	100	1.6	15.38	7	4660	NM	0.51	-56.1	4.31	NM	

Sample ID(s): PA-27d-121125	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/11/2025 17:37



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-31
Well Permit No:

Date: 2025/12/12
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 22 (ft)	Reference Elevation 36.25 (ft)
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 6.75 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 19.395 - 24.395 (in)
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.2 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:43	6.95	100		15.98	6.92	225	NM	5.19	14.8	12.9	NM	
11:46	7			15.96	9.41	204	NM	4.76	23	9.78	NM	
11:49	7			15.96	9.25	215	NM	1.9	26.5	6.84	NM	
11:52	7			16	9.26	227	NM	1.51	21.8	6.39	NM	
11:55	7			15.96	9.26	239	NM	1.34	22.4	5.69	NM	
11:58	7			15.92	9.23	252	NM	1.27	20.7	5.32	NM	
12:01	7	100	2.2	15.97	9.27	259	NM	1.21	19.7	4.85	NM	

Sample ID(s): PA-31-121225	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/12/2025 20:04



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-44I
Well Permit No:

Date: 2025/12/15
Cool raining

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 43 (ft)	Reference Elevation 40.36 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 27.15 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 40.892 - 45.892 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.2 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
05:49	27.2	100		13.99	7.56	142	NM	4.35	111.1	7.54	NM	
05:52	27.2			14.03	7.63	141	NM	4.14	104.5	6.39	NM	
05:55	27.2			14.11	7.6	139	NM	3.46	105.4	5.65	NM	
05:58	27.2			14.23	7.58	137	NM	2.82	105.1	5.21	NM	
06:01	27.2			14.33	7.59	136	NM	2.52	104.4	4.77	NM	
06:04	27.2			14.34	7.59	136	NM	2.44	103.7	4.83	NM	
06:07	27.2	100	2.2	14.43	7.58	136	NM	2.37	103.8	4.54	NM	

Sample ID(s): PA-44i-121525	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	2 pump	ST 	12/15/2025 14:11



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-04B**Well Permit No:****Date: 2025/12/11****Cool cloudy**

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 57.5 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 20.57 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 59.9 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 2.92 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
07:53	21	100		15.47	6.16	4840	NM	2.54	31.3	27.3	NM	
07:56	21.06			15.17	6.17	4663	NM	1.31	34.7	18.4	NM	
07:59	21.1			14.96	6.19	4564	NM	0.59	42.6	14.9	NM	
08:02	21.14			14.97	6.19	4441	NM	0.49	41.6	9.46	NM	
08:05	21.14			14.88	6.19	4381	NM	0.36	43.3	6.22	NM	
08:08	21.16			14.89	6.19	4345	NM	0.3	43.5	5.92	NM	
08:11	21.16			14.89	6.21	4313	NM	0.28	43.6	5.56	NM	
08:15	21.16			14.96	6.21	4276	NM	0.31	42.7	5.72	NM	
08:18	21.18	100	2.92	14.92	6.21	4253	NM	0.28	43.1	4.86	NM	

Sample ID(s): PMW-04b-121125	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/11/2025 16:35



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-05B
Well Permit No:

Date: 2025/12/11
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 69.5 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 22.25 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 70.45 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 2.78 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
06:17	22.7	100		15.62	6.09	7353	NM	2.98	23.6	12.6	NM	
06:20	22.7			15.73	5.97	7263	NM	1.63	20.5	8.35	NM	
06:23	22.7			15.77	5.96	7176	NM	0.99	18.6	6.78	NM	
06:26	22.7			15.81	5.95	7082	NM	0.48	17.2	5.46	NM	
06:29	22.7			15.83	5.94	7030	NM	0.4	16.2	5.8	NM	
06:32	22.7			15.83	5.93	6964	NM	0.39	15.3	5.42	NM	
06:35	22.7			15.75	5.94	6924	NM	0.37	14.6	5.2	NM	
06:38	22.7	100	2.78	15.77	5.94	6896	NM	0.35	14.2	4.79	NM	

Sample ID(s): DUP-02-121125,PMW-05b-121125	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	1 pump	ST 	12/11/2025 15:15



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-05B2
Well Permit No:

Date: 2025/12/10
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 77.5 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 22.18 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 80.15 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 5.13 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
13:39	22.32	100		16.67	6.29	7075	NM	1.79	-3.8	92.7	NM	
13:42	22.32			16.53	6.25	7667	NM	1.07	-12.8	171	NM	
13:45	22.32			16.41	6.25	7760	NM	0.66	-13.7	109	NM	
13:48	22.32			16.59	6.26	7767	NM	0.5	-14.6	57.3	NM	
13:51	22.32			16.51	6.25	7789	NM	0.36	-15.5	29.7	NM	
13:54	22.32			16.41	6.25	7801	NM	0.33	-16.8	31.8	NM	
14:24	22.32	100	5.13	16.41	6.25	7797	NM	0.3	-16.6	3.92	NM	

Sample ID(s): PMW-05b2-121025	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/11/2025 13:59



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-06B**Well Permit No:****Date: 2025/12/10****Cool cloudy**

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 78 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 24.45 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 79.65 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 2.12 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
12:40	24.65	100		16.92	6.19	4376	NM	1	16.9	24.8	NM	
12:43	24.65			16.86	6.21	4212	NM	0.58	13.5	16.1	NM	
12:46	24.67			16.89	6.22	4098	NM	0.42	11.9	11.8	NM	
12:49	24.67			16.92	6.21	4080	NM	0.36	11	7.53	NM	
12:52	24.67			16.91	6.22	4068	NM	0.31	9.6	5.48	NM	
12:55	24.67	100	2.12	16.84	6.22	4065	NM	0.34	8.9	4.12	NM	

Sample ID(s): PMW-06b-121025	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/10/2025 21:15



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-06B2
Well Permit No:

Date: 2025/12/10
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 83 (ft)	Reference Elevation ()
Site Address Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 24.1 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 85.9 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 3.05 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
11:38	24.3	100		17.01	6.9	16650	NM	0.9	50.3	84.4	NM	
11:41	24.3			16.99	6.9	16360	NM	0.51	44.1	41.4	NM	
11:44	24.3			16.98	6.88	15630	NM	0.43	38.7	34.6	NM	
11:47	24.3			16.92	6.87	14840	NM	0.35	29.2	29.7	NM	
11:50	24.3			16.93	6.86	14340	NM	0.32	21.5	20.9	NM	
11:53	24.3			16.99	6.84	13730	NM	0.3	13.7	16.5	NM	
11:56	24.3			17.07	6.83	13360	NM	0.28	12.8	6.93	NM	
11:59	24.3			17.06	6.82	13020	NM	0.27	9.9	5.48	NM	
12:02	24.3	100	3.05	17.15	6.8	12700	NM	0.29	7.3	4.73	NM	

Sample ID(s): PMW-06b2-121025	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/10/2025 20:23



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-09B**Well Permit No:****Date: 2025/12/10****Cool raining**

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 90.5 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 23.9 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 93.23 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 6.7 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
07:30	23.95	100		16.22	8.31	1120	NM	1.43	-52.9	250	NM	
07:33	23.95			16.13	8.34	1036	NM	1.12	-93.2	187	NM	
07:36	23.95			15.93	8.45	1004	NM	0.89	-112.2	158	NM	
07:39	23.95			15.94	8.45	991	NM	0.75	-116.8	98.7	NM	
07:42	23.95			15.85	8.45	983	NM	0.57	-123.3	50.8	NM	
07:45	23.95			15.98	8.41	969	NM	0.52	-126.4	68.3	NM	
07:48	23.95			16.11	8.46	965	NM	0.45	-131.3	53.9	NM	
07:51	23.95			15.97	8.49	966	NM	0.35	-134.9	35.8	NM	
07:54	23.95			16.11	8.48	958	NM	0.34	-137.5	30.8	NM	
07:57	23.95			15.97	8.52	958	NM	0.27	-138.8	25.9	NM	
08:00	23.95			15.93	8.46	959	NM	0.26	-138.8	29.4	NM	
08:30	24	100	6.7	15.98	8.52	958	NM	0.29	-142.3	28.7	NM	

Sample ID(s): PMW-09b-121025	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/10/2025 17:30



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-09G**Well Permit No:****Date: 2025/12/10****Cool cloudy**

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 88.5 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 23.81 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 90.87 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 140 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 9.22 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
09:45	23.88	140		16.22	8.41	1227	NM	1.18	-75.3	1000	NM	
09:48	23.88			16.25	8.37	1135	NM	0.71	-106.5	1000	NM	
09:51	23.88			16.2	8.37	1043	NM	0.39	-127.1	1000	NM	
09:54	23.88			16.16	8.36	1030	NM	0.26	-132.6	1000	NM	
09:57	23.88			16.24	8.35	1020	NM	0.2	-143.6	1000	NM	
10:00	23.88			16.33	8.36	1019	NM	0.22	148.1	1000	NM	
10:03	23.88			16.3	8.33	1017	NM	0.19	-153.8	1000	NM	
10:06	23.88			16.18	8.32	1015	NM	0.18	-157.2	1000	NM	
10:09	23.88			16.21	8.36	1014	NM	0.16	-159.5	1000	NM	
10:45	23.88	140	9.22	16.28	8.38	1010	NM	0.24	-165.8	865	NM	

Sample ID(s): PMW-09g-121025	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/10/2025 19:09



Low Flow Groundwater Sampling Field Data Form

Well ID: PMW-18B**Well Permit No:****Date: 2025/12/10****Cool cloudy**

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 72.5 (ft)	Reference Elevation ()
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 22.7 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth 75.22 (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / - ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged (l) / 1.8 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
06:28	22.9	100		15.44	6.87	4683	NM	1.24	0.1	2.48	NM	
06:31	22.9			15.52	6.87	4759	NM	0.88	-12.8	1.99	NM	
06:34	22.9			15.52	6.89	4752	NM	0.65	-22.9	2.18	NM	
06:37	22.9			15.56	6.88	4684	NM	0.59	-25.7	1.85	NM	
06:40	22.9	100	1.8	15.48	6.88	4611	NM	0.5	-27.2	2.26	NM	

Sample ID(s): PMW-18b-121025	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/10/2025 14:57



Low Flow Groundwater Sampling Field Data Form

Well ID: PA-04
Well Permit No:

Date: 2025/12/12
Cool cloudy

Site ID ARKEMA-PORTLAND	Purge Method / Pump Intake Depth Low Flow / 25 (ft)	Reference Elevation 36.67 (ft)
Site Address , Portland, US-OR	Purge Equipment NA	Depth to Water / Free Product 6.9 (ft) / None
Project Number 0773746	Sample Equipment NA	Total Well Depth (ft)
Project Name 20251208-GWMonitor	Average Purge Rate 100 (mL/min)	Well Diameter / Well Screen Interval (in) / 22.75 - 27.75 ()
Sampler scott terranova	Volume of Water in Well / Total Volume Purged () / 2.2 (l)	Well Construction

Well Head Vapor Measurements

PID: NA; FID: NA; CO: NA; CO2: NA; O2: NA; CH4: NA; H2S: NA

Time	DTW (ft)	Flow Rate (mL/min)	Purge Volume (l)	Temperature (C) ±3%	pH ±0.2pH units	Specific Conductivity (uS/cm) ±10%	Total Conductivity (NA)	Dissolved Oxygen (mg/L) ±10%	ORP (mV) ±10 mV	Turbidity (NTU) ±10%	Total Dissolved Solids(NA)	Comments
08:51	7.08	100		15.32	9.95	919	NM	1.18	-77.8	80.7	NM	
08:54	7.08			15.45	9.9	793	NM	1.13	-82.6	70.2	NM	
08:57	7.1			15.51	9.94	749	NM	0.77	-86.4	75.6	NM	
09:00	7.1			15.52	9.98	743	NM	0.77	-89.2	78.6	NM	
09:03	7.1			15.56	9.96	740	NM	0.38	-89.5	76.3	NM	
09:06	7.12			15.64	10	738	NM	0.36	-92.3	74.8	NM	
09:09	7.12	100	2.2	15.62	10	736	NM	0.32	-93.1	76.1	NM	

Sample ID(s): PA-04-121225	Additional Comments	SAMPLER NAME AND SIGNATURE	Date Time
Analysis:	Peri pump	ST 	12/12/2025 17:17



APPENDIX B LABORATORY ANALYTICAL REPORTS



ANALYTICAL REPORT

PREPARED FOR

Attn: Avery Soplata
ERM-West
1050 SW 6th Avenue
Suite 1650
Portland, Oregon 97204
Generated 11/14/2025 5:36:47 PM

JOB DESCRIPTION

Arkema - Quarterly 2025 Groundwater Even

JOB NUMBER

580-155538-1

Eurofins Seattle

Job Notes

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Authorization



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Authorized for release by
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Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	28
QC Association	46
Chronicle	49
Certification Summary	51
Sample Summary	52
Chain of Custody	53
Receipt Checklists	58

Case Narrative

Client: ERM-West
Project: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Job ID: 580-155538-1

Eurofins Seattle

Job Narrative 580-155538-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 11/6/2025 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.9°C.

GC/MS VOA

Method 8260D: The method blank for analytical batch 580-508115 contained tert-Butylbenzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-508115 recovered above the upper control limit for Dichlorodifluoromethane and 2,2-Dichloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: PMW-03b-110425 (580-155538-1), PMW-02b-110425 (580-155538-2) and (CCVIS 580-508115/3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 8081B: The continuing calibration verification (CCV) associated with 580-508353 recovered high and outside the control limits for 2,4'-DDD, 2,4'-DDE and 2,4'-DDT on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCV 580-508353/8).

Method 8081B: The continuing calibration verification (CCV) associated with batch 580-508353 recovered above the upper control limit for 2,4'-DDE. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: RB-01-110525 (580-155538-3), PMW-08b-110525 (580-155538-6) and (CCV 580-508353/8).

Method 8081B: The following samples required a copper clean-up (CleanCuPowder_00006), via EPA Method 3660B, to reduce matrix interferences: RB-01-110525 (580-155538-3), PMW-08b-110525 (580-155538-6), (LCS 580-508050/2-A), (LCS 580-508050/4-A), (LCS 580-508050/6-A), (LCS 580-508050/8-A), (LCSD 580-508050/3-A), (LCSD 580-508050/5-A), (LCSD 580-508050/7-A), (LCSD 580-508050/9-A) and (MB 580-508050/1-A).

Method 8081B: Surrogate recovery for the following samples was outside the control limits. Per the method, only one surrogate is required; therefore re-extraction and/or re-analysis was not performed.

PMW-02b-110425 (580-155538-2), RB-01-110525 (580-155538-3) and PMW-08b-110525 (580-155538-6)

Method 8081B: The laboratory control sample (LCS) for preparation batch 580-508050 and analytical batch 580-508353 recovered outside control limits for the following analytes: Toxaphene. These analytes were low in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8081B: The surrogate recovery for the method blank (MB) and the laboratory control sample (LCS) associated with preparation batch 580-508050 and 580-508143 and analytical batch 580-508353 was outside the lower control limits however, the associated samples surrogate recoveries were within control limits. Per client approval, the data is reported.

Eurofins Seattle

Case Narrative

Client: ERM-West
Project: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Job ID: 580-155538-1 (Continued)

Eurofins Seattle

Method 8081B - Dissolved: The following sample(s) formed emulsions during the extraction procedure: The emulsions were broken up using additional sodium sulfate and methylene chloride rinses. 8081B.

Method 8081B - Dissolved: The continuing calibration verification (CCV) associated with 580-508353 recovered high and outside the control limits for 2,4'-DDD, 2,4'-DDE and 2,4'-DDT on one column. Results are confirmed on both columns and reported from the passing column. The associated sample is: (CCV 580-508353/8).

Method 8081B - Dissolved: The continuing calibration verification (CCV) associated with batch 580-508353 recovered above the upper control limit for 2,4'-DDE. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:RB-01-110525 (580-155538-3), PMW-08b-110525 (580-155538-6) and (CCV 580-508353/8).

Method 8081B - Dissolved: Surrogate recovery for the following samples was outside the control limits. Per the method, only one surrogate is required; therefore re-extraction and/or re-analysis was not performed.

PMW-02b-110425 (580-155538-2), RB-01-110525 (580-155538-3) and PMW-08b-110525 (580-155538-6)

Method 8081B - Dissolved: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 580-508143 and analytical batch 580-508353 recovered outside control limits for the following analytes: alpha-BHC, gamma-BHC (Lindane), beta-BHC, delta-BHC, Heptachlor, Heptachlor epoxide, trans-Chlordane, cis-Chlordane, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endosulfan sulfate, Methoxychlor, Endrin ketone and Toxaphene. Data qualified and reported per client approval.

Method 8081B - Dissolved: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 580-508143 and analytical batch 580-508353: delta-BHC. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8081B - Dissolved: The surrogate recovery for the method blank (MB) and the laboratory control sample (LCS) associated with preparation batch 580-508050 and 580-508143 and analytical batch 580-508353 was outside the lower control limits however, the associated samples surrogate recoveries were within control limits. Per client approval, the data is reported.

Method 8081B - Dissolved: The following samples required a copper clean-up (Cu_Powder_00001), to reduce matrix interferences: PMW-03b-110425 (580-155538-1), PMW-02b-110425 (580-155538-2), FB-01-110525 (580-155538-4), PMW-08g-110525 (580-155538-5), DUP-01-110525 (580-155538-8), (LCS 580-508143/2-A), (LCS 580-508143/4-A), (LCS 580-508143/6-A), (LCS 580-508143/8-A), (LCSD 580-508143/3-A), (LCSD 580-508143/5-A), (LCSD 580-508143/7-A), (LCSD 580-508143/9-A) and (MB 580-508143/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 314.0: The following samples were diluted due to the nature of the sample matrix: PMW-03b-110425 (580-155538-1), PMW-02b-110425 (580-155538-2), PMW-08g-110525 (580-155538-5), PMW-08b-110525 (580-155538-6) and DUP-01-110525 (580-155538-8). Elevated reporting limits (RLs) are provided.

Method 314.0: The continuing calibration verification (CCV) associated with batch 570-653852 recovered above the upper control limit for Perchlorate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:PMW-03b-110425 (580-155538-1), PMW-02b-110425 (580-155538-2), RB-01-110525 (580-155538-3), PMW-08g-110525 (580-155538-5), PMW-08b-110525 (580-155538-6), DUP-01-110525 (580-155538-8) and (CCV 570-653852/19).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 300.0_28D: The method blank for analytical batch 580-508165 contained Chloride above the method detection limit (MDL). This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Definitions/Glossary

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

HPLC/IC

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-03b-110425

Lab Sample ID: 580-155538-1

Date Collected: 11/04/25 13:04

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/11/25 06:10	1
Chloromethane	ND		1.0	0.23	ug/L			11/11/25 06:10	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/11/25 06:10	1
Bromomethane	ND		1.0	0.35	ug/L			11/11/25 06:10	1
Chloroethane	ND		1.0	0.34	ug/L			11/11/25 06:10	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/25 06:10	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/11/25 06:10	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/11/25 06:10	1
Acetone	ND		25	11	ug/L			11/11/25 06:10	1
Methylene Chloride	ND		15	6.8	ug/L			11/11/25 06:10	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/11/25 06:10	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/11/25 06:10	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/11/25 06:10	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/11/25 06:10	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/11/25 06:10	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/11/25 06:10	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/11/25 06:10	1
Chloroform	ND		1.0	0.11	ug/L			11/11/25 06:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/11/25 06:10	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/11/25 06:10	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/11/25 06:10	1
Benzene	ND		1.0	0.47	ug/L			11/11/25 06:10	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/11/25 06:10	1
Trichloroethene	ND		1.0	0.27	ug/L			11/11/25 06:10	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/11/25 06:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/11/25 06:10	1
Dibromomethane	ND		1.0	0.28	ug/L			11/11/25 06:10	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/11/25 06:10	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/11/25 06:10	1
Toluene	0.23 J		1.0	0.21	ug/L			11/11/25 06:10	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/11/25 06:10	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/11/25 06:10	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/11/25 06:10	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/11/25 06:10	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/11/25 06:10	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/11/25 06:10	1
Chlorobenzene	71		1.0	0.22	ug/L			11/11/25 06:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/11/25 06:10	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/11/25 06:10	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/11/25 06:10	1
o-Xylene	ND		1.0	0.22	ug/L			11/11/25 06:10	1
Styrene	ND		1.0	0.41	ug/L			11/11/25 06:10	1
Bromoform	ND		1.0	0.46	ug/L			11/11/25 06:10	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/11/25 06:10	1
Bromobenzene	ND		1.0	0.18	ug/L			11/11/25 06:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/11/25 06:10	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/11/25 06:10	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/11/25 06:10	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/11/25 06:10	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-03b-110425

Lab Sample ID: 580-155538-1

Date Collected: 11/04/25 13:04

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/11/25 06:10	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/11/25 06:10	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/11/25 06:10	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/11/25 06:10	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/11/25 06:10	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/25 06:10	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/25 06:10	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/11/25 06:10	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/25 06:10	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/11/25 06:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/11/25 06:10	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/11/25 06:10	1
Naphthalene	ND		3.0	1.4	ug/L			11/11/25 06:10	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/11/25 06:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/11/25 06:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		11/11/25 06:10	1
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		11/11/25 06:10	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/11/25 06:10	1
Dibromofluoromethane (Surr)	101		80 - 120		11/11/25 06:10	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND	*1	0.018	0.0039	ug/L		11/11/25 10:00	11/13/25 21:26	1
gamma-BHC (Lindane)	ND	*1	0.019	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
beta-BHC	ND	*1	0.020	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
delta-BHC	ND	*1 *	0.015	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
Heptachlor	ND	*1	0.015	0.0039	ug/L		11/11/25 10:00	11/13/25 21:26	1
Aldrin	ND		0.023	0.0068	ug/L		11/11/25 10:00	11/13/25 21:26	1
Heptachlor epoxide	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 21:26	1
trans-Chlordane	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 21:26	1
cis-Chlordane	ND	*1	0.026	0.0078	ug/L		11/11/25 10:00	11/13/25 21:26	1
Endosulfan I	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 21:26	1
4,4'-DDE	ND	*1	0.0097	0.0029	ug/L		11/11/25 10:00	11/13/25 21:26	1
Dieldrin	ND	*1	0.018	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
Endrin	ND	*1	0.012	0.0029	ug/L		11/11/25 10:00	11/13/25 21:26	1
4,4'-DDD	ND	*1	0.015	0.0058	ug/L		11/11/25 10:00	11/13/25 21:26	1
Endosulfan II	ND	*1	0.023	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
4,4'-DDT	ND	*1	0.019	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
Endrin aldehyde	ND		0.058	0.033	ug/L		11/11/25 10:00	11/13/25 21:26	1
Endosulfan sulfate	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 21:26	1
Methoxychlor	ND	*1	0.097	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
Endrin ketone	ND	*1	0.019	0.0068	ug/L		11/11/25 10:00	11/13/25 21:26	1
Toxaphene	ND		1.9	0.45	ug/L		11/11/25 10:00	11/13/25 21:26	1
Chlordane (technical)	ND		0.19	0.060	ug/L		11/11/25 10:00	11/13/25 21:26	1
2,4'-DDD	ND		0.029	0.0088	ug/L		11/11/25 10:00	11/13/25 21:26	1
2,4'-DDE	ND		0.029	0.0049	ug/L		11/11/25 10:00	11/13/25 21:26	1
2,4'-DDT	ND		0.029	0.0088	ug/L		11/11/25 10:00	11/13/25 21:26	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-03b-110425

Lab Sample ID: 580-155538-1

Date Collected: 11/04/25 13:04

Matrix: Water

Date Received: 11/06/25 10:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		42 - 120	11/11/25 10:00	11/13/25 21:26	1
DCB Decachlorobiphenyl	63		50 - 120	11/11/25 10:00	11/13/25 21:26	1

Method: EPA 314.0 - Perchlorate (IC) - DL									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^+	10	2.1	ug/L	-		11/10/25 18:17	5

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	610	B	15	4.3	mg/L	-		11/11/25 10:32	10

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-02b-110425

Lab Sample ID: 580-155538-2

Date Collected: 11/04/25 15:55

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/11/25 05:44	1
Chloromethane	ND		1.0	0.23	ug/L			11/11/25 05:44	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/11/25 05:44	1
Bromomethane	ND		1.0	0.35	ug/L			11/11/25 05:44	1
Chloroethane	ND		1.0	0.34	ug/L			11/11/25 05:44	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/25 05:44	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/11/25 05:44	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/11/25 05:44	1
Acetone	ND		25	11	ug/L			11/11/25 05:44	1
Methylene Chloride	ND		15	6.8	ug/L			11/11/25 05:44	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/11/25 05:44	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/11/25 05:44	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/11/25 05:44	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/11/25 05:44	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/11/25 05:44	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/11/25 05:44	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/11/25 05:44	1
Chloroform	ND		1.0	0.11	ug/L			11/11/25 05:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/11/25 05:44	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/11/25 05:44	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/11/25 05:44	1
Benzene	ND		1.0	0.47	ug/L			11/11/25 05:44	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/11/25 05:44	1
Trichloroethene	ND		1.0	0.27	ug/L			11/11/25 05:44	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/11/25 05:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/11/25 05:44	1
Dibromomethane	ND		1.0	0.28	ug/L			11/11/25 05:44	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/11/25 05:44	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/11/25 05:44	1
Toluene	ND		1.0	0.21	ug/L			11/11/25 05:44	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/11/25 05:44	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/11/25 05:44	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/11/25 05:44	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/11/25 05:44	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/11/25 05:44	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/11/25 05:44	1
Chlorobenzene	2.3		1.0	0.22	ug/L			11/11/25 05:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/11/25 05:44	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/11/25 05:44	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/11/25 05:44	1
o-Xylene	ND		1.0	0.22	ug/L			11/11/25 05:44	1
Styrene	ND		1.0	0.41	ug/L			11/11/25 05:44	1
Bromoform	ND		1.0	0.46	ug/L			11/11/25 05:44	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/11/25 05:44	1
Bromobenzene	ND		1.0	0.18	ug/L			11/11/25 05:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/11/25 05:44	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/11/25 05:44	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/11/25 05:44	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/11/25 05:44	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-02b-110425

Lab Sample ID: 580-155538-2

Date Collected: 11/04/25 15:55

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/11/25 05:44	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/11/25 05:44	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/11/25 05:44	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/11/25 05:44	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/11/25 05:44	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/25 05:44	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/25 05:44	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/11/25 05:44	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/25 05:44	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/11/25 05:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/11/25 05:44	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/11/25 05:44	1
Naphthalene	ND		3.0	1.4	ug/L			11/11/25 05:44	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/11/25 05:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/11/25 05:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		11/11/25 05:44	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		11/11/25 05:44	1
4-Bromofluorobenzene (Surr)	98		80 - 120		11/11/25 05:44	1
Dibromofluoromethane (Surr)	100		80 - 120		11/11/25 05:44	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND	*1	0.017	0.0037	ug/L		11/11/25 10:00	11/13/25 21:45	1
gamma-BHC (Lindane)	ND	*1	0.019	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
beta-BHC	ND	*1	0.020	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
delta-BHC	ND	*1 *	0.014	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
Heptachlor	ND	*1	0.014	0.0037	ug/L		11/11/25 10:00	11/13/25 21:45	1
Aldrin	ND		0.022	0.0065	ug/L		11/11/25 10:00	11/13/25 21:45	1
Heptachlor epoxide	ND	*1	0.019	0.0028	ug/L		11/11/25 10:00	11/13/25 21:45	1
trans-Chlordane	ND	*1	0.019	0.0028	ug/L		11/11/25 10:00	11/13/25 21:45	1
cis-Chlordane	ND	*1	0.025	0.0075	ug/L		11/11/25 10:00	11/13/25 21:45	1
Endosulfan I	ND	*1	0.019	0.0028	ug/L		11/11/25 10:00	11/13/25 21:45	1
4,4'-DDE	ND	*1	0.0093	0.0028	ug/L		11/11/25 10:00	11/13/25 21:45	1
Dieldrin	ND	*1	0.017	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
Endrin	ND	*1	0.011	0.0028	ug/L		11/11/25 10:00	11/13/25 21:45	1
4,4'-DDD	ND	*1	0.014	0.0056	ug/L		11/11/25 10:00	11/13/25 21:45	1
Endosulfan II	ND	*1	0.022	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
4,4'-DDT	ND	*1	0.019	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
Endrin aldehyde	ND		0.056	0.032	ug/L		11/11/25 10:00	11/13/25 21:45	1
Endosulfan sulfate	ND	*1	0.019	0.0028	ug/L		11/11/25 10:00	11/13/25 21:45	1
Methoxychlor	ND	*1	0.093	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
Endrin ketone	ND	*1	0.019	0.0065	ug/L		11/11/25 10:00	11/13/25 21:45	1
Toxaphene	ND		1.9	0.43	ug/L		11/11/25 10:00	11/13/25 21:45	1
Chlordane (technical)	ND		0.19	0.058	ug/L		11/11/25 10:00	11/13/25 21:45	1
2,4'-DDD	ND		0.028	0.0084	ug/L		11/11/25 10:00	11/13/25 21:45	1
2,4'-DDE	ND		0.028	0.0047	ug/L		11/11/25 10:00	11/13/25 21:45	1
2,4'-DDT	ND		0.028	0.0084	ug/L		11/11/25 10:00	11/13/25 21:45	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-02b-110425

Lab Sample ID: 580-155538-2

Date Collected: 11/04/25 15:55

Matrix: Water

Date Received: 11/06/25 10:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		42 - 120	11/11/25 10:00	11/13/25 21:45	1
DCB Decachlorobiphenyl	41	S1-	50 - 120	11/11/25 10:00	11/13/25 21:45	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^+	20	4.3	ug/L	-		11/10/25 18:58	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	510	B	15	4.3	mg/L	-		11/11/25 10:45	10

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: RB-01-110525

Lab Sample ID: 580-155538-3

Date Collected: 11/05/25 07:10

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/12/25 14:16	1
Chloromethane	ND		1.0	0.23	ug/L			11/12/25 14:16	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/12/25 14:16	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/25 14:16	1
Chloroethane	ND		1.0	0.34	ug/L			11/12/25 14:16	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/25 14:16	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/12/25 14:16	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/12/25 14:16	1
Acetone	ND		25	11	ug/L			11/12/25 14:16	1
Methylene Chloride	ND		15	6.8	ug/L			11/12/25 14:16	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/12/25 14:16	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/12/25 14:16	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/12/25 14:16	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/12/25 14:16	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/12/25 14:16	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/12/25 14:16	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/12/25 14:16	1
Chloroform	ND		1.0	0.11	ug/L			11/12/25 14:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/12/25 14:16	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/12/25 14:16	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/12/25 14:16	1
Benzene	ND		1.0	0.47	ug/L			11/12/25 14:16	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/12/25 14:16	1
Trichloroethene	ND		1.0	0.27	ug/L			11/12/25 14:16	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/12/25 14:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/12/25 14:16	1
Dibromomethane	ND		1.0	0.28	ug/L			11/12/25 14:16	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/12/25 14:16	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/12/25 14:16	1
Toluene	ND		1.0	0.21	ug/L			11/12/25 14:16	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/12/25 14:16	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/12/25 14:16	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/12/25 14:16	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/12/25 14:16	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/12/25 14:16	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/12/25 14:16	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/12/25 14:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/12/25 14:16	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/12/25 14:16	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/12/25 14:16	1
o-Xylene	ND		1.0	0.22	ug/L			11/12/25 14:16	1
Styrene	ND		1.0	0.41	ug/L			11/12/25 14:16	1
Bromoform	ND		1.0	0.46	ug/L			11/12/25 14:16	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/12/25 14:16	1
Bromobenzene	ND		1.0	0.18	ug/L			11/12/25 14:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/12/25 14:16	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/12/25 14:16	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/12/25 14:16	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/12/25 14:16	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: RB-01-110525

Lab Sample ID: 580-155538-3

Date Collected: 11/05/25 07:10

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/12/25 14:16	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/12/25 14:16	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/12/25 14:16	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/12/25 14:16	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/12/25 14:16	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 14:16	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/25 14:16	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/12/25 14:16	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 14:16	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/12/25 14:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/12/25 14:16	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/12/25 14:16	1
Naphthalene	ND		3.0	1.4	ug/L			11/12/25 14:16	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/12/25 14:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/12/25 14:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/12/25 14:16	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		11/12/25 14:16	1
4-Bromofluorobenzene (Surr)	104		80 - 120		11/12/25 14:16	1
Dibromofluoromethane (Surr)	115		80 - 120		11/12/25 14:16	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.014	0.0057	ug/L		11/10/25 09:29	11/13/25 17:50	1
4,4'-DDE	ND		0.0094	0.0028	ug/L		11/10/25 09:29	11/13/25 17:50	1
4,4'-DDT	ND		0.019	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
Aldrin	ND		0.023	0.0066	ug/L		11/10/25 09:29	11/13/25 17:50	1
alpha-BHC	ND		0.017	0.0038	ug/L		11/10/25 09:29	11/13/25 17:50	1
cis-Chlordane	ND		0.025	0.0076	ug/L		11/10/25 09:29	11/13/25 17:50	1
beta-BHC	ND		0.020	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
Chlordane (technical)	ND		0.19	0.059	ug/L		11/10/25 09:29	11/13/25 17:50	1
delta-BHC	ND		0.014	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
Dieldrin	ND		0.017	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
Endosulfan I	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 17:50	1
Endosulfan II	ND		0.023	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
Endosulfan sulfate	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 17:50	1
Endrin	ND		0.011	0.0028	ug/L		11/10/25 09:29	11/13/25 17:50	1
Endrin aldehyde	ND		0.057	0.032	ug/L		11/10/25 09:29	11/13/25 17:50	1
Endrin ketone	ND		0.019	0.0066	ug/L		11/10/25 09:29	11/13/25 17:50	1
gamma-BHC (Lindane)	ND		0.019	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
trans-Chlordane	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 17:50	1
Heptachlor	ND		0.014	0.0038	ug/L		11/10/25 09:29	11/13/25 17:50	1
Heptachlor epoxide	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 17:50	1
Methoxychlor	ND		0.094	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
Toxaphene	ND	* - *1	1.9	0.43	ug/L		11/10/25 09:29	11/13/25 17:50	1
2,4'-DDD	ND		0.028	0.0085	ug/L		11/10/25 09:29	11/13/25 17:50	1
2,4'-DDE	ND		0.028	0.0047	ug/L		11/10/25 09:29	11/13/25 17:50	1
2,4'-DDT	ND		0.028	0.0085	ug/L		11/10/25 09:29	11/13/25 17:50	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: RB-01-110525

Lab Sample ID: 580-155538-3

Date Collected: 11/05/25 07:10

Matrix: Water

Date Received: 11/06/25 10:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	18	S1-	50 - 120	11/10/25 09:29	11/13/25 17:50	1
Tetrachloro-m-xylene	76		42 - 120	11/10/25 09:29	11/13/25 17:50	1

Method: EPA 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^+	2.0	0.43	ug/L	-		11/10/25 21:02	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	0.93	J B	1.5	0.43	mg/L	-		11/10/25 23:55	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: FB-01-110525

Lab Sample ID: 580-155538-4

Date Collected: 11/05/25 07:51

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND	*1	0.016	0.0036	ug/L		11/11/25 10:00	11/13/25 22:05	1
gamma-BHC (Lindane)	ND	*1	0.018	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
beta-BHC	ND	*1	0.019	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
delta-BHC	ND	*1 *	0.014	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
Heptachlor	ND	*1	0.014	0.0036	ug/L		11/11/25 10:00	11/13/25 22:05	1
Aldrin	ND		0.022	0.0064	ug/L		11/11/25 10:00	11/13/25 22:05	1
Heptachlor epoxide	ND	*1	0.018	0.0027	ug/L		11/11/25 10:00	11/13/25 22:05	1
trans-Chlordane	ND	*1	0.018	0.0027	ug/L		11/11/25 10:00	11/13/25 22:05	1
cis-Chlordane	ND	*1	0.025	0.0073	ug/L		11/11/25 10:00	11/13/25 22:05	1
Endosulfan I	ND	*1	0.018	0.0027	ug/L		11/11/25 10:00	11/13/25 22:05	1
4,4'-DDE	ND	*1	0.0091	0.0027	ug/L		11/11/25 10:00	11/13/25 22:05	1
Dieldrin	ND	*1	0.016	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
Endrin	ND	*1	0.011	0.0027	ug/L		11/11/25 10:00	11/13/25 22:05	1
4,4'-DDD	ND	*1	0.014	0.0055	ug/L		11/11/25 10:00	11/13/25 22:05	1
Endosulfan II	ND	*1	0.022	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
4,4'-DDT	ND	*1	0.018	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
Endrin aldehyde	ND		0.055	0.031	ug/L		11/11/25 10:00	11/13/25 22:05	1
Endosulfan sulfate	ND	*1	0.018	0.0027	ug/L		11/11/25 10:00	11/13/25 22:05	1
Methoxychlor	ND	*1	0.091	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
Endrin ketone	ND	*1	0.018	0.0064	ug/L		11/11/25 10:00	11/13/25 22:05	1
Toxaphene	ND		1.8	0.42	ug/L		11/11/25 10:00	11/13/25 22:05	1
Chlordane (technical)	ND		0.18	0.056	ug/L		11/11/25 10:00	11/13/25 22:05	1
2,4'-DDD	ND		0.027	0.0082	ug/L		11/11/25 10:00	11/13/25 22:05	1
2,4'-DDE	ND		0.027	0.0046	ug/L		11/11/25 10:00	11/13/25 22:05	1
2,4'-DDT	ND		0.027	0.0082	ug/L		11/11/25 10:00	11/13/25 22:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		42 - 120	11/11/25 10:00	11/13/25 22:05	1
DCB Decachlorobiphenyl	66		50 - 120	11/11/25 10:00	11/13/25 22:05	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-08g-110525

Lab Sample ID: 580-155538-5

Date Collected: 11/05/25 10:30

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/12/25 19:32	1
Chloromethane	ND		1.0	0.23	ug/L			11/12/25 19:32	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/12/25 19:32	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/25 19:32	1
Chloroethane	ND		1.0	0.34	ug/L			11/12/25 19:32	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/25 19:32	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/12/25 19:32	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/12/25 19:32	1
Acetone	ND		25	11	ug/L			11/12/25 19:32	1
Methylene Chloride	ND		15	6.8	ug/L			11/12/25 19:32	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/12/25 19:32	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/12/25 19:32	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/12/25 19:32	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/12/25 19:32	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/12/25 19:32	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/12/25 19:32	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/12/25 19:32	1
Chloroform	1.5		1.0	0.11	ug/L			11/12/25 19:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/12/25 19:32	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/12/25 19:32	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/12/25 19:32	1
Benzene	ND		1.0	0.47	ug/L			11/12/25 19:32	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/12/25 19:32	1
Trichloroethene	ND		1.0	0.27	ug/L			11/12/25 19:32	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/12/25 19:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/12/25 19:32	1
Dibromomethane	ND		1.0	0.28	ug/L			11/12/25 19:32	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/12/25 19:32	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/12/25 19:32	1
Toluene	ND		1.0	0.21	ug/L			11/12/25 19:32	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/12/25 19:32	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/12/25 19:32	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/12/25 19:32	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/12/25 19:32	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/12/25 19:32	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/12/25 19:32	1
Chlorobenzene	4.6		1.0	0.22	ug/L			11/12/25 19:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/12/25 19:32	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/12/25 19:32	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/12/25 19:32	1
o-Xylene	ND		1.0	0.22	ug/L			11/12/25 19:32	1
Styrene	ND		1.0	0.41	ug/L			11/12/25 19:32	1
Bromoform	ND		1.0	0.46	ug/L			11/12/25 19:32	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/12/25 19:32	1
Bromobenzene	ND		1.0	0.18	ug/L			11/12/25 19:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/12/25 19:32	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/12/25 19:32	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/12/25 19:32	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/12/25 19:32	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-08g-110525

Lab Sample ID: 580-155538-5

Date Collected: 11/05/25 10:30

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/12/25 19:32	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/12/25 19:32	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/12/25 19:32	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/12/25 19:32	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/12/25 19:32	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 19:32	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/25 19:32	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/12/25 19:32	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 19:32	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/12/25 19:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/12/25 19:32	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/12/25 19:32	1
Naphthalene	ND		3.0	1.4	ug/L			11/12/25 19:32	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/12/25 19:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/12/25 19:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/12/25 19:32	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		11/12/25 19:32	1
4-Bromofluorobenzene (Surr)	101		80 - 120		11/12/25 19:32	1
Dibromofluoromethane (Surr)	101		80 - 120		11/12/25 19:32	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND	*1	0.017	0.0038	ug/L		11/11/25 10:00	11/13/25 22:25	1
gamma-BHC (Lindane)	ND	*1	0.019	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
beta-BHC	ND	*1	0.020	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
delta-BHC	ND	*1 *	0.014	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
Heptachlor	ND	*1	0.014	0.0038	ug/L		11/11/25 10:00	11/13/25 22:25	1
Aldrin	ND		0.023	0.0067	ug/L		11/11/25 10:00	11/13/25 22:25	1
Heptachlor epoxide	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:25	1
trans-Chlordane	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:25	1
cis-Chlordane	ND	*1	0.026	0.0077	ug/L		11/11/25 10:00	11/13/25 22:25	1
Endosulfan I	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:25	1
4,4'-DDE	ND	*1	0.0096	0.0029	ug/L		11/11/25 10:00	11/13/25 22:25	1
Dieldrin	ND	*1	0.017	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
Endrin	ND	*1	0.011	0.0029	ug/L		11/11/25 10:00	11/13/25 22:25	1
4,4'-DDD	ND	*1	0.014	0.0057	ug/L		11/11/25 10:00	11/13/25 22:25	1
Endosulfan II	ND	*1	0.023	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
4,4'-DDT	ND	*1	0.019	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
Endrin aldehyde	ND		0.057	0.033	ug/L		11/11/25 10:00	11/13/25 22:25	1
Endosulfan sulfate	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:25	1
Methoxychlor	ND	*1	0.096	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
Endrin ketone	ND	*1	0.019	0.0067	ug/L		11/11/25 10:00	11/13/25 22:25	1
Toxaphene	ND		1.9	0.44	ug/L		11/11/25 10:00	11/13/25 22:25	1
Chlordane (technical)	ND		0.19	0.059	ug/L		11/11/25 10:00	11/13/25 22:25	1
2,4'-DDD	ND		0.029	0.0086	ug/L		11/11/25 10:00	11/13/25 22:25	1
2,4'-DDE	ND		0.029	0.0048	ug/L		11/11/25 10:00	11/13/25 22:25	1
2,4'-DDT	ND		0.029	0.0086	ug/L		11/11/25 10:00	11/13/25 22:25	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-08g-110525

Lab Sample ID: 580-155538-5

Date Collected: 11/05/25 10:30

Matrix: Water

Date Received: 11/06/25 10:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	78		42 - 120	11/11/25 10:00	11/13/25 22:25	1
DCB Decachlorobiphenyl	65		50 - 120	11/11/25 10:00	11/13/25 22:25	1

Method: EPA 314.0 - Perchlorate (IC) - DL									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^+	20	4.3	ug/L	-		11/10/25 21:44	10

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3800	B	150	43	mg/L	-		11/11/25 12:28	100

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-08b-110525

Lab Sample ID: 580-155538-6

Date Collected: 11/05/25 12:31

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/12/25 19:55	1
Chloromethane	ND		1.0	0.23	ug/L			11/12/25 19:55	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/12/25 19:55	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/25 19:55	1
Chloroethane	ND		1.0	0.34	ug/L			11/12/25 19:55	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/25 19:55	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/12/25 19:55	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/12/25 19:55	1
Acetone	ND		25	11	ug/L			11/12/25 19:55	1
Methylene Chloride	ND		15	6.8	ug/L			11/12/25 19:55	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/12/25 19:55	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/12/25 19:55	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/12/25 19:55	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/12/25 19:55	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/12/25 19:55	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/12/25 19:55	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/12/25 19:55	1
Chloroform	2.6		1.0	0.11	ug/L			11/12/25 19:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/12/25 19:55	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/12/25 19:55	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/12/25 19:55	1
Benzene	ND		1.0	0.47	ug/L			11/12/25 19:55	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/12/25 19:55	1
Trichloroethene	ND		1.0	0.27	ug/L			11/12/25 19:55	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/12/25 19:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/12/25 19:55	1
Dibromomethane	ND		1.0	0.28	ug/L			11/12/25 19:55	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/12/25 19:55	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/12/25 19:55	1
Toluene	1.2		1.0	0.21	ug/L			11/12/25 19:55	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/12/25 19:55	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/12/25 19:55	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/12/25 19:55	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/12/25 19:55	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/12/25 19:55	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/12/25 19:55	1
Chlorobenzene	1.6		1.0	0.22	ug/L			11/12/25 19:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/12/25 19:55	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/12/25 19:55	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/12/25 19:55	1
o-Xylene	ND		1.0	0.22	ug/L			11/12/25 19:55	1
Styrene	ND		1.0	0.41	ug/L			11/12/25 19:55	1
Bromoform	ND		1.0	0.46	ug/L			11/12/25 19:55	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/12/25 19:55	1
Bromobenzene	ND		1.0	0.18	ug/L			11/12/25 19:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/12/25 19:55	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/12/25 19:55	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/12/25 19:55	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/12/25 19:55	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-08b-110525

Lab Sample ID: 580-155538-6

Date Collected: 11/05/25 12:31

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/12/25 19:55	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/12/25 19:55	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/12/25 19:55	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/12/25 19:55	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/12/25 19:55	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 19:55	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/25 19:55	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/12/25 19:55	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 19:55	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/12/25 19:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/12/25 19:55	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/12/25 19:55	1
Naphthalene	ND		3.0	1.4	ug/L			11/12/25 19:55	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/12/25 19:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/12/25 19:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/12/25 19:55	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		11/12/25 19:55	1
4-Bromofluorobenzene (Surr)	103		80 - 120		11/12/25 19:55	1
Dibromofluoromethane (Surr)	109		80 - 120		11/12/25 19:55	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0056	J	0.014	0.0056	ug/L		11/10/25 09:29	11/13/25 18:09	1
4,4'-DDE	ND		0.0094	0.0028	ug/L		11/10/25 09:29	11/13/25 18:09	1
4,4'-DDT	ND		0.019	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
Aldrin	ND		0.022	0.0066	ug/L		11/10/25 09:29	11/13/25 18:09	1
alpha-BHC	ND		0.017	0.0037	ug/L		11/10/25 09:29	11/13/25 18:09	1
cis-Chlordane	ND		0.025	0.0075	ug/L		11/10/25 09:29	11/13/25 18:09	1
beta-BHC	ND		0.020	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
Chlordane (technical)	ND		0.19	0.058	ug/L		11/10/25 09:29	11/13/25 18:09	1
delta-BHC	ND		0.014	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
Dieldrin	ND		0.017	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
Endosulfan I	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 18:09	1
Endosulfan II	ND		0.022	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
Endosulfan sulfate	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 18:09	1
Endrin	ND		0.011	0.0028	ug/L		11/10/25 09:29	11/13/25 18:09	1
Endrin aldehyde	ND		0.056	0.032	ug/L		11/10/25 09:29	11/13/25 18:09	1
Endrin ketone	ND		0.019	0.0066	ug/L		11/10/25 09:29	11/13/25 18:09	1
gamma-BHC (Lindane)	ND		0.019	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
trans-Chlordane	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 18:09	1
Heptachlor	ND		0.014	0.0037	ug/L		11/10/25 09:29	11/13/25 18:09	1
Heptachlor epoxide	ND		0.019	0.0028	ug/L		11/10/25 09:29	11/13/25 18:09	1
Methoxychlor	ND		0.094	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
Toxaphene	ND	* - *1	1.9	0.43	ug/L		11/10/25 09:29	11/13/25 18:09	1
2,4'-DDD	ND		0.028	0.0084	ug/L		11/10/25 09:29	11/13/25 18:09	1
2,4'-DDE	ND		0.028	0.0047	ug/L		11/10/25 09:29	11/13/25 18:09	1
2,4'-DDT	ND		0.028	0.0084	ug/L		11/10/25 09:29	11/13/25 18:09	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-08b-110525

Lab Sample ID: 580-155538-6

Date Collected: 11/05/25 12:31

Matrix: Water

Date Received: 11/06/25 10:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	43	S1-	50 - 120	11/10/25 09:29	11/13/25 18:09	1
Tetrachloro-m-xylene	72		42 - 120	11/10/25 09:29	11/13/25 18:09	1

Method: EPA 314.0 - Perchlorate (IC) - DL									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^+	80	17	ug/L	-		11/10/25 22:25	40

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	14000	B	750	220	mg/L	-		11/11/25 12:41	500

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: TB-110425

Lab Sample ID: 580-155538-7

Date Collected: 11/04/25 00:00

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/12/25 13:31	1
Chloromethane	ND		1.0	0.23	ug/L			11/12/25 13:31	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/12/25 13:31	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/25 13:31	1
Chloroethane	ND		1.0	0.34	ug/L			11/12/25 13:31	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/25 13:31	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/12/25 13:31	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/12/25 13:31	1
Acetone	ND		25	11	ug/L			11/12/25 13:31	1
Methylene Chloride	ND		15	6.8	ug/L			11/12/25 13:31	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/12/25 13:31	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/12/25 13:31	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/12/25 13:31	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/12/25 13:31	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/12/25 13:31	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/12/25 13:31	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/12/25 13:31	1
Chloroform	ND		1.0	0.11	ug/L			11/12/25 13:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/12/25 13:31	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/12/25 13:31	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/12/25 13:31	1
Benzene	ND		1.0	0.47	ug/L			11/12/25 13:31	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/12/25 13:31	1
Trichloroethene	ND		1.0	0.27	ug/L			11/12/25 13:31	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/12/25 13:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/12/25 13:31	1
Dibromomethane	ND		1.0	0.28	ug/L			11/12/25 13:31	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/12/25 13:31	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/12/25 13:31	1
Toluene	ND		1.0	0.21	ug/L			11/12/25 13:31	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/12/25 13:31	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/12/25 13:31	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/12/25 13:31	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/12/25 13:31	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/12/25 13:31	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/12/25 13:31	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/12/25 13:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/12/25 13:31	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/12/25 13:31	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/12/25 13:31	1
o-Xylene	ND		1.0	0.22	ug/L			11/12/25 13:31	1
Styrene	ND		1.0	0.41	ug/L			11/12/25 13:31	1
Bromoform	ND		1.0	0.46	ug/L			11/12/25 13:31	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/12/25 13:31	1
Bromobenzene	ND		1.0	0.18	ug/L			11/12/25 13:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/12/25 13:31	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/12/25 13:31	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/12/25 13:31	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/12/25 13:31	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: TB-110425

Lab Sample ID: 580-155538-7

Date Collected: 11/04/25 00:00

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/12/25 13:31	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/12/25 13:31	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/12/25 13:31	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/12/25 13:31	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/12/25 13:31	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 13:31	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/25 13:31	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/12/25 13:31	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 13:31	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/12/25 13:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/12/25 13:31	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/12/25 13:31	1
Naphthalene	ND		3.0	1.4	ug/L			11/12/25 13:31	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/12/25 13:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/12/25 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		11/12/25 13:31	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		11/12/25 13:31	1
4-Bromofluorobenzene (Surr)	101		80 - 120		11/12/25 13:31	1
Dibromofluoromethane (Surr)	100		80 - 120		11/12/25 13:31	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: DUP-01-110525

Lab Sample ID: 580-155538-8

Date Collected: 11/05/25 06:00

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/12/25 20:17	1
Chloromethane	ND		1.0	0.23	ug/L			11/12/25 20:17	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/12/25 20:17	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/25 20:17	1
Chloroethane	ND		1.0	0.34	ug/L			11/12/25 20:17	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/25 20:17	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/12/25 20:17	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/12/25 20:17	1
Acetone	ND		25	11	ug/L			11/12/25 20:17	1
Methylene Chloride	ND		15	6.8	ug/L			11/12/25 20:17	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/12/25 20:17	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/12/25 20:17	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/12/25 20:17	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/12/25 20:17	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/12/25 20:17	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/12/25 20:17	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/12/25 20:17	1
Chloroform	1.4		1.0	0.11	ug/L			11/12/25 20:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/12/25 20:17	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/12/25 20:17	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/12/25 20:17	1
Benzene	ND		1.0	0.47	ug/L			11/12/25 20:17	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/12/25 20:17	1
Trichloroethene	ND		1.0	0.27	ug/L			11/12/25 20:17	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/12/25 20:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/12/25 20:17	1
Dibromomethane	ND		1.0	0.28	ug/L			11/12/25 20:17	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/12/25 20:17	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/12/25 20:17	1
Toluene	ND		1.0	0.21	ug/L			11/12/25 20:17	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/12/25 20:17	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/12/25 20:17	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/12/25 20:17	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/12/25 20:17	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/12/25 20:17	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/12/25 20:17	1
Chlorobenzene	4.5		1.0	0.22	ug/L			11/12/25 20:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/12/25 20:17	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/12/25 20:17	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/12/25 20:17	1
o-Xylene	ND		1.0	0.22	ug/L			11/12/25 20:17	1
Styrene	ND		1.0	0.41	ug/L			11/12/25 20:17	1
Bromoform	ND		1.0	0.46	ug/L			11/12/25 20:17	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/12/25 20:17	1
Bromobenzene	ND		1.0	0.18	ug/L			11/12/25 20:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/12/25 20:17	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/12/25 20:17	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/12/25 20:17	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/12/25 20:17	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: DUP-01-110525

Lab Sample ID: 580-155538-8

Date Collected: 11/05/25 06:00

Matrix: Water

Date Received: 11/06/25 10:40

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/12/25 20:17	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/12/25 20:17	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/12/25 20:17	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/12/25 20:17	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/12/25 20:17	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 20:17	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/25 20:17	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/12/25 20:17	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 20:17	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/12/25 20:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/12/25 20:17	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/12/25 20:17	1
Naphthalene	ND		3.0	1.4	ug/L			11/12/25 20:17	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/12/25 20:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/12/25 20:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		11/12/25 20:17	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		11/12/25 20:17	1
4-Bromofluorobenzene (Surr)	102		80 - 120		11/12/25 20:17	1
Dibromofluoromethane (Surr)	109		80 - 120		11/12/25 20:17	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND	*1	0.017	0.0039	ug/L		11/11/25 10:00	11/13/25 22:45	1
gamma-BHC (Lindane)	ND	*1	0.019	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
beta-BHC	ND	*1	0.020	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
delta-BHC	ND	*1 *	0.015	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
Heptachlor	ND	*1	0.015	0.0039	ug/L		11/11/25 10:00	11/13/25 22:45	1
Aldrin	ND		0.023	0.0068	ug/L		11/11/25 10:00	11/13/25 22:45	1
Heptachlor epoxide	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:45	1
trans-Chlordane	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:45	1
cis-Chlordane	ND	*1	0.026	0.0077	ug/L		11/11/25 10:00	11/13/25 22:45	1
Endosulfan I	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:45	1
4,4'-DDE	ND	*1	0.0097	0.0029	ug/L		11/11/25 10:00	11/13/25 22:45	1
Dieldrin	ND	*1	0.017	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
Endrin	ND	*1	0.012	0.0029	ug/L		11/11/25 10:00	11/13/25 22:45	1
4,4'-DDD	ND	*1	0.015	0.0058	ug/L		11/11/25 10:00	11/13/25 22:45	1
Endosulfan II	ND	*1	0.023	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
4,4'-DDT	ND	*1	0.019	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
Endrin aldehyde	ND		0.058	0.033	ug/L		11/11/25 10:00	11/13/25 22:45	1
Endosulfan sulfate	ND	*1	0.019	0.0029	ug/L		11/11/25 10:00	11/13/25 22:45	1
Methoxychlor	ND	*1	0.097	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
Endrin ketone	ND	*1	0.019	0.0068	ug/L		11/11/25 10:00	11/13/25 22:45	1
Toxaphene	ND		1.9	0.45	ug/L		11/11/25 10:00	11/13/25 22:45	1
Chlordane (technical)	ND		0.19	0.060	ug/L		11/11/25 10:00	11/13/25 22:45	1
2,4'-DDD	ND		0.029	0.0087	ug/L		11/11/25 10:00	11/13/25 22:45	1
2,4'-DDE	ND		0.029	0.0048	ug/L		11/11/25 10:00	11/13/25 22:45	1
2,4'-DDT	ND		0.029	0.0087	ug/L		11/11/25 10:00	11/13/25 22:45	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: DUP-01-110525

Lab Sample ID: 580-155538-8

Date Collected: 11/05/25 06:00

Matrix: Water

Date Received: 11/06/25 10:40

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	84		42 - 120	11/11/25 10:00	11/13/25 22:45	1
DCB Decachlorobiphenyl	61		50 - 120	11/11/25 10:00	11/13/25 22:45	1

Method: EPA 314.0 - Perchlorate (IC) - DL									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^+	20	4.3	ug/L	-		11/10/25 23:07	10

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3800	B	150	43	mg/L	-		11/11/25 12:54	100

QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-508115/8

Matrix: Water

Analysis Batch: 508115

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/11/25 02:06	1
Chloromethane	ND		1.0	0.23	ug/L			11/11/25 02:06	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/11/25 02:06	1
Bromomethane	ND		1.0	0.35	ug/L			11/11/25 02:06	1
Chloroethane	ND		1.0	0.34	ug/L			11/11/25 02:06	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/11/25 02:06	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/11/25 02:06	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/11/25 02:06	1
Acetone	ND		25	11	ug/L			11/11/25 02:06	1
Methylene Chloride	ND		15	6.8	ug/L			11/11/25 02:06	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/11/25 02:06	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/11/25 02:06	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/11/25 02:06	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/11/25 02:06	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/11/25 02:06	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/11/25 02:06	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/11/25 02:06	1
Chloroform	ND		1.0	0.11	ug/L			11/11/25 02:06	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/11/25 02:06	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/11/25 02:06	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/11/25 02:06	1
Benzene	ND		1.0	0.47	ug/L			11/11/25 02:06	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/11/25 02:06	1
Trichloroethene	ND		1.0	0.27	ug/L			11/11/25 02:06	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/11/25 02:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/11/25 02:06	1
Dibromomethane	ND		1.0	0.28	ug/L			11/11/25 02:06	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/11/25 02:06	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/11/25 02:06	1
Toluene	ND		1.0	0.21	ug/L			11/11/25 02:06	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/11/25 02:06	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/11/25 02:06	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/11/25 02:06	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/11/25 02:06	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/11/25 02:06	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/11/25 02:06	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/11/25 02:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/11/25 02:06	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/11/25 02:06	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/11/25 02:06	1
o-Xylene	ND		1.0	0.22	ug/L			11/11/25 02:06	1
Styrene	ND		1.0	0.41	ug/L			11/11/25 02:06	1
Bromoform	ND		1.0	0.46	ug/L			11/11/25 02:06	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/11/25 02:06	1
Bromobenzene	ND		1.0	0.18	ug/L			11/11/25 02:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/11/25 02:06	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/11/25 02:06	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/11/25 02:06	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-508115/8

Matrix: Water

Analysis Batch: 508115

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/11/25 02:06	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/11/25 02:06	1
tert-Butylbenzene	0.598	J	2.0	0.34	ug/L			11/11/25 02:06	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/11/25 02:06	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/11/25 02:06	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/11/25 02:06	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/25 02:06	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/11/25 02:06	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/11/25 02:06	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/11/25 02:06	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/11/25 02:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/11/25 02:06	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/11/25 02:06	1
Naphthalene	ND		3.0	1.4	ug/L			11/11/25 02:06	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/11/25 02:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/11/25 02:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		11/11/25 02:06	1
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		11/11/25 02:06	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/11/25 02:06	1
Dibromofluoromethane (Surr)	101		80 - 120		11/11/25 02:06	1

Lab Sample ID: LCS 580-508115/4

Matrix: Water

Analysis Batch: 508115

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	10.0	10.8		ug/L		108	20 - 150
Chloromethane	10.0	9.81		ug/L		98	25 - 150
Vinyl chloride	10.0	11.3		ug/L		113	31 - 150
Bromomethane	10.0	10.4		ug/L		104	36 - 150
Chloroethane	10.0	9.47		ug/L		95	38 - 150
Trichlorofluoromethane	10.0	10.4		ug/L		104	45 - 148
Carbon disulfide	10.0	9.69		ug/L		97	63 - 134
1,1-Dichloroethene	10.0	9.85		ug/L		99	70 - 129
Acetone	50.0	48.9		ug/L		98	44 - 150
Methylene Chloride	10.0	9.34	J	ug/L		93	77 - 125
Methyl tert-butyl ether	10.0	10.5		ug/L		105	72 - 120
trans-1,2-Dichloroethene	10.0	9.98		ug/L		100	75 - 120
1,1-Dichloroethane	10.0	9.86		ug/L		99	80 - 120
2-Butanone (MEK)	50.0	52.2		ug/L		104	65 - 137
2,2-Dichloropropane	10.0	12.4		ug/L		124	66 - 126
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	76 - 120
Chlorobromomethane	10.0	10.4		ug/L		104	78 - 120
Chloroform	10.0	9.68		ug/L		97	78 - 127
1,1,1-Trichloroethane	10.0	9.85		ug/L		99	74 - 130
Carbon tetrachloride	10.0	9.85		ug/L		98	72 - 129

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-508115/4

Matrix: Water

Analysis Batch: 508115

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	10.0	10.0		ug/L		100	74 - 120
Benzene	10.0	9.82		ug/L		98	80 - 122
1,2-Dichloroethane	10.0	8.97		ug/L		90	69 - 126
Trichloroethene	10.0	10.2		ug/L		102	80 - 125
1,2-Dichloropropane	10.0	10.2		ug/L		102	80 - 120
4-Methyl-2-pentanone (MIBK)	50.0	50.8		ug/L		102	59 - 141
Dibromomethane	10.0	10.4		ug/L		104	80 - 120
Dichlorobromomethane	10.0	10.0		ug/L		100	75 - 124
cis-1,3-Dichloropropene	10.0	10.4		ug/L		104	77 - 120
Toluene	10.0	9.82		ug/L		98	80 - 120
trans-1,3-Dichloropropene	10.0	10.8		ug/L		108	76 - 122
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	80 - 121
Tetrachloroethene	10.0	9.78		ug/L		98	76 - 125
1,3-Dichloropropane	10.0	10.1		ug/L		101	79 - 120
Chlorodibromomethane	10.0	10.1		ug/L		101	73 - 125
Ethylene Dibromide	10.0	10.1		ug/L		101	79 - 126
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
1,1,1,2-Tetrachloroethane	10.0	10.2		ug/L		102	79 - 120
Ethylbenzene	10.0	10.5		ug/L		105	80 - 120
m-Xylene & p-Xylene	10.0	10.3		ug/L		103	80 - 120
o-Xylene	10.0	10.7		ug/L		107	80 - 120
Styrene	10.0	10.1		ug/L		101	76 - 122
Bromoform	10.0	10.4		ug/L		104	56 - 139
Isopropylbenzene	10.0	10.9		ug/L		109	80 - 123
Bromobenzene	10.0	10.3		ug/L		103	80 - 120
1,1,2,2-Tetrachloroethane	10.0	9.62		ug/L		96	74 - 124
1,2,3-Trichloropropane	10.0	9.83		ug/L		98	76 - 124
N-Propylbenzene	10.0	10.8		ug/L		108	80 - 122
2-Chlorotoluene	10.0	10.5		ug/L		105	80 - 120
4-Chlorotoluene	10.0	10.8		ug/L		108	73 - 129
tert-Butylbenzene	10.0	9.88		ug/L		99	75 - 123
1,2,4-Trimethylbenzene	10.0	10.5		ug/L		105	80 - 120
sec-Butylbenzene	10.0	10.4		ug/L		104	78 - 122
4-Isopropyltoluene	10.0	10.4		ug/L		104	77 - 126
1,3-Dichlorobenzene	10.0	10.9		ug/L		109	77 - 127
1,4-Dichlorobenzene	10.0	10.6		ug/L		106	80 - 120
n-Butylbenzene	10.0	11.2		ug/L		112	57 - 133
1,2-Dichlorobenzene	10.0	11.0		ug/L		110	80 - 120
1,2-Dibromo-3-Chloropropane	10.0	10.1		ug/L		101	65 - 133
1,2,4-Trichlorobenzene	10.0	12.3		ug/L		123	61 - 148
Hexachlorobutadiene	10.0	11.1		ug/L		111	74 - 131
Naphthalene	10.0	13.7		ug/L		137	63 - 150
1,2,3-Trichlorobenzene	10.0	13.7		ug/L		137	65 - 150
1,3,5-Trimethylbenzene	10.0	11.1		ug/L		111	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	96		80 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-508115/4

Matrix: Water

Analysis Batch: 508115

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120

Lab Sample ID: LCSD 580-508115/5

Matrix: Water

Analysis Batch: 508115

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	10.0	10.7		ug/L		107	20 - 150	1	33
Chloromethane	10.0	10.1		ug/L		101	25 - 150	3	26
Vinyl chloride	10.0	11.0		ug/L		110	31 - 150	3	26
Bromomethane	10.0	10.4		ug/L		104	36 - 150	0	33
Chloroethane	10.0	9.46		ug/L		95	38 - 150	0	28
Trichlorofluoromethane	10.0	9.77		ug/L		98	45 - 148	6	35
Carbon disulfide	10.0	9.97		ug/L		100	63 - 134	3	24
1,1-Dichloroethene	10.0	9.86		ug/L		99	70 - 129	0	23
Acetone	50.0	52.9		ug/L		106	44 - 150	8	33
Methylene Chloride	10.0	9.68	J	ug/L		97	77 - 125	4	18
Methyl tert-butyl ether	10.0	10.7		ug/L		107	72 - 120	2	18
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	75 - 120	2	21
1,1-Dichloroethane	10.0	10.3		ug/L		103	80 - 120	4	15
2-Butanone (MEK)	50.0	54.5		ug/L		109	65 - 137	4	34
2,2-Dichloropropane	10.0	12.6		ug/L		126	66 - 126	1	22
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	76 - 120	3	20
Chlorobromomethane	10.0	10.4		ug/L		104	78 - 120	0	13
Chloroform	10.0	9.96		ug/L		100	78 - 127	3	14
1,1,1-Trichloroethane	10.0	9.98		ug/L		100	74 - 130	1	19
Carbon tetrachloride	10.0	10.0		ug/L		100	72 - 129	2	19
1,1-Dichloropropene	10.0	10.0		ug/L		100	74 - 120	0	14
Benzene	10.0	10.0		ug/L		100	80 - 122	2	14
1,2-Dichloroethane	10.0	9.11		ug/L		91	69 - 126	2	11
Trichloroethene	10.0	9.98		ug/L		100	80 - 125	2	13
1,2-Dichloropropane	10.0	10.5		ug/L		105	80 - 120	3	14
4-Methyl-2-pentanone (MIBK)	50.0	50.4		ug/L		101	59 - 141	1	22
Dibromomethane	10.0	10.7		ug/L		107	80 - 120	3	11
Dichlorobromomethane	10.0	10.4		ug/L		104	75 - 124	3	13
cis-1,3-Dichloropropene	10.0	10.6		ug/L		106	77 - 120	1	35
Toluene	10.0	9.95		ug/L		100	80 - 120	1	13
trans-1,3-Dichloropropene	10.0	10.8		ug/L		108	76 - 122	0	20
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	80 - 121	3	14
Tetrachloroethene	10.0	10.2		ug/L		102	76 - 125	4	13
1,3-Dichloropropane	10.0	10.4		ug/L		104	79 - 120	3	19
Chlorodibromomethane	10.0	10.5		ug/L		105	73 - 125	4	13
Ethylene Dibromide	10.0	10.0		ug/L		100	79 - 126	1	12
Chlorobenzene	10.0	10.3		ug/L		103	80 - 120	1	10
1,1,1,2-Tetrachloroethane	10.0	10.3		ug/L		103	79 - 120	1	16
Ethylbenzene	10.0	10.4		ug/L		104	80 - 120	0	14
m-Xylene & p-Xylene	10.0	10.5		ug/L		105	80 - 120	2	14

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-508115/5

Matrix: Water

Analysis Batch: 508115

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
o-Xylene	10.0	10.9		ug/L		109	80 - 120	2	16
Styrene	10.0	10.2		ug/L		102	76 - 122	1	16
Bromoform	10.0	10.5		ug/L		105	56 - 139	1	21
Isopropylbenzene	10.0	10.8		ug/L		108	80 - 123	1	19
Bromobenzene	10.0	10.4		ug/L		104	80 - 120	1	24
1,1,2,2-Tetrachloroethane	10.0	10.3		ug/L		103	74 - 124	6	25
1,2,3-Trichloropropane	10.0	10.1		ug/L		101	76 - 124	2	26
N-Propylbenzene	10.0	10.8		ug/L		108	80 - 122	0	22
2-Chlorotoluene	10.0	10.4		ug/L		104	80 - 120	1	20
4-Chlorotoluene	10.0	10.7		ug/L		107	73 - 129	1	29
tert-Butylbenzene	10.0	9.61		ug/L		96	75 - 123	3	21
1,2,4-Trimethylbenzene	10.0	10.4		ug/L		104	80 - 120	1	16
sec-Butylbenzene	10.0	10.2		ug/L		102	78 - 122	1	15
4-Isopropyltoluene	10.0	9.83		ug/L		98	77 - 126	5	20
1,3-Dichlorobenzene	10.0	10.9		ug/L		109	77 - 127	1	35
1,4-Dichlorobenzene	10.0	10.6		ug/L		106	80 - 120	0	17
n-Butylbenzene	10.0	10.7		ug/L		107	57 - 133	5	14
1,2-Dichlorobenzene	10.0	11.0		ug/L		110	80 - 120	0	15
1,2-Dibromo-3-Chloropropane	10.0	10.0		ug/L		100	65 - 133	1	25
1,2,4-Trichlorobenzene	10.0	11.8		ug/L		118	61 - 148	5	27
Hexachlorobutadiene	10.0	10.7		ug/L		107	74 - 131	3	22
Naphthalene	10.0	12.8		ug/L		128	63 - 150	6	33
1,2,3-Trichlorobenzene	10.0	13.2		ug/L		132	65 - 150	4	33
1,3,5-Trimethylbenzene	10.0	11.0		ug/L		110	80 - 122	1	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	93		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Lab Sample ID: MB 580-508233/7

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/12/25 12:46	1
Chloromethane	ND		1.0	0.23	ug/L			11/12/25 12:46	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/12/25 12:46	1
Bromomethane	ND		1.0	0.35	ug/L			11/12/25 12:46	1
Chloroethane	ND		1.0	0.34	ug/L			11/12/25 12:46	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/12/25 12:46	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/12/25 12:46	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/12/25 12:46	1
Acetone	ND		25	11	ug/L			11/12/25 12:46	1
Methylene Chloride	ND		15	6.8	ug/L			11/12/25 12:46	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/12/25 12:46	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/12/25 12:46	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-508233/7

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/12/25 12:46	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/12/25 12:46	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/12/25 12:46	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/12/25 12:46	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/12/25 12:46	1
Chloroform	ND		1.0	0.11	ug/L			11/12/25 12:46	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/12/25 12:46	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/12/25 12:46	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/12/25 12:46	1
Benzene	ND		1.0	0.47	ug/L			11/12/25 12:46	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/12/25 12:46	1
Trichloroethene	ND		1.0	0.27	ug/L			11/12/25 12:46	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/12/25 12:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/12/25 12:46	1
Dibromomethane	ND		1.0	0.28	ug/L			11/12/25 12:46	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/12/25 12:46	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/12/25 12:46	1
Toluene	ND		1.0	0.21	ug/L			11/12/25 12:46	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/12/25 12:46	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/12/25 12:46	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/12/25 12:46	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/12/25 12:46	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/12/25 12:46	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/12/25 12:46	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/12/25 12:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/12/25 12:46	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/12/25 12:46	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/12/25 12:46	1
o-Xylene	ND		1.0	0.22	ug/L			11/12/25 12:46	1
Styrene	ND		1.0	0.41	ug/L			11/12/25 12:46	1
Bromoform	ND		1.0	0.46	ug/L			11/12/25 12:46	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/12/25 12:46	1
Bromobenzene	ND		1.0	0.18	ug/L			11/12/25 12:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/12/25 12:46	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/12/25 12:46	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/12/25 12:46	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/12/25 12:46	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/12/25 12:46	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/12/25 12:46	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/12/25 12:46	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/12/25 12:46	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/12/25 12:46	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 12:46	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/12/25 12:46	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/12/25 12:46	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/12/25 12:46	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/12/25 12:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/12/25 12:46	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/12/25 12:46	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-508233/7

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		3.0	1.4	ug/L			11/12/25 12:46	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/12/25 12:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/12/25 12:46	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					11/12/25 12:46	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120					11/12/25 12:46	1
4-Bromofluorobenzene (Surr)	103		80 - 120					11/12/25 12:46	1
Dibromofluoromethane (Surr)	110		80 - 120					11/12/25 12:46	1

Lab Sample ID: LCS 580-508233/4

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	4.40		ug/L		88	20 - 150
Chloromethane	5.00	4.76		ug/L		95	25 - 150
Vinyl chloride	5.00	5.10		ug/L		102	31 - 150
Bromomethane	5.00	5.84		ug/L		117	36 - 150
Chloroethane	5.00	4.99		ug/L		100	38 - 150
Trichlorofluoromethane	5.00	4.87		ug/L		97	45 - 148
Carbon disulfide	5.00	4.71		ug/L		94	63 - 134
1,1-Dichloroethene	5.00	5.08		ug/L		102	70 - 129
Acetone	25.0	24.6	J	ug/L		98	44 - 150
Methylene Chloride	5.00	ND		ug/L		113	77 - 125
Methyl tert-butyl ether	5.00	4.80		ug/L		96	72 - 120
trans-1,2-Dichloroethene	5.00	4.83		ug/L		97	75 - 120
1,1-Dichloroethane	5.00	4.87		ug/L		97	80 - 120
2-Butanone (MEK)	25.0	25.6		ug/L		102	65 - 137
2,2-Dichloropropane	5.00	5.68		ug/L		114	66 - 126
cis-1,2-Dichloroethene	5.00	4.98		ug/L		100	76 - 120
Chlorobromomethane	5.00	5.32		ug/L		106	78 - 120
Chloroform	5.00	5.41		ug/L		108	78 - 127
1,1,1-Trichloroethane	5.00	5.09		ug/L		102	74 - 130
Carbon tetrachloride	5.00	4.78		ug/L		96	72 - 129
1,1-Dichloropropene	5.00	5.13		ug/L		103	74 - 120
Benzene	5.00	5.11		ug/L		102	80 - 122
1,2-Dichloroethane	5.00	4.76		ug/L		95	69 - 126
Trichloroethene	5.00	5.06		ug/L		101	80 - 125
1,2-Dichloropropane	5.00	5.23		ug/L		105	80 - 120
4-Methyl-2-pentanone (MIBK)	25.0	25.4		ug/L		102	59 - 141
Dibromomethane	5.00	5.13		ug/L		103	80 - 120
Dichlorobromomethane	5.00	5.37		ug/L		107	75 - 124
cis-1,3-Dichloropropene	5.00	4.96		ug/L		99	77 - 120
Toluene	5.00	5.12		ug/L		102	80 - 120
trans-1,3-Dichloropropene	5.00	4.91		ug/L		98	76 - 122
1,1,2-Trichloroethane	5.00	4.40		ug/L		88	80 - 121
Tetrachloroethene	5.00	5.14		ug/L		103	76 - 125

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-508233/4

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3-Dichloropropane	5.00	4.66		ug/L		93	79 - 120
Chlorodibromomethane	5.00	4.62		ug/L		92	73 - 125
Ethylene Dibromide	5.00	4.71		ug/L		94	79 - 126
Chlorobenzene	5.00	5.00		ug/L		100	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.33		ug/L		87	79 - 120
Ethylbenzene	5.00	5.65		ug/L		113	80 - 120
m-Xylene & p-Xylene	5.00	5.67		ug/L		113	80 - 120
o-Xylene	5.00	5.70		ug/L		114	80 - 120
Styrene	5.00	5.43		ug/L		109	76 - 122
Bromoform	5.00	4.83		ug/L		97	56 - 139
Isopropylbenzene	5.00	5.58		ug/L		112	80 - 123
Bromobenzene	5.00	5.13		ug/L		103	80 - 120
1,1,2,2-Tetrachloroethane	5.00	4.91		ug/L		98	74 - 124
1,2,3-Trichloropropane	5.00	4.74		ug/L		95	76 - 124
N-Propylbenzene	5.00	5.62		ug/L		112	80 - 122
2-Chlorotoluene	5.00	5.10		ug/L		102	80 - 120
4-Chlorotoluene	5.00	5.11		ug/L		102	73 - 129
tert-Butylbenzene	5.00	5.29		ug/L		106	75 - 123
1,2,4-Trimethylbenzene	5.00	5.21		ug/L		104	80 - 120
sec-Butylbenzene	5.00	5.58		ug/L		112	78 - 122
4-Isopropyltoluene	5.00	5.36		ug/L		107	77 - 126
1,3-Dichlorobenzene	5.00	5.42		ug/L		108	77 - 127
1,4-Dichlorobenzene	5.00	5.19		ug/L		104	80 - 120
n-Butylbenzene	5.00	4.74		ug/L		95	57 - 133
1,2-Dichlorobenzene	5.00	5.22		ug/L		104	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.87		ug/L		97	65 - 133
1,2,4-Trichlorobenzene	5.00	5.24		ug/L		105	61 - 148
Hexachlorobutadiene	5.00	5.96		ug/L		119	74 - 131
Naphthalene	5.00	4.65		ug/L		93	63 - 150
1,2,3-Trichlorobenzene	5.00	5.24		ug/L		105	65 - 150
1,3,5-Trimethylbenzene	5.00	5.26		ug/L		105	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120

Lab Sample ID: LCSD 580-508233/5

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	4.34		ug/L		87	20 - 150	1	33
Chloromethane	5.00	4.58		ug/L		92	25 - 150	4	26
Vinyl chloride	5.00	4.89		ug/L		98	31 - 150	4	26
Bromomethane	5.00	5.63		ug/L		113	36 - 150	4	33
Chloroethane	5.00	4.81		ug/L		96	38 - 150	4	28

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-508233/5

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Trichlorofluoromethane	5.00	4.78		ug/L		96	45 - 148	2	35
Carbon disulfide	5.00	4.56		ug/L		91	63 - 134	3	24
1,1-Dichloroethene	5.00	4.97		ug/L		99	70 - 129	2	23
Acetone	25.0	24.9	J	ug/L		99	44 - 150	1	33
Methylene Chloride	5.00	ND		ug/L		111	77 - 125	2	18
Methyl tert-butyl ether	5.00	4.90		ug/L		98	72 - 120	2	18
trans-1,2-Dichloroethene	5.00	4.75		ug/L		95	75 - 120	2	21
1,1-Dichloroethane	5.00	4.76		ug/L		95	80 - 120	2	15
2-Butanone (MEK)	25.0	26.8		ug/L		107	65 - 137	4	34
2,2-Dichloropropane	5.00	5.58		ug/L		112	66 - 126	2	22
cis-1,2-Dichloroethene	5.00	4.92		ug/L		98	76 - 120	1	20
Chlorobromomethane	5.00	5.20		ug/L		104	78 - 120	2	13
Chloroform	5.00	5.33		ug/L		107	78 - 127	1	14
1,1,1-Trichloroethane	5.00	5.06		ug/L		101	74 - 130	1	19
Carbon tetrachloride	5.00	4.76		ug/L		95	72 - 129	0	19
1,1-Dichloropropene	5.00	5.06		ug/L		101	74 - 120	1	14
Benzene	5.00	5.05		ug/L		101	80 - 122	1	14
1,2-Dichloroethane	5.00	4.82		ug/L		96	69 - 126	1	11
Trichloroethene	5.00	5.03		ug/L		101	80 - 125	1	13
1,2-Dichloropropane	5.00	5.24		ug/L		105	80 - 120	0	14
4-Methyl-2-pentanone (MIBK)	25.0	26.5		ug/L		106	59 - 141	4	22
Dibromomethane	5.00	5.17		ug/L		103	80 - 120	1	11
Dichlorobromomethane	5.00	5.42		ug/L		108	75 - 124	1	13
cis-1,3-Dichloropropene	5.00	4.99		ug/L		100	77 - 120	1	35
Toluene	5.00	5.13		ug/L		103	80 - 120	0	13
trans-1,3-Dichloropropene	5.00	5.03		ug/L		101	76 - 122	2	20
1,1,2-Trichloroethane	5.00	4.51		ug/L		90	80 - 121	3	14
Tetrachloroethene	5.00	5.09		ug/L		102	76 - 125	1	13
1,3-Dichloropropane	5.00	4.76		ug/L		95	79 - 120	2	19
Chlorodibromomethane	5.00	4.74		ug/L		95	73 - 125	3	13
Ethylene Dibromide	5.00	4.81		ug/L		96	79 - 126	2	12
Chlorobenzene	5.00	4.99		ug/L		100	80 - 120	0	10
1,1,1,2-Tetrachloroethane	5.00	4.36		ug/L		87	79 - 120	1	16
Ethylbenzene	5.00	5.61		ug/L		112	80 - 120	1	14
m-Xylene & p-Xylene	5.00	5.65		ug/L		113	80 - 120	0	14
o-Xylene	5.00	5.62		ug/L		112	80 - 120	1	16
Styrene	5.00	5.38		ug/L		108	76 - 122	1	16
Bromoform	5.00	5.02		ug/L		100	56 - 139	4	21
Isopropylbenzene	5.00	5.52		ug/L		110	80 - 123	1	19
Bromobenzene	5.00	5.18		ug/L		104	80 - 120	1	24
1,1,2,2-Tetrachloroethane	5.00	5.14		ug/L		103	74 - 124	5	25
1,2,3-Trichloropropane	5.00	4.95		ug/L		99	76 - 124	4	26
N-Propylbenzene	5.00	5.65		ug/L		113	80 - 122	1	22
2-Chlorotoluene	5.00	5.12		ug/L		102	80 - 120	0	20
4-Chlorotoluene	5.00	5.11		ug/L		102	73 - 129	0	29
tert-Butylbenzene	5.00	5.22		ug/L		104	75 - 123	1	21
1,2,4-Trimethylbenzene	5.00	5.23		ug/L		105	80 - 120	0	16
sec-Butylbenzene	5.00	5.58		ug/L		112	78 - 122	0	15
4-Isopropyltoluene	5.00	5.34		ug/L		107	77 - 126	0	20

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-508233/5

Matrix: Water

Analysis Batch: 508233

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichlorobenzene	5.00	5.38		ug/L		108	77 - 127	1	35
1,4-Dichlorobenzene	5.00	5.22		ug/L		104	80 - 120	1	17
n-Butylbenzene	5.00	4.72		ug/L		94	57 - 133	0	14
1,2-Dichlorobenzene	5.00	5.25		ug/L		105	80 - 120	1	15
1,2-Dibromo-3-Chloropropane	5.00	5.04		ug/L		101	65 - 133	3	25
1,2,4-Trichlorobenzene	5.00	5.30		ug/L		106	61 - 148	1	27
Hexachlorobutadiene	5.00	5.90		ug/L		118	74 - 131	1	22
Naphthalene	5.00	4.71		ug/L		94	63 - 150	1	33
1,2,3-Trichlorobenzene	5.00	5.28		ug/L		106	65 - 150	1	33
1,3,5-Trimethylbenzene	5.00	5.28		ug/L		106	80 - 122	0	21

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 580-508050/1-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 508050

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		11/10/25 09:29	11/13/25 14:50	1
beta-BHC	ND		0.021	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
Aldrin	ND		0.024	0.0070	ug/L		11/10/25 09:29	11/13/25 14:50	1
delta-BHC	ND		0.015	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
cis-Chlordane	ND		0.027	0.0080	ug/L		11/10/25 09:29	11/13/25 14:50	1
Endosulfan I	ND		0.020	0.0030	ug/L		11/10/25 09:29	11/13/25 14:50	1
4,4'-DDE	ND		0.010	0.0030	ug/L		11/10/25 09:29	11/13/25 14:50	1
Dieldrin	ND		0.018	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
Endrin	ND		0.012	0.0030	ug/L		11/10/25 09:29	11/13/25 14:50	1
4,4'-DDD	ND		0.015	0.0060	ug/L		11/10/25 09:29	11/13/25 14:50	1
Endosulfan II	ND		0.024	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
4,4'-DDT	ND		0.020	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
Endrin aldehyde	ND		0.060	0.034	ug/L		11/10/25 09:29	11/13/25 14:50	1
trans-Chlordane	ND		0.020	0.0030	ug/L		11/10/25 09:29	11/13/25 14:50	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		11/10/25 09:29	11/13/25 14:50	1
Heptachlor	ND		0.015	0.0040	ug/L		11/10/25 09:29	11/13/25 14:50	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		11/10/25 09:29	11/13/25 14:50	1
Endrin ketone	ND		0.020	0.0070	ug/L		11/10/25 09:29	11/13/25 14:50	1
Methoxychlor	ND		0.10	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
Chlordane (technical)	ND		0.20	0.062	ug/L		11/10/25 09:29	11/13/25 14:50	1
Toxaphene	ND		2.0	0.46	ug/L		11/10/25 09:29	11/13/25 14:50	1
2,4'-DDD	ND		0.030	0.0090	ug/L		11/10/25 09:29	11/13/25 14:50	1
2,4'-DDE	ND		0.030	0.0050	ug/L		11/10/25 09:29	11/13/25 14:50	1
2,4'-DDT	ND		0.030	0.0090	ug/L		11/10/25 09:29	11/13/25 14:50	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	61		50 - 120	11/10/25 09:29	11/13/25 14:50	1
Tetrachloro-m-xylene	78		42 - 120	11/10/25 09:29	11/13/25 14:50	1

Lab Sample ID: LCS 580-508050/2-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	0.200	0.150		ug/L		75	54 - 120
beta-BHC	0.200	0.160		ug/L		80	54 - 120
Aldrin	0.200	0.158		ug/L		79	25 - 124
delta-BHC	0.200	0.132		ug/L		66	51 - 120
cis-Chlordane	0.200	0.157		ug/L		79	48 - 120
Endosulfan I	0.200	0.173		ug/L		86	45 - 123
4,4'-DDE	0.200	0.168		ug/L		84	47 - 120
Dieldrin	0.200	0.171		ug/L		85	48 - 122
Endrin	0.200	0.182		ug/L		91	48 - 120
4,4'-DDD	0.200	0.163		ug/L		81	53 - 120
Endosulfan II	0.200	0.166		ug/L		83	24 - 120
4,4'-DDT	0.200	0.153		ug/L		77	39 - 122
gamma-BHC (Lindane)	0.200	0.156		ug/L		78	55 - 120
Endrin aldehyde	0.200	0.201		ug/L		100	26 - 139
trans-Chlordane	0.200	0.162		ug/L		81	48 - 120
Endosulfan sulfate	0.200	0.161		ug/L		81	56 - 120
Heptachlor	0.200	0.158		ug/L		79	35 - 120
Heptachlor epoxide	0.200	0.162		ug/L		81	49 - 120
Endrin ketone	0.200	0.155		ug/L		78	51 - 120
Methoxychlor	0.200	0.171		ug/L		86	44 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	66		50 - 120
Tetrachloro-m-xylene	76		42 - 120

Lab Sample ID: LCS 580-508050/4-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (technical)	1.00	0.612		ug/L		61	39 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	66		50 - 120
Tetrachloro-m-xylene	74		42 - 120

Lab Sample ID: LCS 580-508050/6-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	5.00	2.23	*-	ug/L		45	50 - 150

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 580-508050/6-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508050

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	28	S1-	50 - 120
Tetrachloro-m-xylene	37	S1-	42 - 120

Lab Sample ID: LCS 580-508050/8-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.200	0.181		ug/L		90	50 - 120
2,4'-DDE	0.200	0.186		ug/L		93	50 - 120
2,4'-DDT	0.200	0.176		ug/L		88	50 - 120

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	66		50 - 120
Tetrachloro-m-xylene	64		42 - 120

Lab Sample ID: LCSD 580-508050/3-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
alpha-BHC	0.200	0.150		ug/L		75	54 - 120	1	23
beta-BHC	0.200	0.158		ug/L		79	54 - 120	1	19
Aldrin	0.200	0.159		ug/L		80	25 - 124	1	35
delta-BHC	0.200	0.127		ug/L		64	51 - 120	3	23
cis-Chlordane	0.200	0.154		ug/L		77	48 - 120	2	27
Endosulfan I	0.200	0.174		ug/L		87	45 - 123	1	26
4,4'-DDE	0.200	0.164		ug/L		82	47 - 120	3	25
Dieldrin	0.200	0.169		ug/L		84	48 - 122	1	23
Endrin	0.200	0.172		ug/L		86	48 - 120	5	24
4,4'-DDD	0.200	0.155		ug/L		78	53 - 120	5	19
Endosulfan II	0.200	0.163		ug/L		81	24 - 120	2	26
4,4'-DDT	0.200	0.145		ug/L		73	39 - 122	6	20
gamma-BHC (Lindane)	0.200	0.156		ug/L		78	55 - 120	0	21
Endrin aldehyde	0.200	0.203		ug/L		102	26 - 139	1	35
trans-Chlordane	0.200	0.161		ug/L		80	48 - 120	1	28
Endosulfan sulfate	0.200	0.158		ug/L		79	56 - 120	2	21
Heptachlor	0.200	0.154		ug/L		77	35 - 120	3	26
Heptachlor epoxide	0.200	0.158		ug/L		79	49 - 120	2	24
Endrin ketone	0.200	0.159		ug/L		79	51 - 120	2	25
Methoxychlor	0.200	0.166		ug/L		83	44 - 129	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl	71		50 - 120
Tetrachloro-m-xylene	74		42 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 580-508050/5-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlordane (technical)	1.00	0.689		ug/L		69	39 - 120	12	28
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
DCB Decachlorobiphenyl	73		50 - 120						
Tetrachloro-m-xylene	81		42 - 120						

Lab Sample ID: LCSD 580-508050/7-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toxaphene	5.00	4.61	*1	ug/L		92	50 - 150	70	15
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
DCB Decachlorobiphenyl	59		50 - 120						
Tetrachloro-m-xylene	81		42 - 120						

Lab Sample ID: LCSD 580-508050/9-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508050

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	0.200	0.193		ug/L		96	50 - 120	7	24
2,4'-DDE	0.200	0.202		ug/L		101	50 - 120	9	27
2,4'-DDT	0.200	0.190		ug/L		95	50 - 120	8	26
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
DCB Decachlorobiphenyl	61		50 - 120						
Tetrachloro-m-xylene	81		42 - 120						

Lab Sample ID: MB 580-508143/1-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 508143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		11/11/25 10:00	11/13/25 18:29	1
beta-BHC	ND		0.021	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1
Aldrin	ND		0.024	0.0070	ug/L		11/11/25 10:00	11/13/25 18:29	1
delta-BHC	ND		0.015	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1
cis-Chlordane	ND		0.027	0.0080	ug/L		11/11/25 10:00	11/13/25 18:29	1
Endosulfan I	ND		0.020	0.0030	ug/L		11/11/25 10:00	11/13/25 18:29	1
4,4'-DDE	ND		0.010	0.0030	ug/L		11/11/25 10:00	11/13/25 18:29	1
Dieldrin	ND		0.018	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1
Endrin	ND		0.012	0.0030	ug/L		11/11/25 10:00	11/13/25 18:29	1
4,4'-DDD	ND		0.015	0.0060	ug/L		11/11/25 10:00	11/13/25 18:29	1
Endosulfan II	ND		0.024	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1
4,4'-DDT	ND		0.020	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 580-508143/1-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 508143

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin aldehyde	ND		0.060	0.034	ug/L		11/11/25 10:00	11/13/25 18:29	1
trans-Chlordane	ND		0.020	0.0030	ug/L		11/11/25 10:00	11/13/25 18:29	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		11/11/25 10:00	11/13/25 18:29	1
Heptachlor	ND		0.015	0.0040	ug/L		11/11/25 10:00	11/13/25 18:29	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		11/11/25 10:00	11/13/25 18:29	1
Endrin ketone	ND		0.020	0.0070	ug/L		11/11/25 10:00	11/13/25 18:29	1
Methoxychlor	ND		0.10	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1
Chlordane (technical)	ND		0.20	0.062	ug/L		11/11/25 10:00	11/13/25 18:29	1
Toxaphene	ND		2.0	0.46	ug/L		11/11/25 10:00	11/13/25 18:29	1
2,4'-DDD	ND		0.030	0.0090	ug/L		11/11/25 10:00	11/13/25 18:29	1
2,4'-DDE	ND		0.030	0.0050	ug/L		11/11/25 10:00	11/13/25 18:29	1
2,4'-DDT	ND		0.030	0.0090	ug/L		11/11/25 10:00	11/13/25 18:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	4	S1-	50 - 120	11/11/25 10:00	11/13/25 18:29	1
Tetrachloro-m-xylene	3	S1-	42 - 120	11/11/25 10:00	11/13/25 18:29	1

Lab Sample ID: LCS 580-508143/2-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	5.00	3.74		ug/L		75	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	67		50 - 120
Tetrachloro-m-xylene	76		42 - 120

Lab Sample ID: LCS 580-508143/4-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	0.200	0.112		ug/L		56	54 - 120
beta-BHC	0.200	0.116		ug/L		58	54 - 120
Aldrin	0.200	0.116		ug/L		58	25 - 124
delta-BHC	0.200	0.0936	*-	ug/L		47	51 - 120
cis-Chlordane	0.200	0.113		ug/L		57	48 - 120
Endosulfan I	0.200	0.130		ug/L		65	45 - 123
4,4'-DDE	0.200	0.122		ug/L		61	47 - 120
Dieldrin	0.200	0.126		ug/L		63	48 - 122
Endrin	0.200	0.124		ug/L		62	48 - 120
4,4'-DDD	0.200	0.111		ug/L		56	53 - 120
Endosulfan II	0.200	0.121		ug/L		60	24 - 120
4,4'-DDT	0.200	0.109		ug/L		54	39 - 122
gamma-BHC (Lindane)	0.200	0.116		ug/L		58	55 - 120
Endrin aldehyde	0.200	0.125		ug/L		63	26 - 139
trans-Chlordane	0.200	0.118		ug/L		59	48 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 580-508143/4-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Endosulfan sulfate	0.200	0.118		ug/L		59	56 - 120
Heptachlor	0.200	0.117		ug/L		59	35 - 120
Heptachlor epoxide	0.200	0.122		ug/L		61	49 - 120
Endrin ketone	0.200	0.122		ug/L		61	51 - 120
Methoxychlor	0.200	0.134		ug/L		67	44 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	52		50 - 120
Tetrachloro-m-xylene	54		42 - 120

Lab Sample ID: LCS 580-508143/6-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.200	0.187		ug/L		93	50 - 120
2,4'-DDE	0.200	0.194		ug/L		97	50 - 120
2,4'-DDT	0.200	0.186		ug/L		93	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	61		50 - 120
Tetrachloro-m-xylene	77		42 - 120

Lab Sample ID: LCS 580-508143/8-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (technical)	1.00	0.679		ug/L		68	39 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	75		50 - 120
Tetrachloro-m-xylene	75		42 - 120

Lab Sample ID: LCSD 580-508143/3-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toxaphene	5.00	3.68		ug/L		74	50 - 150	1	15

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	68		50 - 120
Tetrachloro-m-xylene	74		42 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 580-508143/5-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC	0.200	0.154	*1	ug/L		77	54 - 120	31	23
beta-BHC	0.200	0.161	*1	ug/L		80	54 - 120	33	19
Aldrin	0.200	0.164		ug/L		82	25 - 124	34	35
delta-BHC	0.200	0.129	*1	ug/L		64	51 - 120	32	23
cis-Chlordane	0.200	0.161	*1	ug/L		80	48 - 120	35	27
Endosulfan I	0.200	0.179	*1	ug/L		89	45 - 123	32	26
4,4'-DDE	0.200	0.171	*1	ug/L		85	47 - 120	34	25
Dieldrin	0.200	0.174	*1	ug/L		87	48 - 122	32	23
Endrin	0.200	0.178	*1	ug/L		89	48 - 120	36	24
4,4'-DDD	0.200	0.160	*1	ug/L		80	53 - 120	36	19
Endosulfan II	0.200	0.167	*1	ug/L		84	24 - 120	32	26
4,4'-DDT	0.200	0.156	*1	ug/L		78	39 - 122	36	20
gamma-BHC (Lindane)	0.200	0.160	*1	ug/L		80	55 - 120	32	21
Endrin aldehyde	0.200	0.169		ug/L		85	26 - 139	30	35
trans-Chlordane	0.200	0.165	*1	ug/L		83	48 - 120	33	28
Endosulfan sulfate	0.200	0.161	*1	ug/L		81	56 - 120	31	21
Heptachlor	0.200	0.164	*1	ug/L		82	35 - 120	33	26
Heptachlor epoxide	0.200	0.164	*1	ug/L		82	49 - 120	29	24
Endrin ketone	0.200	0.165	*1	ug/L		83	51 - 120	30	25
Methoxychlor	0.200	0.176	*1	ug/L		88	44 - 129	28	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	67		50 - 120
Tetrachloro-m-xylene	76		42 - 120

Lab Sample ID: LCSD 580-508143/7-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	0.200	0.189		ug/L		94	50 - 120	1	24
2,4'-DDE	0.200	0.196		ug/L		98	50 - 120	1	27
2,4'-DDT	0.200	0.188		ug/L		94	50 - 120	1	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	69		50 - 120
Tetrachloro-m-xylene	80		42 - 120

Lab Sample ID: LCSD 580-508143/9-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508143

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlordane (technical)	1.00	0.706		ug/L		71	39 - 120	4	28

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	73		50 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 580-508143/9-A

Matrix: Water

Analysis Batch: 508353

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508143

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Tetrachloro-m-xylene	80		42 - 120

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 570-653852/7

Matrix: Water

Analysis Batch: 653852

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	^+	2.0	0.43	ug/L			11/10/25 14:04	1

Lab Sample ID: LCS 570-653852/8

Matrix: Water

Analysis Batch: 653852

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	24.7	^+	ug/L		99	85 - 115

Lab Sample ID: LCSD 570-653852/9

Matrix: Water

Analysis Batch: 653852

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	23.6	^+	ug/L		94	85 - 115	4	15

Method: 314.0 - Perchlorate (IC) - DL

Lab Sample ID: 580-155538-2 MS

Matrix: Water

Analysis Batch: 653852

Client Sample ID: PMW-02b-110425

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate - DL	ND	^+	250	247	^+	ug/L		99	80 - 120

Lab Sample ID: 580-155538-2 MSD

Matrix: Water

Analysis Batch: 653852

Client Sample ID: PMW-02b-110425

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate - DL	ND	^+	250	254	^+	ug/L		102	80 - 120	3	15

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-508165/41

Matrix: Water

Analysis Batch: 508165

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.669	J	1.5	0.43	mg/L			11/11/25 10:19	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-508165/4

Matrix: Water

Analysis Batch: 508165

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.8		mg/L		102	90 - 110

Lab Sample ID: LCSD 580-508165/5

Matrix: Water

Analysis Batch: 508165

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	50.9		mg/L		102	90 - 110	0	15

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

GC/MS VOA

Analysis Batch: 508115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155538-1	PMW-03b-110425	Total/NA	Water	8260D	
580-155538-2	PMW-02b-110425	Total/NA	Water	8260D	
MB 580-508115/8	Method Blank	Total/NA	Water	8260D	
LCS 580-508115/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-508115/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 508233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155538-3	RB-01-110525	Total/NA	Water	8260D	
580-155538-5	PMW-08g-110525	Total/NA	Water	8260D	
580-155538-6	PMW-08b-110525	Total/NA	Water	8260D	
580-155538-7	TB-110425	Total/NA	Water	8260D	
580-155538-8	DUP-01-110525	Total/NA	Water	8260D	
MB 580-508233/7	Method Blank	Total/NA	Water	8260D	
LCS 580-508233/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-508233/5	Lab Control Sample Dup	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 508050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155538-3	RB-01-110525	Total/NA	Water	3510C	
580-155538-6	PMW-08b-110525	Total/NA	Water	3510C	
MB 580-508050/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-508050/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508050/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508050/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508050/8-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-508050/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508050/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508050/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508050/9-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 508143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155538-1	PMW-03b-110425	Dissolved	Water	3510C	
580-155538-2	PMW-02b-110425	Dissolved	Water	3510C	
580-155538-4	FB-01-110525	Dissolved	Water	3510C	
580-155538-5	PMW-08g-110525	Dissolved	Water	3510C	
580-155538-8	DUP-01-110525	Dissolved	Water	3510C	
MB 580-508143/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-508143/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508143/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508143/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508143/8-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-508143/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508143/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508143/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508143/9-A	Lab Control Sample Dup	Total/NA	Water	3510C	

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

GC Semi VOA

Analysis Batch: 508353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155538-1	PMW-03b-110425	Dissolved	Water	8081B	508143
580-155538-2	PMW-02b-110425	Dissolved	Water	8081B	508143
580-155538-3	RB-01-110525	Total/NA	Water	8081B	508050
580-155538-4	FB-01-110525	Dissolved	Water	8081B	508143
580-155538-5	PMW-08g-110525	Dissolved	Water	8081B	508143
580-155538-6	PMW-08b-110525	Total/NA	Water	8081B	508050
580-155538-8	DUP-01-110525	Dissolved	Water	8081B	508143
MB 580-508050/1-A	Method Blank	Total/NA	Water	8081B	508050
MB 580-508143/1-A	Method Blank	Total/NA	Water	8081B	508143
LCS 580-508050/2-A	Lab Control Sample	Total/NA	Water	8081B	508050
LCS 580-508050/4-A	Lab Control Sample	Total/NA	Water	8081B	508050
LCS 580-508050/6-A	Lab Control Sample	Total/NA	Water	8081B	508050
LCS 580-508050/8-A	Lab Control Sample	Total/NA	Water	8081B	508050
LCS 580-508143/2-A	Lab Control Sample	Total/NA	Water	8081B	508143
LCS 580-508143/4-A	Lab Control Sample	Total/NA	Water	8081B	508143
LCS 580-508143/6-A	Lab Control Sample	Total/NA	Water	8081B	508143
LCS 580-508143/8-A	Lab Control Sample	Total/NA	Water	8081B	508143
LCSD 580-508050/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	508050
LCSD 580-508050/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	508050
LCSD 580-508050/7-A	Lab Control Sample Dup	Total/NA	Water	8081B	508050
LCSD 580-508050/9-A	Lab Control Sample Dup	Total/NA	Water	8081B	508050
LCSD 580-508143/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	508143
LCSD 580-508143/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	508143
LCSD 580-508143/7-A	Lab Control Sample Dup	Total/NA	Water	8081B	508143
LCSD 580-508143/9-A	Lab Control Sample Dup	Total/NA	Water	8081B	508143

HPLC/IC

Analysis Batch: 653852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155538-1 - DL	PMW-03b-110425	Total/NA	Water	314.0	
580-155538-2 - DL	PMW-02b-110425	Total/NA	Water	314.0	
580-155538-3	RB-01-110525	Total/NA	Water	314.0	
580-155538-5 - DL	PMW-08g-110525	Total/NA	Water	314.0	
580-155538-6 - DL	PMW-08b-110525	Total/NA	Water	314.0	
580-155538-8 - DL	DUP-01-110525	Total/NA	Water	314.0	
MB 570-653852/7	Method Blank	Total/NA	Water	314.0	
LCS 570-653852/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-653852/9	Lab Control Sample Dup	Total/NA	Water	314.0	
580-155538-2 MS - DL	PMW-02b-110425	Total/NA	Water	314.0	
580-155538-2 MSD - DL	PMW-02b-110425	Total/NA	Water	314.0	

General Chemistry

Analysis Batch: 508165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155538-1	PMW-03b-110425	Total/NA	Water	300.0	
580-155538-2	PMW-02b-110425	Total/NA	Water	300.0	
580-155538-3	RB-01-110525	Total/NA	Water	300.0	
580-155538-5	PMW-08g-110525	Total/NA	Water	300.0	
580-155538-6	PMW-08b-110525	Total/NA	Water	300.0	
580-155538-8	DUP-01-110525	Total/NA	Water	300.0	

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QC Association Summary

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

General Chemistry (Continued)

Analysis Batch: 508165 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 580-508165/41	Method Blank	Total/NA	Water	300.0	
LCS 580-508165/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-508165/5	Lab Control Sample Dup	Total/NA	Water	300.0	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-03b-110425

Lab Sample ID: 580-155538-1

Date Collected: 11/04/25 13:04

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508115	JBT	EET SEA	11/11/25 06:10
Dissolved	Prep	3510C			508143	J1H	EET SEA	11/11/25 10:00
Dissolved	Analysis	8081B		1	508353	K1K	EET SEA	11/13/25 21:26
Total/NA	Analysis	314.0	DL	5	653852	M5Z3	EET CAL 4	11/10/25 18:17
Total/NA	Analysis	300.0		10	508165	MLT	EET SEA	11/11/25 10:32

Client Sample ID: PMW-02b-110425

Lab Sample ID: 580-155538-2

Date Collected: 11/04/25 15:55

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508115	JBT	EET SEA	11/11/25 05:44
Dissolved	Prep	3510C			508143	J1H	EET SEA	11/11/25 10:00
Dissolved	Analysis	8081B		1	508353	K1K	EET SEA	11/13/25 21:45
Total/NA	Analysis	314.0	DL	10	653852	M5Z3	EET CAL 4	11/10/25 18:58
Total/NA	Analysis	300.0		10	508165	MLT	EET SEA	11/11/25 10:45

Client Sample ID: RB-01-110525

Lab Sample ID: 580-155538-3

Date Collected: 11/05/25 07:10

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508233	AA	EET SEA	11/12/25 14:16
Total/NA	Prep	3510C			508050	J1H	EET SEA	11/10/25 09:29
Total/NA	Analysis	8081B		1	508353	K1K	EET SEA	11/13/25 17:50
Total/NA	Analysis	314.0		1	653852	M5Z3	EET CAL 4	11/10/25 21:02
Total/NA	Analysis	300.0		1	508165	MLT	EET SEA	11/10/25 23:55

Client Sample ID: FB-01-110525

Lab Sample ID: 580-155538-4

Date Collected: 11/05/25 07:51

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3510C			508143	J1H	EET SEA	11/11/25 10:00
Dissolved	Analysis	8081B		1	508353	K1K	EET SEA	11/13/25 22:05

Client Sample ID: PMW-08g-110525

Lab Sample ID: 580-155538-5

Date Collected: 11/05/25 10:30

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508233	AA	EET SEA	11/12/25 19:32
Dissolved	Prep	3510C			508143	J1H	EET SEA	11/11/25 10:00
Dissolved	Analysis	8081B		1	508353	K1K	EET SEA	11/13/25 22:25
Total/NA	Analysis	314.0	DL	10	653852	M5Z3	EET CAL 4	11/10/25 21:44

Eurofins Seattle

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Quarterly 2025 Groundwater Even

Job ID: 580-155538-1

Client Sample ID: PMW-08g-110525

Lab Sample ID: 580-155538-5

Date Collected: 11/05/25 10:30

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		100	508165	MLT	EET SEA	11/11/25 12:28

Client Sample ID: PMW-08b-110525

Lab Sample ID: 580-155538-6

Date Collected: 11/05/25 12:31

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508233	AA	EET SEA	11/12/25 19:55
Total/NA	Prep	3510C			508050	J1H	EET SEA	11/10/25 09:29
Total/NA	Analysis	8081B		1	508353	K1K	EET SEA	11/13/25 18:09
Total/NA	Analysis	314.0	DL	40	653852	M5Z3	EET CAL 4	11/10/25 22:25
Total/NA	Analysis	300.0		500	508165	MLT	EET SEA	11/11/25 12:41

Client Sample ID: TB-110425

Lab Sample ID: 580-155538-7

Date Collected: 11/04/25 00:00

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508233	AA	EET SEA	11/12/25 13:31

Client Sample ID: DUP-01-110525

Lab Sample ID: 580-155538-8

Date Collected: 11/05/25 06:00

Matrix: Water

Date Received: 11/06/25 10:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508233	AA	EET SEA	11/12/25 20:17
Dissolved	Prep	3510C			508143	J1H	EET SEA	11/11/25 10:00
Dissolved	Analysis	8081B		1	508353	K1K	EET SEA	11/13/25 22:45
Total/NA	Analysis	314.0	DL	10	653852	M5Z3	EET CAL 4	11/10/25 23:07
Total/NA	Analysis	300.0		100	508165	MLT	EET SEA	11/11/25 12:54

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ERM-West

Job ID: 580-155538-1

Project/Site: Arkema - Quarterly 2025 Groundwater Even

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4167	07-07-26

Laboratory: Eurofins Calscience

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	7296.01	11-30-26
A2LA	ISO/IEC 17025	7296.01	11-30-26
Alaska (UST)	State	25-005	11-10-25
Arizona	State	AZ0830	11-15-25
California	Los Angeles County Sanitation Districts	9257304	07-31-26
California	SCAQMD LAP	17LA0919	11-30-25
California	State	3082	07-31-26
Kansas	NELAP	E-10420	07-31-26
Nevada	State	CA00111	07-31-26
Oregon	NELAP	4175	02-02-26
USDA	US Federal Programs	525-23-159-97150	06-08-26
Utah	NELAP	CA00111	02-28-26
Washington	State	C916	10-11-26

Sample Summary

Client: ERM-West

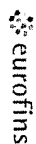
Job ID: 580-155538-1

Project/Site: Arkema - Quarterly 2025 Groundwater Even

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-155538-1	PMW-03b-110425	Water	11/04/25 13:04	11/06/25 10:40	Oregon
580-155538-2	PMW-02b-110425	Water	11/04/25 15:55	11/06/25 10:40	Oregon
580-155538-3	RB-01-110525	Water	11/05/25 07:10	11/06/25 10:40	Oregon
580-155538-4	FB-01-110525	Water	11/05/25 07:51	11/06/25 10:40	Oregon
580-155538-5	PMW-08g-110525	Water	11/05/25 10:30	11/06/25 10:40	Oregon
580-155538-6	PMW-08b-110525	Water	11/05/25 12:31	11/06/25 10:40	Oregon
580-155538-7	TB-110425	Water	11/04/25 00:00	11/06/25 10:40	Oregon
580-155538-8	DUP-01-110525	Water	11/05/25 06:00	11/06/25 10:40	Oregon

Tacoma, WA 98424
Phone: 253-922-2310

Chain of Custody Record



Environment Testing

Client Information		Sampler: FANE PARESH	Lab PM: Caparas Criselda	COC No: 580-72068-22034.8										
Client Contact: Avery Soplat	Phone: 1001.714.8300	E-Mail: Criselda.Caparas@et.eurofinus.com	State of Origin:	Page: Page 8 of 8										
Company: ERM-West		PWSID:	Job #:											
Address: 1050 SW 6th Avenue Suite 1650		Date Date Requested:	Preservation Codas: A-HCL N-None											
City: Portland	State Zip: OR 97204	Compliance Project: STANDARD	Preservation Codas: A-HCL N-None											
Phone: 0732445.207	PO #: 0732445.207	WO #:	580-155538 COC											
Email: avery.soplat@erm.com	Project Name: Alkema - Quarterly 2025 Groundwater Even	Project #: 58016290	Other: 											
Site: SSOW:														
Sample Identification		Sample Date	Sample Time	Sample Type (G=comp, G=grab)	Matrix (W=water, S=solid, O=other, A=air, P=particulate, W=water)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - (MOD) Volatiles, standard list	314.0 - Perchlorate	300.0_28D - (MOD) Local Method	8081B - (MOD) Pesticides, standard list	8081B - FF	Total Number of containers	Special Instructions/Note:
PMW-03b - 110425	11/4/25	1304	G	Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
PMW-02b - 110425	11/4/25	1555	~	Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
RB-01 - 110525	11/5/25	0710		Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
FB-01 - 110525		0751		Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
PMW-08b - 110525		1030		Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
PMW-08b - 110525		1231		Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
TRIP BLANKS				Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
DUP-01 - 110525		0000		Water	X	3	1	1	2	7	8081B FIELD FILTERED	7	8081B FIELD FILTERED	"
Possible Hazard Identification														
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological														
Deliverable Requested: I, II, III, IV, Other (Specify)														
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)														
☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months														
Special Instructions/QC Requirements:														
Empty Kit Relinquished by:														
Relinquished by:														
Relinquished by:														
Relinquished by:														
Custody Seals Intact:														
Custody Seal No.:														
Analysis Requested														
Carrier Tracking No(s):														
Page:														
Page 8 of 8														
Job #:														
Preservation Codas:														
A-HCL														
N-None														
580-155538 COC														
Other:														
QR Code														



Sampling Documentation Form

Client: JAE Oregon

Project: CWS/NPDES Compliance Self-Monitoring

Sampler: Jeremy Morgan

Date & Time: 11/5/25 1020

Sample Matrix: Water

Sampling Method: Composite

Composite Sampling Equipment:

ISCO: X Dipper: _____ Bottle Only: _____

Flow Comp: X Time Comp: _____

Time Interval/Min: 20 Pulses

Comp Samples/day: 48/1

Start Date & Time: 11/4/25 0950

Stop Date & Time: 11/5/25 0950

Field Conditions:

Weather: ☐ Sunny ☐ Partly cloudy ☒ Cloudy ☐ Snowing ☐ Indoors
Rainfall: ☐ Heavy ☐ Normal ☐ Light ☒ Showers ☐ None

Sample Characteristics:

Color: Y/N Odor: Y/N TSS: Y/N
Sediment: Y/N Foam: Y/N Clear: Y/N

Observations and Comments:

Page: 8 of 8

Production Codes:	

Preservation Codes:
A - HCL
N - None

100

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580-15

Other: .

CONCLUSIONS

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Chain of Custody Record

Client Information		Sampler: FAWE PARESH		Lab PM: Caparas, Criselda		Carrier Tracking No(s):		COC No: 580-72068-22034.8	
Client Contact: Avery Soplat		Phone: 601.714.8308		E-Mail: Criselda.Caparas@eurofins.com		Date of Origin:		Page: Page 8 of 8	
Company: ERM-West		PMSID:		Analysis Requested		Job #:		Preservation Codes: A-HCL N-None	
Address: 1050 SW 6th Avenue Suite 1650		Due Date Requested:		TAT Requested (days):		STANDARD		Other: 580-155538 COC	
City: Portland		State, Zip: OR, 97204		Compliance Project: ☐ Yes ☐ No		PO #:		Project #:	
Phone: 0732445.207		MO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers	
Email: avery.soplat@erm.com		Project #:		8260D - (MOD) Volatiles, standard list		314.0 - Perchlorate		300.0_28D - (MOD) Local Method	
Project Name: Artema - Quarterly 2025 Groundwater Even		SSOW#:		8081B - (MOD) Pesticides, standard list		8081B - FF		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=wastewater, BT=tissue, AA=air, DW=drinking water)	
PMW-03b - 110425		11/4/25		1304		G		Water	
PMW-02b - 110425		11/4/25		1555		G		Water	
RB-01 - 110525		11/5/25		0710		G		Water	
FB-01 - 110525		0751		1030		G		Water	
PMW-08g - 110525		1231		1231		G		Water	
TRIP BLANKS		DUDD							
DUP-01 - 110525									
Possible Hazard Identification		Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological ☐		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months			
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:		Date/Time: 11/5/25		Company: M.E.		Received by:		Date/Time: 11/6/25	
Relinquished by:		Date/Time: 11/6/25		Company: M.E.		Received by:		Date/Time: 11/6/25	
Relinquished by:		Date/Time: 11/6/25		Company: M.E.		Received by:		Date/Time: 11/6/25	
Custody Seals Intact: ☐ Yes ☐ No		Jostody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		48/45 POK & IA		Ver: 10/10/2024	

155538

1-800-155538 Chair of

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-155538-1

Login Number: 155538

List Number: 1

Creator: O'Connell, Jason I

List Source: Eurofins Seattle

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	No sample date on COC, logged in per container labels.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No date on COC, logged in per container labels.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-155538-1

Login Number: 155538

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 11/10/25 02:08 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Avery Soplata
ERM-West
1050 SW 6th Avenue
Suite 1650
Portland, Oregon 97204
Generated 11/20/2025 11:45:23 AM

JOB DESCRIPTION

Arkema-Quarterly 2025 Groundwater Event

JOB NUMBER

580-155638-1

Eurofins Seattle

Job Notes

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The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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11/20/2025 11:45:23 AM

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Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	24
QC Association	43
Chronicle	45
Certification Summary	47
Sample Summary	48
Chain of Custody	49
Receipt Checklists	51



Case Narrative

Client: ERM-West
Project: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Job ID: 580-155638-1

Eurofins Seattle

Job Narrative 580-155638-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 11/10/2025 11:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.7°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-508533 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:PMW-20g-110625 (580-155638-1), PMW-19g-110625 (580-155638-2) and (CCVIS 580-508533/3).

Method 8260D: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for analytical batch 580-508533 recovered outside control limits for the following analytes: Methylene Chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-508643 recovered outside acceptance criteria, low biased, for Carbon tetrachloride, trans-1,3-Dichloropropene, 1,1,2-Trichloroethane, Tetrachloroethene, 1,3-Dichloropropane, Chlorodibromomethane, Ethylene Dibromide, 1,1,1,2-Tetrachloroethane, Bromoform, 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane, n-Butylbenzene, 1,2-Dibromo-3-Chloropropane, 1,2,4-Trichlorobenzene and Naphthalene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-508643 recovered above the upper control limit for Methylene Chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are:PMW-19b-110625 (580-155638-3), PMW-01b-110725 (580-155638-4), PMW-01g-110725 (580-155638-5), TB-110625 (580-155638-6) and (CCVIS 580-508643/3).

Method 8260D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 580-508643 recovered outside control limits for the following analytes: Methylene Chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 8081B - Dissolved: The laboratory control sample (LCS) recovery for delta-BHC was outside the lower control limit. The laboratory control sample duplicate recovered within control limits; therefore re-extraction and/or re-analysis was not performed and the data was reported.

(LCS 580-508227/4-A)

Method 8081B - Dissolved: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 580-508227 and analytical batch 580-508787 recovered outside control limits for the following analytes: beta-BHC, 4,4'-DDD, 4,4'-DDT, Endosulfan sulfate, Methoxychlor, Endrin ketone and Toxaphene. The batch MS/MSD are in control; therefore data is reported.

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Case Narrative

Client: ERM-West
Project: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Job ID: 580-155638-1 (Continued)

Eurofins Seattle

Method 8081B - Dissolved: The following samples required a copper clean-up (Cu_Powder_00001), via EPA Method 3660B, to reduce matrix interferences: PMW-20g-110625 (580-155638-1), PMW-20g-110625 (580-155638-1[MS]), PMW-20g-110625 (580-155638-1[MSD]), PMW-19g-110625 (580-155638-2), PMW-19b-110625 (580-155638-3), PMW-01b-110725 (580-155638-4), PMW-01g-110725 (580-155638-5), (LCS 580-508227/2-A), (LCS 580-508227/4-A), (LCS 580-508227/6-A), (LCS 580-508227/8-A), (LCSD 580-508227/3-A), (LCSD 580-508227/5-A), (LCSD 580-508227/7-A), (LCSD 580-508227/9-A) and (MB 580-508227/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 314.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 570-657433 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 300.0_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 580-508543 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300.0_28D: The method blank for analytical batch 580-508543 contained above the method detection limit (MDL) This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Definitions/Glossary

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-20g-110625

Lab Sample ID: 580-155638-1

Date Collected: 11/06/25 11:25

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/15/25 06:56	1
Chloromethane	ND		1.0	0.23	ug/L			11/15/25 06:56	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/15/25 06:56	1
Bromomethane	ND		1.0	0.35	ug/L			11/15/25 06:56	1
Chloroethane	ND		1.0	0.34	ug/L			11/15/25 06:56	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/15/25 06:56	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/15/25 06:56	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/15/25 06:56	1
Acetone	ND		25	11	ug/L			11/15/25 06:56	1
Methylene Chloride	ND	+	15	6.8	ug/L			11/15/25 06:56	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/15/25 06:56	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/15/25 06:56	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/15/25 06:56	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/15/25 06:56	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/15/25 06:56	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/15/25 06:56	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/15/25 06:56	1
Chloroform	ND		1.0	0.11	ug/L			11/15/25 06:56	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/15/25 06:56	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/15/25 06:56	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/15/25 06:56	1
Benzene	ND		1.0	0.47	ug/L			11/15/25 06:56	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/15/25 06:56	1
Trichloroethene	ND		1.0	0.27	ug/L			11/15/25 06:56	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/15/25 06:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/15/25 06:56	1
Dibromomethane	ND		1.0	0.28	ug/L			11/15/25 06:56	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/15/25 06:56	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/15/25 06:56	1
Toluene	ND		1.0	0.21	ug/L			11/15/25 06:56	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/15/25 06:56	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/15/25 06:56	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/15/25 06:56	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/15/25 06:56	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/15/25 06:56	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/15/25 06:56	1
Chlorobenzene	1.2		1.0	0.22	ug/L			11/15/25 06:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/15/25 06:56	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/15/25 06:56	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/15/25 06:56	1
o-Xylene	ND		1.0	0.22	ug/L			11/15/25 06:56	1
Styrene	ND		1.0	0.41	ug/L			11/15/25 06:56	1
Bromoform	ND		1.0	0.46	ug/L			11/15/25 06:56	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/15/25 06:56	1
Bromobenzene	ND		1.0	0.18	ug/L			11/15/25 06:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/15/25 06:56	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/15/25 06:56	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/15/25 06:56	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/15/25 06:56	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-20g-110625

Lab Sample ID: 580-155638-1

Date Collected: 11/06/25 11:25

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/15/25 06:56	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/15/25 06:56	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/15/25 06:56	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/15/25 06:56	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/15/25 06:56	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/15/25 06:56	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/15/25 06:56	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/15/25 06:56	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/15/25 06:56	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/15/25 06:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/15/25 06:56	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/15/25 06:56	1
Naphthalene	ND		3.0	1.4	ug/L			11/15/25 06:56	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/15/25 06:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/15/25 06:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/15/25 06:56	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		11/15/25 06:56	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/15/25 06:56	1
Dibromofluoromethane (Surr)	100		80 - 120		11/15/25 06:56	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.017	0.0037	ug/L		11/12/25 10:02	11/19/25 20:38	1
gamma-BHC (Lindane)	ND		0.019	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
beta-BHC	ND	*1	0.019	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
delta-BHC	ND	*-	0.014	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
Heptachlor	ND		0.014	0.0037	ug/L		11/12/25 10:02	11/19/25 20:38	1
Aldrin	ND		0.022	0.0065	ug/L		11/12/25 10:02	11/19/25 20:38	1
Heptachlor epoxide	ND		0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 20:38	1
trans-Chlordane	ND		0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 20:38	1
cis-Chlordane	ND		0.025	0.0074	ug/L		11/12/25 10:02	11/19/25 20:38	1
Endosulfan I	ND		0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 20:38	1
4,4'-DDE	ND		0.0093	0.0028	ug/L		11/12/25 10:02	11/19/25 20:38	1
Dieldrin	ND		0.017	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
Endrin	ND		0.011	0.0028	ug/L		11/12/25 10:02	11/19/25 20:38	1
4,4'-DDD	ND	*1	0.014	0.0056	ug/L		11/12/25 10:02	11/19/25 20:38	1
Endosulfan II	ND		0.022	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
4,4'-DDT	ND	*1	0.019	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
Endrin aldehyde	ND		0.056	0.031	ug/L		11/12/25 10:02	11/19/25 20:38	1
Endosulfan sulfate	ND	*1	0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 20:38	1
Methoxychlor	ND	*1	0.093	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
Endrin ketone	ND	*1	0.019	0.0065	ug/L		11/12/25 10:02	11/19/25 20:38	1
Toxaphene	ND	*1	1.9	0.43	ug/L		11/12/25 10:02	11/19/25 20:38	1
Chlordane (technical)	ND		0.19	0.057	ug/L		11/12/25 10:02	11/19/25 20:38	1
2,4'-DDD	ND		0.028	0.0083	ug/L		11/12/25 10:02	11/19/25 20:38	1
2,4'-DDE	ND		0.028	0.0046	ug/L		11/12/25 10:02	11/19/25 20:38	1
2,4'-DDT	ND		0.028	0.0083	ug/L		11/12/25 10:02	11/19/25 20:38	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-20g-110625

Lab Sample ID: 580-155638-1

Date Collected: 11/06/25 11:25

Matrix: Water

Date Received: 11/10/25 11:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	62		42 - 120	11/12/25 10:02	11/19/25 20:38	1
DCB Decachlorobiphenyl	54		50 - 120	11/12/25 10:02	11/19/25 20:38	1

Method: EPA 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	4.0	F1	2.0	0.43	ug/L	-		11/17/25 17:01	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	180	B F1	7.5	2.2	mg/L	-		11/14/25 23:12	5

Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-19g-110625

Lab Sample ID: 580-155638-2

Date Collected: 11/06/25 14:24

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/15/25 08:04	1
Chloromethane	ND		1.0	0.23	ug/L			11/15/25 08:04	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/15/25 08:04	1
Bromomethane	ND		1.0	0.35	ug/L			11/15/25 08:04	1
Chloroethane	ND		1.0	0.34	ug/L			11/15/25 08:04	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/15/25 08:04	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/15/25 08:04	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/15/25 08:04	1
Acetone	ND		25	11	ug/L			11/15/25 08:04	1
Methylene Chloride	ND	*+	15	6.8	ug/L			11/15/25 08:04	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/15/25 08:04	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/15/25 08:04	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/15/25 08:04	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/15/25 08:04	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/15/25 08:04	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/15/25 08:04	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/15/25 08:04	1
Chloroform	0.16	J	1.0	0.11	ug/L			11/15/25 08:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/15/25 08:04	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/15/25 08:04	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/15/25 08:04	1
Benzene	ND		1.0	0.47	ug/L			11/15/25 08:04	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/15/25 08:04	1
Trichloroethene	ND		1.0	0.27	ug/L			11/15/25 08:04	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/15/25 08:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/15/25 08:04	1
Dibromomethane	ND		1.0	0.28	ug/L			11/15/25 08:04	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/15/25 08:04	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/15/25 08:04	1
Toluene	ND		1.0	0.21	ug/L			11/15/25 08:04	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/15/25 08:04	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/15/25 08:04	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/15/25 08:04	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/15/25 08:04	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/15/25 08:04	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/15/25 08:04	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/15/25 08:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/15/25 08:04	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/15/25 08:04	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/15/25 08:04	1
o-Xylene	ND		1.0	0.22	ug/L			11/15/25 08:04	1
Styrene	ND		1.0	0.41	ug/L			11/15/25 08:04	1
Bromoform	ND		1.0	0.46	ug/L			11/15/25 08:04	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/15/25 08:04	1
Bromobenzene	ND		1.0	0.18	ug/L			11/15/25 08:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/15/25 08:04	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/15/25 08:04	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/15/25 08:04	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/15/25 08:04	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-19g-110625

Lab Sample ID: 580-155638-2

Date Collected: 11/06/25 14:24

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/15/25 08:04	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/15/25 08:04	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/15/25 08:04	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/15/25 08:04	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/15/25 08:04	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/15/25 08:04	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/15/25 08:04	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/15/25 08:04	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/15/25 08:04	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/15/25 08:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/15/25 08:04	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/15/25 08:04	1
Naphthalene	ND		3.0	1.4	ug/L			11/15/25 08:04	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/15/25 08:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/15/25 08:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/15/25 08:04	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/15/25 08:04	1
4-Bromofluorobenzene (Surr)	101		80 - 120		11/15/25 08:04	1
Dibromofluoromethane (Surr)	106		80 - 120		11/15/25 08:04	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.019	0.0041	ug/L		11/12/25 10:02	11/19/25 21:37	1
gamma-BHC (Lindane)	ND		0.021	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
beta-BHC	ND	*1	0.022	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
delta-BHC	ND	*-	0.016	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
Heptachlor	ND		0.016	0.0041	ug/L		11/12/25 10:02	11/19/25 21:37	1
Aldrin	ND		0.025	0.0072	ug/L		11/12/25 10:02	11/19/25 21:37	1
Heptachlor epoxide	ND		0.021	0.0031	ug/L		11/12/25 10:02	11/19/25 21:37	1
trans-Chlordane	ND		0.021	0.0031	ug/L		11/12/25 10:02	11/19/25 21:37	1
cis-Chlordane	ND		0.028	0.0083	ug/L		11/12/25 10:02	11/19/25 21:37	1
Endosulfan I	ND		0.021	0.0031	ug/L		11/12/25 10:02	11/19/25 21:37	1
4,4'-DDE	ND		0.010	0.0031	ug/L		11/12/25 10:02	11/19/25 21:37	1
Dieldrin	ND		0.019	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
Endrin	ND		0.012	0.0031	ug/L		11/12/25 10:02	11/19/25 21:37	1
4,4'-DDD	ND	*1	0.016	0.0062	ug/L		11/12/25 10:02	11/19/25 21:37	1
Endosulfan II	ND		0.025	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
4,4'-DDT	ND	*1	0.021	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
Endrin aldehyde	ND		0.062	0.035	ug/L		11/12/25 10:02	11/19/25 21:37	1
Endosulfan sulfate	ND	*1	0.021	0.0031	ug/L		11/12/25 10:02	11/19/25 21:37	1
Methoxychlor	ND	*1	0.10	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
Endrin ketone	ND	*1	0.021	0.0072	ug/L		11/12/25 10:02	11/19/25 21:37	1
Toxaphene	ND	*1	2.1	0.48	ug/L		11/12/25 10:02	11/19/25 21:37	1
Chlordane (technical)	ND		0.21	0.064	ug/L		11/12/25 10:02	11/19/25 21:37	1
2,4'-DDD	ND		0.031	0.0093	ug/L		11/12/25 10:02	11/19/25 21:37	1
2,4'-DDE	ND		0.031	0.0052	ug/L		11/12/25 10:02	11/19/25 21:37	1
2,4'-DDT	ND		0.031	0.0093	ug/L		11/12/25 10:02	11/19/25 21:37	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-19g-110625

Lab Sample ID: 580-155638-2

Date Collected: 11/06/25 14:24

Matrix: Water

Date Received: 11/10/25 11:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		42 - 120	11/12/25 10:02	11/19/25 21:37	1
DCB Decachlorobiphenyl	61		50 - 120	11/12/25 10:02	11/19/25 21:37	1

Method: EPA 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	1.9	J	2.0	0.43	ug/L	-		11/17/25 18:42	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	260	B	7.5	2.2	mg/L	-		11/15/25 00:04	5

Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-19b-110625

Lab Sample ID: 580-155638-3

Date Collected: 11/06/25 16:08

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/18/25 03:53	1
Chloromethane	ND		1.0	0.23	ug/L			11/18/25 03:53	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/18/25 03:53	1
Bromomethane	ND		1.0	0.35	ug/L			11/18/25 03:53	1
Chloroethane	ND		1.0	0.34	ug/L			11/18/25 03:53	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/18/25 03:53	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/18/25 03:53	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/18/25 03:53	1
Acetone	ND		25	11	ug/L			11/18/25 03:53	1
Methylene Chloride	ND	*+	15	6.8	ug/L			11/18/25 03:53	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/18/25 03:53	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/18/25 03:53	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/18/25 03:53	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/18/25 03:53	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/18/25 03:53	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/18/25 03:53	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/18/25 03:53	1
Chloroform	0.43	J	1.0	0.11	ug/L			11/18/25 03:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/18/25 03:53	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/18/25 03:53	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/18/25 03:53	1
Benzene	ND		1.0	0.47	ug/L			11/18/25 03:53	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/18/25 03:53	1
Trichloroethene	ND		1.0	0.27	ug/L			11/18/25 03:53	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/18/25 03:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/18/25 03:53	1
Dibromomethane	ND		1.0	0.28	ug/L			11/18/25 03:53	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/18/25 03:53	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/18/25 03:53	1
Toluene	ND		1.0	0.21	ug/L			11/18/25 03:53	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/18/25 03:53	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/18/25 03:53	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/18/25 03:53	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/18/25 03:53	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/18/25 03:53	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/18/25 03:53	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/18/25 03:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/18/25 03:53	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/18/25 03:53	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/18/25 03:53	1
o-Xylene	ND		1.0	0.22	ug/L			11/18/25 03:53	1
Styrene	ND		1.0	0.41	ug/L			11/18/25 03:53	1
Bromoform	ND		1.0	0.46	ug/L			11/18/25 03:53	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/18/25 03:53	1
Bromobenzene	ND		1.0	0.18	ug/L			11/18/25 03:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/18/25 03:53	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/18/25 03:53	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/18/25 03:53	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/18/25 03:53	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-19b-110625

Lab Sample ID: 580-155638-3

Date Collected: 11/06/25 16:08

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/18/25 03:53	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/18/25 03:53	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/18/25 03:53	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/18/25 03:53	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/18/25 03:53	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 03:53	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/18/25 03:53	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/18/25 03:53	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 03:53	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/18/25 03:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/18/25 03:53	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/18/25 03:53	1
Naphthalene	ND		3.0	1.4	ug/L			11/18/25 03:53	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/18/25 03:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/18/25 03:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/18/25 03:53	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		11/18/25 03:53	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/18/25 03:53	1
Dibromofluoromethane (Surr)	104		80 - 120		11/18/25 03:53	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0039	ug/L		11/12/25 10:02	11/19/25 21:56	1
gamma-BHC (Lindane)	ND		0.020	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
beta-BHC	ND	*1	0.021	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
delta-BHC	ND	*-	0.015	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
Heptachlor	ND		0.015	0.0039	ug/L		11/12/25 10:02	11/19/25 21:56	1
Aldrin	ND		0.023	0.0068	ug/L		11/12/25 10:02	11/19/25 21:56	1
Heptachlor epoxide	ND		0.020	0.0029	ug/L		11/12/25 10:02	11/19/25 21:56	1
trans-Chlordane	ND		0.020	0.0029	ug/L		11/12/25 10:02	11/19/25 21:56	1
cis-Chlordane	ND		0.026	0.0078	ug/L		11/12/25 10:02	11/19/25 21:56	1
Endosulfan I	ND		0.020	0.0029	ug/L		11/12/25 10:02	11/19/25 21:56	1
4,4'-DDE	ND		0.0098	0.0029	ug/L		11/12/25 10:02	11/19/25 21:56	1
Dieldrin	ND		0.018	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
Endrin	ND		0.012	0.0029	ug/L		11/12/25 10:02	11/19/25 21:56	1
4,4'-DDD	ND	*1	0.015	0.0059	ug/L		11/12/25 10:02	11/19/25 21:56	1
Endosulfan II	ND		0.023	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
4,4'-DDT	ND	*1	0.020	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
Endrin aldehyde	ND		0.059	0.033	ug/L		11/12/25 10:02	11/19/25 21:56	1
Endosulfan sulfate	ND	*1	0.020	0.0029	ug/L		11/12/25 10:02	11/19/25 21:56	1
Methoxychlor	ND	*1	0.098	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
Endrin ketone	ND	*1	0.020	0.0068	ug/L		11/12/25 10:02	11/19/25 21:56	1
Toxaphene	ND	*1	2.0	0.45	ug/L		11/12/25 10:02	11/19/25 21:56	1
Chlordane (technical)	ND		0.20	0.061	ug/L		11/12/25 10:02	11/19/25 21:56	1
2,4'-DDD	ND		0.029	0.0088	ug/L		11/12/25 10:02	11/19/25 21:56	1
2,4'-DDE	ND		0.029	0.0049	ug/L		11/12/25 10:02	11/19/25 21:56	1
2,4'-DDT	ND		0.029	0.0088	ug/L		11/12/25 10:02	11/19/25 21:56	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-19b-110625

Lab Sample ID: 580-155638-3

Date Collected: 11/06/25 16:08

Matrix: Water

Date Received: 11/10/25 11:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	78		42 - 120	11/12/25 10:02	11/19/25 21:56	1
DCB Decachlorobiphenyl	69		50 - 120	11/12/25 10:02	11/19/25 21:56	1

Method: EPA 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L	-		11/17/25 19:15	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	400	B	7.5	2.2	mg/L	-		11/15/25 00:30	5

Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-01b-110725

Lab Sample ID: 580-155638-4

Date Collected: 11/07/25 09:00

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/18/25 04:38	1
Chloromethane	ND		1.0	0.23	ug/L			11/18/25 04:38	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/18/25 04:38	1
Bromomethane	ND		1.0	0.35	ug/L			11/18/25 04:38	1
Chloroethane	ND		1.0	0.34	ug/L			11/18/25 04:38	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/18/25 04:38	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/18/25 04:38	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/18/25 04:38	1
Acetone	ND		25	11	ug/L			11/18/25 04:38	1
Methylene Chloride	ND	*+	15	6.8	ug/L			11/18/25 04:38	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/18/25 04:38	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/18/25 04:38	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/18/25 04:38	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/18/25 04:38	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/18/25 04:38	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/18/25 04:38	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/18/25 04:38	1
Chloroform	ND		1.0	0.11	ug/L			11/18/25 04:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/18/25 04:38	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/18/25 04:38	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/18/25 04:38	1
Benzene	ND		1.0	0.47	ug/L			11/18/25 04:38	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/18/25 04:38	1
Trichloroethene	ND		1.0	0.27	ug/L			11/18/25 04:38	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/18/25 04:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/18/25 04:38	1
Dibromomethane	ND		1.0	0.28	ug/L			11/18/25 04:38	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/18/25 04:38	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/18/25 04:38	1
Toluene	ND		1.0	0.21	ug/L			11/18/25 04:38	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/18/25 04:38	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/18/25 04:38	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/18/25 04:38	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/18/25 04:38	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/18/25 04:38	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/18/25 04:38	1
Chlorobenzene	1.8		1.0	0.22	ug/L			11/18/25 04:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/18/25 04:38	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/18/25 04:38	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/18/25 04:38	1
o-Xylene	ND		1.0	0.22	ug/L			11/18/25 04:38	1
Styrene	ND		1.0	0.41	ug/L			11/18/25 04:38	1
Bromoform	ND		1.0	0.46	ug/L			11/18/25 04:38	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/18/25 04:38	1
Bromobenzene	ND		1.0	0.18	ug/L			11/18/25 04:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/18/25 04:38	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/18/25 04:38	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/18/25 04:38	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/18/25 04:38	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-01b-110725

Lab Sample ID: 580-155638-4

Date Collected: 11/07/25 09:00

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/18/25 04:38	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/18/25 04:38	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/18/25 04:38	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/18/25 04:38	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/18/25 04:38	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 04:38	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/18/25 04:38	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/18/25 04:38	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 04:38	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/18/25 04:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/18/25 04:38	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/18/25 04:38	1
Naphthalene	ND		3.0	1.4	ug/L			11/18/25 04:38	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/18/25 04:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/18/25 04:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/18/25 04:38	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		11/18/25 04:38	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/18/25 04:38	1
Dibromofluoromethane (Surr)	98		80 - 120		11/18/25 04:38	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		11/12/25 10:02	11/19/25 22:16	1
gamma-BHC (Lindane)	ND		0.020	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
beta-BHC	ND	*1	0.021	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
delta-BHC	ND	*-	0.015	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
Heptachlor	ND		0.015	0.0040	ug/L		11/12/25 10:02	11/19/25 22:16	1
Aldrin	ND		0.024	0.0071	ug/L		11/12/25 10:02	11/19/25 22:16	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 22:16	1
trans-Chlordane	ND		0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 22:16	1
cis-Chlordane	ND		0.027	0.0081	ug/L		11/12/25 10:02	11/19/25 22:16	1
Endosulfan I	ND		0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 22:16	1
4,4'-DDE	ND		0.010	0.0030	ug/L		11/12/25 10:02	11/19/25 22:16	1
Dieldrin	ND		0.018	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
Endrin	ND		0.012	0.0030	ug/L		11/12/25 10:02	11/19/25 22:16	1
4,4'-DDD	ND	*1	0.015	0.0061	ug/L		11/12/25 10:02	11/19/25 22:16	1
Endosulfan II	ND		0.024	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
4,4'-DDT	ND	*1	0.020	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
Endrin aldehyde	ND		0.061	0.034	ug/L		11/12/25 10:02	11/19/25 22:16	1
Endosulfan sulfate	ND	*1	0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 22:16	1
Methoxychlor	ND	*1	0.10	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
Endrin ketone	ND	*1	0.020	0.0071	ug/L		11/12/25 10:02	11/19/25 22:16	1
Toxaphene	ND	*1	2.0	0.47	ug/L		11/12/25 10:02	11/19/25 22:16	1
Chlordane (technical)	ND		0.20	0.063	ug/L		11/12/25 10:02	11/19/25 22:16	1
2,4'-DDD	ND		0.030	0.0091	ug/L		11/12/25 10:02	11/19/25 22:16	1
2,4'-DDE	ND		0.030	0.0051	ug/L		11/12/25 10:02	11/19/25 22:16	1
2,4'-DDT	ND		0.030	0.0091	ug/L		11/12/25 10:02	11/19/25 22:16	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-01b-110725

Lab Sample ID: 580-155638-4

Date Collected: 11/07/25 09:00

Matrix: Water

Date Received: 11/10/25 11:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		42 - 120	11/12/25 10:02	11/19/25 22:16	1
DCB Decachlorobiphenyl	69		50 - 120	11/12/25 10:02	11/19/25 22:16	1

Method: EPA 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L	-		11/17/25 19:49	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	77	B	1.5	0.43	mg/L	-		11/15/25 00:43	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-01g-110725

Lab Sample ID: 580-155638-5

Date Collected: 11/07/25 11:20

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/18/25 04:16	1
Chloromethane	ND		1.0	0.23	ug/L			11/18/25 04:16	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/18/25 04:16	1
Bromomethane	ND		1.0	0.35	ug/L			11/18/25 04:16	1
Chloroethane	ND		1.0	0.34	ug/L			11/18/25 04:16	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/18/25 04:16	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/18/25 04:16	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/18/25 04:16	1
Acetone	ND		25	11	ug/L			11/18/25 04:16	1
Methylene Chloride	ND	*+	15	6.8	ug/L			11/18/25 04:16	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/18/25 04:16	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/18/25 04:16	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/18/25 04:16	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/18/25 04:16	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/18/25 04:16	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/18/25 04:16	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/18/25 04:16	1
Chloroform	ND		1.0	0.11	ug/L			11/18/25 04:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/18/25 04:16	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/18/25 04:16	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/18/25 04:16	1
Benzene	ND		1.0	0.47	ug/L			11/18/25 04:16	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/18/25 04:16	1
Trichloroethene	ND		1.0	0.27	ug/L			11/18/25 04:16	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/18/25 04:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/18/25 04:16	1
Dibromomethane	ND		1.0	0.28	ug/L			11/18/25 04:16	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/18/25 04:16	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/18/25 04:16	1
Toluene	ND		1.0	0.21	ug/L			11/18/25 04:16	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/18/25 04:16	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/18/25 04:16	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/18/25 04:16	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/18/25 04:16	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/18/25 04:16	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/18/25 04:16	1
Chlorobenzene	2.7		1.0	0.22	ug/L			11/18/25 04:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/18/25 04:16	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/18/25 04:16	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/18/25 04:16	1
o-Xylene	ND		1.0	0.22	ug/L			11/18/25 04:16	1
Styrene	ND		1.0	0.41	ug/L			11/18/25 04:16	1
Bromoform	ND		1.0	0.46	ug/L			11/18/25 04:16	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/18/25 04:16	1
Bromobenzene	ND		1.0	0.18	ug/L			11/18/25 04:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/18/25 04:16	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/18/25 04:16	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/18/25 04:16	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/18/25 04:16	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-01g-110725

Lab Sample ID: 580-155638-5

Date Collected: 11/07/25 11:20

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/18/25 04:16	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/18/25 04:16	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/18/25 04:16	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/18/25 04:16	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/18/25 04:16	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 04:16	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/18/25 04:16	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/18/25 04:16	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 04:16	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/18/25 04:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/18/25 04:16	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/18/25 04:16	1
Naphthalene	ND		3.0	1.4	ug/L			11/18/25 04:16	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/18/25 04:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/18/25 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		11/18/25 04:16	1
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		11/18/25 04:16	1
4-Bromofluorobenzene (Surr)	100		80 - 120		11/18/25 04:16	1
Dibromofluoromethane (Surr)	104		80 - 120		11/18/25 04:16	1

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.017	0.0038	ug/L		11/12/25 10:02	11/19/25 22:36	1
gamma-BHC (Lindane)	ND		0.019	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
beta-BHC	ND	*1	0.020	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
delta-BHC	ND	*-	0.014	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
Heptachlor	ND		0.014	0.0038	ug/L		11/12/25 10:02	11/19/25 22:36	1
Aldrin	ND		0.023	0.0066	ug/L		11/12/25 10:02	11/19/25 22:36	1
Heptachlor epoxide	ND		0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 22:36	1
trans-Chlordane	ND		0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 22:36	1
cis-Chlordane	ND		0.025	0.0075	ug/L		11/12/25 10:02	11/19/25 22:36	1
Endosulfan I	ND		0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 22:36	1
4,4'-DDE	ND		0.0094	0.0028	ug/L		11/12/25 10:02	11/19/25 22:36	1
Dieldrin	ND		0.017	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
Endrin	ND		0.011	0.0028	ug/L		11/12/25 10:02	11/19/25 22:36	1
4,4'-DDD	ND	*1	0.014	0.0056	ug/L		11/12/25 10:02	11/19/25 22:36	1
Endosulfan II	ND		0.023	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
4,4'-DDT	ND	*1	0.019	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
Endrin aldehyde	ND		0.056	0.032	ug/L		11/12/25 10:02	11/19/25 22:36	1
Endosulfan sulfate	ND	*1	0.019	0.0028	ug/L		11/12/25 10:02	11/19/25 22:36	1
Methoxychlor	ND	*1	0.094	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
Endrin ketone	ND	*1	0.019	0.0066	ug/L		11/12/25 10:02	11/19/25 22:36	1
Toxaphene	ND	*1	1.9	0.43	ug/L		11/12/25 10:02	11/19/25 22:36	1
Chlordane (technical)	ND		0.19	0.058	ug/L		11/12/25 10:02	11/19/25 22:36	1
2,4'-DDD	ND		0.028	0.0085	ug/L		11/12/25 10:02	11/19/25 22:36	1
2,4'-DDE	ND		0.028	0.0047	ug/L		11/12/25 10:02	11/19/25 22:36	1
2,4'-DDT	ND		0.028	0.0085	ug/L		11/12/25 10:02	11/19/25 22:36	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-01g-110725

Lab Sample ID: 580-155638-5

Date Collected: 11/07/25 11:20

Matrix: Water

Date Received: 11/10/25 11:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		42 - 120	11/12/25 10:02	11/19/25 22:36	1
DCB Decachlorobiphenyl	64		50 - 120	11/12/25 10:02	11/19/25 22:36	1

Method: EPA 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	2.2		2.0	0.43	ug/L	-		11/17/25 20:31	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	76	B	1.5	0.43	mg/L	-		11/15/25 01:34	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: TB-110625

Lab Sample ID: 580-155638-6

Date Collected: 11/06/25 00:00

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/18/25 01:37	1
Chloromethane	ND		1.0	0.23	ug/L			11/18/25 01:37	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/18/25 01:37	1
Bromomethane	ND		1.0	0.35	ug/L			11/18/25 01:37	1
Chloroethane	ND		1.0	0.34	ug/L			11/18/25 01:37	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/18/25 01:37	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/18/25 01:37	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/18/25 01:37	1
Acetone	ND		25	11	ug/L			11/18/25 01:37	1
Methylene Chloride	ND	*+	15	6.8	ug/L			11/18/25 01:37	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/18/25 01:37	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/18/25 01:37	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/18/25 01:37	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/18/25 01:37	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/18/25 01:37	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/18/25 01:37	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/18/25 01:37	1
Chloroform	ND		1.0	0.11	ug/L			11/18/25 01:37	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/18/25 01:37	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/18/25 01:37	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/18/25 01:37	1
Benzene	ND		1.0	0.47	ug/L			11/18/25 01:37	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/18/25 01:37	1
Trichloroethene	ND		1.0	0.27	ug/L			11/18/25 01:37	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/18/25 01:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/18/25 01:37	1
Dibromomethane	ND		1.0	0.28	ug/L			11/18/25 01:37	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/18/25 01:37	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/18/25 01:37	1
Toluene	ND		1.0	0.21	ug/L			11/18/25 01:37	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/18/25 01:37	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/18/25 01:37	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/18/25 01:37	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/18/25 01:37	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/18/25 01:37	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/18/25 01:37	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/18/25 01:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/18/25 01:37	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/18/25 01:37	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/18/25 01:37	1
o-Xylene	ND		1.0	0.22	ug/L			11/18/25 01:37	1
Styrene	ND		1.0	0.41	ug/L			11/18/25 01:37	1
Bromoform	ND		1.0	0.46	ug/L			11/18/25 01:37	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/18/25 01:37	1
Bromobenzene	ND		1.0	0.18	ug/L			11/18/25 01:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/18/25 01:37	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/18/25 01:37	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/18/25 01:37	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/18/25 01:37	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: TB-110625

Lab Sample ID: 580-155638-6

Date Collected: 11/06/25 00:00

Matrix: Water

Date Received: 11/10/25 11:45

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/18/25 01:37	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/18/25 01:37	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/18/25 01:37	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/18/25 01:37	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/18/25 01:37	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 01:37	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/18/25 01:37	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/18/25 01:37	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 01:37	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/18/25 01:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/18/25 01:37	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/18/25 01:37	1
Naphthalene	ND		3.0	1.4	ug/L			11/18/25 01:37	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/18/25 01:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/18/25 01:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/18/25 01:37	1
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		11/18/25 01:37	1
4-Bromofluorobenzene (Surr)	102		80 - 120		11/18/25 01:37	1
Dibromofluoromethane (Surr)	105		80 - 120		11/18/25 01:37	1

QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-508533/7

Matrix: Water

Analysis Batch: 508533

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/15/25 02:25	1
Chloromethane	ND		1.0	0.23	ug/L			11/15/25 02:25	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/15/25 02:25	1
Bromomethane	ND		1.0	0.35	ug/L			11/15/25 02:25	1
Chloroethane	ND		1.0	0.34	ug/L			11/15/25 02:25	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/15/25 02:25	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/15/25 02:25	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/15/25 02:25	1
Acetone	ND		25	11	ug/L			11/15/25 02:25	1
Methylene Chloride	ND		15	6.8	ug/L			11/15/25 02:25	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/15/25 02:25	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/15/25 02:25	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/15/25 02:25	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/15/25 02:25	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/15/25 02:25	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/15/25 02:25	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/15/25 02:25	1
Chloroform	ND		1.0	0.11	ug/L			11/15/25 02:25	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/15/25 02:25	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/15/25 02:25	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/15/25 02:25	1
Benzene	ND		1.0	0.47	ug/L			11/15/25 02:25	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/15/25 02:25	1
Trichloroethene	ND		1.0	0.27	ug/L			11/15/25 02:25	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/15/25 02:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/15/25 02:25	1
Dibromomethane	ND		1.0	0.28	ug/L			11/15/25 02:25	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/15/25 02:25	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/15/25 02:25	1
Toluene	ND		1.0	0.21	ug/L			11/15/25 02:25	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/15/25 02:25	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/15/25 02:25	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/15/25 02:25	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/15/25 02:25	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/15/25 02:25	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/15/25 02:25	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/15/25 02:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/15/25 02:25	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/15/25 02:25	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/15/25 02:25	1
o-Xylene	ND		1.0	0.22	ug/L			11/15/25 02:25	1
Styrene	ND		1.0	0.41	ug/L			11/15/25 02:25	1
Bromoform	ND		1.0	0.46	ug/L			11/15/25 02:25	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/15/25 02:25	1
Bromobenzene	ND		1.0	0.18	ug/L			11/15/25 02:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/15/25 02:25	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/15/25 02:25	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/15/25 02:25	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-508533/7

Matrix: Water

Analysis Batch: 508533

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/15/25 02:25	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/15/25 02:25	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/15/25 02:25	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/15/25 02:25	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/15/25 02:25	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/15/25 02:25	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/15/25 02:25	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/15/25 02:25	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/15/25 02:25	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/15/25 02:25	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/15/25 02:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/15/25 02:25	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/15/25 02:25	1
Naphthalene	ND		3.0	1.4	ug/L			11/15/25 02:25	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/15/25 02:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/15/25 02:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/15/25 02:25	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		11/15/25 02:25	1
4-Bromofluorobenzene (Surr)	104		80 - 120		11/15/25 02:25	1
Dibromofluoromethane (Surr)	108		80 - 120		11/15/25 02:25	1

Lab Sample ID: LCS 580-508533/4

Matrix: Water

Analysis Batch: 508533

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	4.38		ug/L		88	20 - 150
Chloromethane	5.00	5.51		ug/L		110	25 - 150
Vinyl chloride	5.00	5.53		ug/L		111	31 - 150
Bromomethane	5.00	5.66		ug/L		113	36 - 150
Chloroethane	5.00	5.39		ug/L		108	38 - 150
Trichlorofluoromethane	5.00	5.00		ug/L		100	45 - 148
Carbon disulfide	5.00	4.93		ug/L		99	63 - 134
1,1-Dichloroethene	5.00	5.20		ug/L		104	70 - 129
Acetone	25.0	27.8		ug/L		111	44 - 150
Methylene Chloride	5.00	9.27	J *+	ug/L		185	77 - 125
Methyl tert-butyl ether	5.00	4.90		ug/L		98	72 - 120
trans-1,2-Dichloroethene	5.00	4.94		ug/L		99	75 - 120
1,1-Dichloroethane	5.00	5.01		ug/L		100	80 - 120
2-Butanone (MEK)	25.0	26.5		ug/L		106	65 - 137
2,2-Dichloropropane	5.00	4.98		ug/L		100	66 - 126
cis-1,2-Dichloroethene	5.00	5.07		ug/L		101	76 - 120
Chlorobromomethane	5.00	5.35		ug/L		107	78 - 120
Chloroform	5.00	5.64		ug/L		113	78 - 127
1,1,1-Trichloroethane	5.00	5.12		ug/L		102	74 - 130
Carbon tetrachloride	5.00	4.63		ug/L		93	72 - 129

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-508533/4

Matrix: Water

Analysis Batch: 508533

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	5.00	5.24		ug/L		105	74 - 120
Benzene	5.00	5.15		ug/L		103	80 - 122
1,2-Dichloroethane	5.00	5.02		ug/L		100	69 - 126
Trichloroethene	5.00	5.05		ug/L		101	80 - 125
1,2-Dichloropropane	5.00	5.31		ug/L		106	80 - 120
4-Methyl-2-pentanone (MIBK)	25.0	25.5		ug/L		102	59 - 141
Dibromomethane	5.00	5.23		ug/L		105	80 - 120
Dichlorobromomethane	5.00	5.53		ug/L		111	75 - 124
cis-1,3-Dichloropropene	5.00	4.75		ug/L		95	77 - 120
Toluene	5.00	5.06		ug/L		101	80 - 120
trans-1,3-Dichloropropene	5.00	4.77		ug/L		95	76 - 122
1,1,2-Trichloroethane	5.00	4.27		ug/L		85	80 - 121
Tetrachloroethene	5.00	4.80		ug/L		96	76 - 125
1,3-Dichloropropane	5.00	4.70		ug/L		94	79 - 120
Chlorodibromomethane	5.00	4.35		ug/L		87	73 - 125
Ethylene Dibromide	5.00	4.57		ug/L		91	79 - 126
Chlorobenzene	5.00	4.93		ug/L		99	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.20		ug/L		84	79 - 120
Ethylbenzene	5.00	5.65		ug/L		113	80 - 120
m-Xylene & p-Xylene	5.00	5.54		ug/L		111	80 - 120
o-Xylene	5.00	5.63		ug/L		113	80 - 120
Styrene	5.00	5.29		ug/L		106	76 - 122
Bromoform	5.00	4.73		ug/L		95	56 - 139
Isopropylbenzene	5.00	5.48		ug/L		110	80 - 123
Bromobenzene	5.00	5.02		ug/L		100	80 - 120
1,1,2,2-Tetrachloroethane	5.00	4.70		ug/L		94	74 - 124
1,2,3-Trichloropropane	5.00	4.77		ug/L		95	76 - 124
N-Propylbenzene	5.00	5.52		ug/L		110	80 - 122
2-Chlorotoluene	5.00	4.91		ug/L		98	80 - 120
4-Chlorotoluene	5.00	4.90		ug/L		98	73 - 129
tert-Butylbenzene	5.00	4.90		ug/L		98	75 - 123
1,2,4-Trimethylbenzene	5.00	5.19		ug/L		104	80 - 120
sec-Butylbenzene	5.00	5.45		ug/L		109	78 - 122
4-Isopropyltoluene	5.00	5.07		ug/L		101	77 - 126
1,3-Dichlorobenzene	5.00	5.23		ug/L		105	77 - 127
1,4-Dichlorobenzene	5.00	5.22		ug/L		104	80 - 120
n-Butylbenzene	5.00	4.62		ug/L		92	57 - 133
1,2-Dichlorobenzene	5.00	5.11		ug/L		102	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.83		ug/L		97	65 - 133
1,2,4-Trichlorobenzene	5.00	5.13		ug/L		103	61 - 148
Hexachlorobutadiene	5.00	5.61		ug/L		112	74 - 131
Naphthalene	5.00	4.45		ug/L		89	63 - 150
1,2,3-Trichlorobenzene	5.00	5.23		ug/L		105	65 - 150
1,3,5-Trimethylbenzene	5.00	5.25		ug/L		105	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-508533/4

Matrix: Water

Analysis Batch: 508533

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120

Lab Sample ID: LCSD 580-508533/5

Matrix: Water

Analysis Batch: 508533

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	4.01		ug/L		80	20 - 150	9	33
Chloromethane	5.00	5.10		ug/L		102	25 - 150	8	26
Vinyl chloride	5.00	5.10		ug/L		102	31 - 150	8	26
Bromomethane	5.00	5.22		ug/L		104	36 - 150	8	33
Chloroethane	5.00	5.03		ug/L		101	38 - 150	7	28
Trichlorofluoromethane	5.00	4.69		ug/L		94	45 - 148	6	35
Carbon disulfide	5.00	4.60		ug/L		92	63 - 134	7	24
1,1-Dichloroethene	5.00	4.89		ug/L		98	70 - 129	6	23
Acetone	25.0	24.3	J	ug/L		97	44 - 150	13	33
Methylene Chloride	5.00	8.91	J *+	ug/L		178	77 - 125	4	18
Methyl tert-butyl ether	5.00	4.88		ug/L		98	72 - 120	1	18
trans-1,2-Dichloroethene	5.00	4.68		ug/L		94	75 - 120	5	21
1,1-Dichloroethane	5.00	4.73		ug/L		95	80 - 120	6	15
2-Butanone (MEK)	25.0	26.9		ug/L		107	65 - 137	1	34
2,2-Dichloropropane	5.00	4.71		ug/L		94	66 - 126	6	22
cis-1,2-Dichloroethene	5.00	4.84		ug/L		97	76 - 120	5	20
Chlorobromomethane	5.00	5.19		ug/L		104	78 - 120	3	13
Chloroform	5.00	5.34		ug/L		107	78 - 127	6	14
1,1,1-Trichloroethane	5.00	4.91		ug/L		98	74 - 130	4	19
Carbon tetrachloride	5.00	4.46		ug/L		89	72 - 129	4	19
1,1-Dichloropropene	5.00	5.00		ug/L		100	74 - 120	5	14
Benzene	5.00	4.92		ug/L		98	80 - 122	5	14
1,2-Dichloroethane	5.00	4.94		ug/L		99	69 - 126	2	11
Trichloroethene	5.00	4.71		ug/L		94	80 - 125	7	13
1,2-Dichloropropane	5.00	5.17		ug/L		103	80 - 120	3	14
4-Methyl-2-pentanone (MIBK)	25.0	26.1		ug/L		105	59 - 141	3	22
Dibromomethane	5.00	5.09		ug/L		102	80 - 120	3	11
Dichlorobromomethane	5.00	5.38		ug/L		108	75 - 124	3	13
cis-1,3-Dichloropropene	5.00	4.64		ug/L		93	77 - 120	2	35
Toluene	5.00	4.86		ug/L		97	80 - 120	4	13
trans-1,3-Dichloropropene	5.00	4.64		ug/L		93	76 - 122	3	20
1,1,2-Trichloroethane	5.00	4.28		ug/L		86	80 - 121	0	14
Tetrachloroethene	5.00	4.53		ug/L		91	76 - 125	6	13
1,3-Dichloropropane	5.00	4.63		ug/L		93	79 - 120	2	19
Chlorodibromomethane	5.00	4.29		ug/L		86	73 - 125	1	13
Ethylene Dibromide	5.00	4.51		ug/L		90	79 - 126	1	12
Chlorobenzene	5.00	4.76		ug/L		95	80 - 120	4	10
1,1,1,2-Tetrachloroethane	5.00	4.13		ug/L		83	79 - 120	2	16
Ethylbenzene	5.00	5.37		ug/L		107	80 - 120	5	14
m-Xylene & p-Xylene	5.00	5.29		ug/L		106	80 - 120	5	14

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-508533/5

Matrix: Water

Analysis Batch: 508533

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
o-Xylene	5.00	5.40		ug/L		108	80 - 120	4	16
Styrene	5.00	5.08		ug/L		102	76 - 122	4	16
Bromoform	5.00	4.72		ug/L		94	56 - 139	0	21
Isopropylbenzene	5.00	5.26		ug/L		105	80 - 123	4	19
Bromobenzene	5.00	4.98		ug/L		100	80 - 120	1	24
1,1,2,2-Tetrachloroethane	5.00	5.15		ug/L		103	74 - 124	9	25
1,2,3-Trichloropropane	5.00	4.89		ug/L		98	76 - 124	3	26
N-Propylbenzene	5.00	5.24		ug/L		105	80 - 122	5	22
2-Chlorotoluene	5.00	4.73		ug/L		95	80 - 120	4	20
4-Chlorotoluene	5.00	4.74		ug/L		95	73 - 129	3	29
tert-Butylbenzene	5.00	4.71		ug/L		94	75 - 123	4	21
1,2,4-Trimethylbenzene	5.00	5.03		ug/L		101	80 - 120	3	16
sec-Butylbenzene	5.00	5.14		ug/L		103	78 - 122	6	15
4-Isopropyltoluene	5.00	4.82		ug/L		96	77 - 126	5	20
1,3-Dichlorobenzene	5.00	5.03		ug/L		101	77 - 127	4	35
1,4-Dichlorobenzene	5.00	5.07		ug/L		101	80 - 120	3	17
n-Butylbenzene	5.00	4.37		ug/L		87	57 - 133	6	14
1,2-Dichlorobenzene	5.00	4.98		ug/L		100	80 - 120	3	15
1,2-Dibromo-3-Chloropropane	5.00	4.88		ug/L		98	65 - 133	1	25
1,2,4-Trichlorobenzene	5.00	4.96		ug/L		99	61 - 148	3	27
Hexachlorobutadiene	5.00	5.29		ug/L		106	74 - 131	6	22
Naphthalene	5.00	4.35		ug/L		87	63 - 150	2	33
1,2,3-Trichlorobenzene	5.00	5.03		ug/L		101	65 - 150	4	33
1,3,5-Trimethylbenzene	5.00	5.03		ug/L		101	80 - 122	4	21

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Lab Sample ID: 580-155638-1 MS

Matrix: Water

Analysis Batch: 508533

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	ND		5.00	4.46		ug/L		89	20 - 150
Chloromethane	ND		5.00	4.16		ug/L		83	25 - 150
Vinyl chloride	ND		5.00	5.41		ug/L		108	31 - 150
Bromomethane	ND		5.00	2.65		ug/L		53	36 - 150
Chloroethane	ND		5.00	5.12		ug/L		102	38 - 150
Trichlorofluoromethane	ND		5.00	5.09		ug/L		102	45 - 148
Carbon disulfide	ND		5.00	5.01		ug/L		100	63 - 134
1,1-Dichloroethene	ND		5.00	5.28		ug/L		106	70 - 129
Acetone	ND		25.0	21.8	J	ug/L		87	44 - 150
Methylene Chloride	ND	*+	5.00	ND		ug/L		NC	77 - 125
Methyl tert-butyl ether	ND		5.00	5.17		ug/L		103	72 - 120
trans-1,2-Dichloroethene	ND		5.00	5.07		ug/L		101	75 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-155638-1 MS

Matrix: Water

Analysis Batch: 508533

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	ND		5.00	5.00		ug/L		100	80 - 120
2-Butanone (MEK)	ND		25.0	24.2		ug/L		97	65 - 137
2,2-Dichloropropane	ND		5.00	4.56		ug/L		91	66 - 126
cis-1,2-Dichloroethene	ND		5.00	4.70		ug/L		94	76 - 120
Chlorobromomethane	ND		5.00	5.46		ug/L		109	78 - 120
Chloroform	ND		5.00	5.68		ug/L		114	78 - 127
1,1,1-Trichloroethane	ND		5.00	5.64		ug/L		113	74 - 130
Carbon tetrachloride	ND		5.00	5.41		ug/L		108	72 - 129
1,1-Dichloropropene	ND		5.00	5.91		ug/L		118	74 - 120
Benzene	ND		5.00	5.48		ug/L		110	80 - 122
1,2-Dichloroethane	ND		5.00	5.06		ug/L		101	69 - 126
Trichloroethene	ND		5.00	5.18		ug/L		104	80 - 125
1,2-Dichloropropane	ND		5.00	5.82		ug/L		116	80 - 120
4-Methyl-2-pentanone (MIBK)	ND		25.0	28.0		ug/L		112	59 - 141
Dibromomethane	ND		5.00	5.04		ug/L		101	80 - 120
Dichlorobromomethane	ND		5.00	5.88		ug/L		118	75 - 124
cis-1,3-Dichloropropene	ND		5.00	4.98		ug/L		100	77 - 120
Toluene	ND		5.00	5.37		ug/L		107	80 - 120
trans-1,3-Dichloropropene	ND		5.00	5.03		ug/L		101	76 - 122
1,1,2-Trichloroethane	ND		5.00	4.74		ug/L		95	80 - 121
Tetrachloroethene	ND		5.00	5.19		ug/L		104	76 - 125
1,3-Dichloropropane	ND		5.00	5.06		ug/L		101	79 - 120
Chlorodibromomethane	ND		5.00	4.82		ug/L		96	73 - 125
Ethylene Dibromide	ND		5.00	4.95		ug/L		99	79 - 126
Chlorobenzene	1.2		5.00	6.35		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	ND		5.00	4.81		ug/L		96	79 - 120
Ethylbenzene	ND		5.00	5.79		ug/L		116	80 - 120
m-Xylene & p-Xylene	ND		5.00	5.53		ug/L		111	80 - 120
o-Xylene	ND		5.00	5.56		ug/L		111	80 - 120
Styrene	ND		5.00	5.23		ug/L		105	76 - 122
Bromoform	ND		5.00	5.16		ug/L		103	56 - 139
Isopropylbenzene	ND		5.00	5.54		ug/L		111	80 - 123
Bromobenzene	ND		5.00	5.19		ug/L		104	80 - 120
1,1,2,2-Tetrachloroethane	ND		5.00	5.53		ug/L		111	74 - 124
1,2,3-Trichloropropane	ND		5.00	5.05		ug/L		101	76 - 124
N-Propylbenzene	ND		5.00	5.61		ug/L		112	80 - 122
2-Chlorotoluene	ND		5.00	5.00		ug/L		100	80 - 120
4-Chlorotoluene	ND		5.00	4.88		ug/L		98	73 - 129
tert-Butylbenzene	ND		5.00	5.02		ug/L		100	75 - 123
1,2,4-Trimethylbenzene	ND		5.00	5.40		ug/L		108	80 - 120
sec-Butylbenzene	ND		5.00	5.50		ug/L		110	78 - 122
4-Isopropyltoluene	ND		5.00	4.98		ug/L		100	77 - 126
1,3-Dichlorobenzene	ND		5.00	5.20		ug/L		104	77 - 127
1,4-Dichlorobenzene	ND		5.00	5.28		ug/L		106	80 - 120
n-Butylbenzene	ND		5.00	4.40		ug/L		88	57 - 133
1,2-Dichlorobenzene	ND		5.00	5.01		ug/L		100	80 - 120
1,2-Dibromo-3-Chloropropane	ND		5.00	4.71		ug/L		94	65 - 133
1,2,4-Trichlorobenzene	ND		5.00	4.71		ug/L		94	61 - 148
Hexachlorobutadiene	ND		5.00	4.90		ug/L		98	74 - 131

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-155638-1 MS

Matrix: Water

Analysis Batch: 508533

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Naphthalene	ND		5.00	4.08		ug/L		82	63 - 150
1,2,3-Trichlorobenzene	ND		5.00	4.78		ug/L		96	65 - 150
1,3,5-Trimethylbenzene	ND		5.00	5.42		ug/L		108	80 - 122
Surrogate	MS %Recovery	MS Qualifier	Limits						
Toluene-d8 (Surr)	99		80 - 120						
1,2-Dichloroethane-d4 (Surr)	99		80 - 120						
4-Bromofluorobenzene (Surr)	99		80 - 120						
Dibromofluoromethane (Surr)	94		80 - 120						

Lab Sample ID: 580-155638-1 MSD

Matrix: Water

Analysis Batch: 508533

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	ND		5.00	4.96		ug/L		99	20 - 150	11	33
Chloromethane	ND		5.00	4.80		ug/L		96	25 - 150	14	26
Vinyl chloride	ND		5.00	6.03		ug/L		121	31 - 150	11	26
Bromomethane	ND		5.00	3.37		ug/L		67	36 - 150	24	33
Chloroethane	ND		5.00	5.63		ug/L		113	38 - 150	10	28
Trichlorofluoromethane	ND		5.00	5.68		ug/L		114	45 - 148	11	35
Carbon disulfide	ND		5.00	5.07		ug/L		101	63 - 134	1	24
1,1-Dichloroethene	ND		5.00	5.38		ug/L		108	70 - 129	2	23
Acetone	ND		25.0	22.3	J	ug/L		89	44 - 150	3	33
Methylene Chloride	ND	++	5.00	ND		ug/L		NC	77 - 125	NC	18
Methyl tert-butyl ether	ND		5.00	4.93		ug/L		99	72 - 120	5	18
trans-1,2-Dichloroethene	ND		5.00	5.05		ug/L		101	75 - 120	1	21
1,1-Dichloroethane	ND		5.00	5.03		ug/L		101	80 - 120	1	15
2-Butanone (MEK)	ND		25.0	23.4		ug/L		93	65 - 137	4	34
2,2-Dichloropropane	ND		5.00	4.24		ug/L		85	66 - 126	7	22
cis-1,2-Dichloroethene	ND		5.00	4.90		ug/L		98	76 - 120	4	20
Chlorobromomethane	ND		5.00	5.05		ug/L		101	78 - 120	8	13
Chloroform	ND		5.00	5.61		ug/L		112	78 - 127	1	14
1,1,1-Trichloroethane	ND		5.00	5.50		ug/L		110	74 - 130	2	19
Carbon tetrachloride	ND		5.00	5.22		ug/L		104	72 - 129	3	19
1,1-Dichloropropene	ND		5.00	5.64		ug/L		113	74 - 120	5	14
Benzene	ND		5.00	5.33		ug/L		107	80 - 122	3	14
1,2-Dichloroethane	ND		5.00	5.05		ug/L		101	69 - 126	0	11
Trichloroethene	ND		5.00	5.06		ug/L		101	80 - 125	2	13
1,2-Dichloropropane	ND		5.00	5.61		ug/L		112	80 - 120	4	14
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.8		ug/L		107	59 - 141	4	22
Dibromomethane	ND		5.00	5.05		ug/L		101	80 - 120	0	11
Dichlorobromomethane	ND		5.00	5.64		ug/L		113	75 - 124	4	13
cis-1,3-Dichloropropene	ND		5.00	4.72		ug/L		94	77 - 120	5	35
Toluene	ND		5.00	5.24		ug/L		105	80 - 120	2	13
trans-1,3-Dichloropropene	ND		5.00	4.77		ug/L		95	76 - 122	5	20
1,1,2-Trichloroethane	ND		5.00	4.50		ug/L		90	80 - 121	5	14
Tetrachloroethene	ND		5.00	5.02		ug/L		100	76 - 125	3	13

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-155638-1 MSD

Matrix: Water

Analysis Batch: 508533

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichloropropane	ND		5.00	4.74		ug/L		95	79 - 120	7	19
Chlorodibromomethane	ND		5.00	4.50		ug/L		90	73 - 125	7	13
Ethylene Dibromide	ND		5.00	4.70		ug/L		94	79 - 126	5	12
Chlorobenzene	1.2		5.00	6.20		ug/L		101	80 - 120	2	10
1,1,1,2-Tetrachloroethane	ND		5.00	4.51		ug/L		90	79 - 120	6	16
Ethylbenzene	ND		5.00	5.72		ug/L		114	80 - 120	1	14
m-Xylene & p-Xylene	ND		5.00	5.45		ug/L		109	80 - 120	1	14
o-Xylene	ND		5.00	5.54		ug/L		111	80 - 120	0	16
Styrene	ND		5.00	5.15		ug/L		103	76 - 122	1	16
Bromoform	ND		5.00	4.95		ug/L		99	56 - 139	4	21
Isopropylbenzene	ND		5.00	5.48		ug/L		110	80 - 123	1	19
Bromobenzene	ND		5.00	5.03		ug/L		101	80 - 120	3	24
1,1,2,2-Tetrachloroethane	ND		5.00	5.26		ug/L		105	74 - 124	5	25
1,2,3-Trichloropropane	ND		5.00	4.82		ug/L		96	76 - 124	5	26
N-Propylbenzene	ND		5.00	5.50		ug/L		110	80 - 122	2	22
2-Chlorotoluene	ND		5.00	4.86		ug/L		97	80 - 120	3	20
4-Chlorotoluene	ND		5.00	4.77		ug/L		95	73 - 129	2	29
tert-Butylbenzene	ND		5.00	4.94		ug/L		99	75 - 123	2	21
1,2,4-Trimethylbenzene	ND		5.00	5.23		ug/L		105	80 - 120	3	16
sec-Butylbenzene	ND		5.00	5.42		ug/L		108	78 - 122	1	15
4-Isopropyltoluene	ND		5.00	4.96		ug/L		99	77 - 126	0	20
1,3-Dichlorobenzene	ND		5.00	5.13		ug/L		103	77 - 127	1	35
1,4-Dichlorobenzene	ND		5.00	5.17		ug/L		103	80 - 120	2	17
n-Butylbenzene	ND		5.00	4.38		ug/L		88	57 - 133	0	14
1,2-Dichlorobenzene	ND		5.00	4.96		ug/L		99	80 - 120	1	15
1,2-Dibromo-3-Chloropropane	ND		5.00	4.61		ug/L		92	65 - 133	2	25
1,2,4-Trichlorobenzene	ND		5.00	4.66		ug/L		93	61 - 148	1	27
Hexachlorobutadiene	ND		5.00	5.05		ug/L		101	74 - 131	3	22
Naphthalene	ND		5.00	4.00		ug/L		80	63 - 150	2	33
1,2,3-Trichlorobenzene	ND		5.00	4.78		ug/L		96	65 - 150	0	33
1,3,5-Trimethylbenzene	ND		5.00	5.30		ug/L		106	80 - 122	2	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	96		80 - 120

Lab Sample ID: MB 580-508643/10

Matrix: Water

Analysis Batch: 508643

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			11/18/25 01:15	1
Chloromethane	ND		1.0	0.23	ug/L			11/18/25 01:15	1
Vinyl chloride	ND		1.0	0.29	ug/L			11/18/25 01:15	1
Bromomethane	ND		1.0	0.35	ug/L			11/18/25 01:15	1
Chloroethane	ND		1.0	0.34	ug/L			11/18/25 01:15	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-508643/10

Matrix: Water

Analysis Batch: 508643

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.21	ug/L			11/18/25 01:15	1
Carbon disulfide	ND		1.0	0.69	ug/L			11/18/25 01:15	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			11/18/25 01:15	1
Acetone	ND		25	11	ug/L			11/18/25 01:15	1
Methylene Chloride	ND		15	6.8	ug/L			11/18/25 01:15	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			11/18/25 01:15	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			11/18/25 01:15	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			11/18/25 01:15	1
2-Butanone (MEK)	ND		15	3.1	ug/L			11/18/25 01:15	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			11/18/25 01:15	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			11/18/25 01:15	1
Chlorobromomethane	ND		1.0	0.21	ug/L			11/18/25 01:15	1
Chloroform	ND		1.0	0.11	ug/L			11/18/25 01:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			11/18/25 01:15	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			11/18/25 01:15	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			11/18/25 01:15	1
Benzene	ND		1.0	0.47	ug/L			11/18/25 01:15	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			11/18/25 01:15	1
Trichloroethene	ND		1.0	0.27	ug/L			11/18/25 01:15	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			11/18/25 01:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			11/18/25 01:15	1
Dibromomethane	ND		1.0	0.28	ug/L			11/18/25 01:15	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			11/18/25 01:15	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			11/18/25 01:15	1
Toluene	ND		1.0	0.21	ug/L			11/18/25 01:15	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			11/18/25 01:15	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			11/18/25 01:15	1
Tetrachloroethene	ND		1.0	0.43	ug/L			11/18/25 01:15	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/18/25 01:15	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			11/18/25 01:15	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			11/18/25 01:15	1
Chlorobenzene	ND		1.0	0.22	ug/L			11/18/25 01:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/18/25 01:15	1
Ethylbenzene	ND		1.0	0.16	ug/L			11/18/25 01:15	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			11/18/25 01:15	1
o-Xylene	ND		1.0	0.22	ug/L			11/18/25 01:15	1
Styrene	ND		1.0	0.41	ug/L			11/18/25 01:15	1
Bromoform	ND		1.0	0.46	ug/L			11/18/25 01:15	1
Isopropylbenzene	ND		1.0	0.45	ug/L			11/18/25 01:15	1
Bromobenzene	ND		1.0	0.18	ug/L			11/18/25 01:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			11/18/25 01:15	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			11/18/25 01:15	1
N-Propylbenzene	ND		1.0	0.26	ug/L			11/18/25 01:15	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			11/18/25 01:15	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			11/18/25 01:15	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			11/18/25 01:15	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			11/18/25 01:15	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			11/18/25 01:15	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			11/18/25 01:15	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-508643/10

Matrix: Water

Analysis Batch: 508643

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 01:15	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			11/18/25 01:15	1
n-Butylbenzene	ND		1.0	0.61	ug/L			11/18/25 01:15	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			11/18/25 01:15	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			11/18/25 01:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			11/18/25 01:15	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			11/18/25 01:15	1
Naphthalene	ND		3.0	1.4	ug/L			11/18/25 01:15	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			11/18/25 01:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			11/18/25 01:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		11/18/25 01:15	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		11/18/25 01:15	1
4-Bromofluorobenzene (Surr)	102		80 - 120		11/18/25 01:15	1
Dibromofluoromethane (Surr)	107		80 - 120		11/18/25 01:15	1

Lab Sample ID: LCS 580-508643/5

Matrix: Water

Analysis Batch: 508643

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	4.30		ug/L		86	20 - 150
Chloromethane	5.00	5.12		ug/L		102	25 - 150
Vinyl chloride	5.00	5.68		ug/L		114	31 - 150
Bromomethane	5.00	5.56		ug/L		111	36 - 150
Chloroethane	5.00	5.21		ug/L		104	38 - 150
Trichlorofluoromethane	5.00	5.13		ug/L		103	45 - 148
Carbon disulfide	5.00	4.41		ug/L		88	63 - 134
1,1-Dichloroethene	5.00	4.90		ug/L		98	70 - 129
Acetone	25.0	26.2		ug/L		105	44 - 150
Methylene Chloride	5.00	29.7	*+	ug/L		594	77 - 125
Methyl tert-butyl ether	5.00	4.44		ug/L		89	72 - 120
trans-1,2-Dichloroethene	5.00	4.63		ug/L		93	75 - 120
1,1-Dichloroethane	5.00	4.90		ug/L		98	80 - 120
2-Butanone (MEK)	25.0	24.4		ug/L		98	65 - 137
2,2-Dichloropropane	5.00	4.82		ug/L		96	66 - 126
cis-1,2-Dichloroethene	5.00	4.89		ug/L		98	76 - 120
Chlorobromomethane	5.00	4.95		ug/L		99	78 - 120
Chloroform	5.00	5.29		ug/L		106	78 - 127
1,1,1-Trichloroethane	5.00	4.72		ug/L		94	74 - 130
Carbon tetrachloride	5.00	4.40		ug/L		88	72 - 129
1,1-Dichloropropene	5.00	4.82		ug/L		96	74 - 120
Benzene	5.00	4.84		ug/L		97	80 - 122
1,2-Dichloroethane	5.00	4.72		ug/L		94	69 - 126
Trichloroethene	5.00	4.41		ug/L		88	80 - 125
1,2-Dichloropropane	5.00	5.00		ug/L		100	80 - 120
4-Methyl-2-pentanone (MIBK)	25.0	24.7		ug/L		99	59 - 141

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-508643/5

Matrix: Water

Analysis Batch: 508643

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibromomethane	5.00	4.85		ug/L		97	80 - 120
Dichlorobromomethane	5.00	5.07		ug/L		101	75 - 124
cis-1,3-Dichloropropene	5.00	4.41		ug/L		88	77 - 120
Toluene	5.00	4.90		ug/L		98	80 - 120
trans-1,3-Dichloropropene	5.00	4.50		ug/L		90	76 - 122
1,1,2-Trichloroethane	5.00	4.01		ug/L		80	80 - 121
Tetrachloroethene	5.00	4.45		ug/L		89	76 - 125
1,3-Dichloropropane	5.00	4.27		ug/L		85	79 - 120
Chlorodibromomethane	5.00	4.05		ug/L		81	73 - 125
Ethylene Dibromide	5.00	4.28		ug/L		86	79 - 126
Chlorobenzene	5.00	4.72		ug/L		94	80 - 120
1,1,1,2-Tetrachloroethane	5.00	3.94		ug/L		79	79 - 120
Ethylbenzene	5.00	5.41		ug/L		108	80 - 120
m-Xylene & p-Xylene	5.00	5.36		ug/L		107	80 - 120
o-Xylene	5.00	5.39		ug/L		108	80 - 120
Styrene	5.00	5.04		ug/L		101	76 - 122
Bromoform	5.00	4.45		ug/L		89	56 - 139
Isopropylbenzene	5.00	5.24		ug/L		105	80 - 123
Bromobenzene	5.00	4.83		ug/L		97	80 - 120
1,1,2,2-Tetrachloroethane	5.00	4.60		ug/L		92	74 - 124
1,2,3-Trichloropropane	5.00	4.59		ug/L		92	76 - 124
N-Propylbenzene	5.00	5.25		ug/L		105	80 - 122
2-Chlorotoluene	5.00	4.60		ug/L		92	80 - 120
4-Chlorotoluene	5.00	4.59		ug/L		92	73 - 129
tert-Butylbenzene	5.00	5.09		ug/L		102	75 - 123
1,2,4-Trimethylbenzene	5.00	4.99		ug/L		100	80 - 120
sec-Butylbenzene	5.00	5.20		ug/L		104	78 - 122
4-Isopropyltoluene	5.00	4.71		ug/L		94	77 - 126
1,3-Dichlorobenzene	5.00	4.94		ug/L		99	77 - 127
1,4-Dichlorobenzene	5.00	5.01		ug/L		100	80 - 120
n-Butylbenzene	5.00	4.28		ug/L		86	57 - 133
1,2-Dichlorobenzene	5.00	4.72		ug/L		94	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.30		ug/L		86	65 - 133
1,2,4-Trichlorobenzene	5.00	4.68		ug/L		94	61 - 148
Hexachlorobutadiene	5.00	5.00		ug/L		100	74 - 131
Naphthalene	5.00	3.85		ug/L		77	63 - 150
1,2,3-Trichlorobenzene	5.00	4.64		ug/L		93	65 - 150
1,3,5-Trimethylbenzene	5.00	4.96		ug/L		99	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-508643/6

Matrix: Water

Analysis Batch: 508643

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	4.03		ug/L		81	20 - 150	6	33
Chloromethane	5.00	4.96		ug/L		99	25 - 150	3	26
Vinyl chloride	5.00	5.42		ug/L		108	31 - 150	5	26
Bromomethane	5.00	5.39		ug/L		108	36 - 150	3	33
Chloroethane	5.00	4.93		ug/L		99	38 - 150	5	28
Trichlorofluoromethane	5.00	4.86		ug/L		97	45 - 148	5	35
Carbon disulfide	5.00	4.16		ug/L		83	63 - 134	6	24
1,1-Dichloroethene	5.00	4.66		ug/L		93	70 - 129	5	23
Acetone	25.0	25.0		ug/L		100	44 - 150	5	33
Methylene Chloride	5.00	27.5	*+	ug/L		549	77 - 125	8	18
Methyl tert-butyl ether	5.00	4.31		ug/L		86	72 - 120	3	18
trans-1,2-Dichloroethene	5.00	4.51		ug/L		90	75 - 120	3	21
1,1-Dichloroethane	5.00	4.71		ug/L		94	80 - 120	4	15
2-Butanone (MEK)	25.0	24.0		ug/L		96	65 - 137	1	34
2,2-Dichloropropane	5.00	4.58		ug/L		92	66 - 126	5	22
cis-1,2-Dichloroethene	5.00	4.70		ug/L		94	76 - 120	4	20
Chlorobromomethane	5.00	4.85		ug/L		97	78 - 120	2	13
Chloroform	5.00	5.15		ug/L		103	78 - 127	3	14
1,1,1-Trichloroethane	5.00	4.57		ug/L		91	74 - 130	3	19
Carbon tetrachloride	5.00	4.24		ug/L		85	72 - 129	4	19
1,1-Dichloropropene	5.00	4.65		ug/L		93	74 - 120	3	14
Benzene	5.00	4.73		ug/L		95	80 - 122	2	14
1,2-Dichloroethane	5.00	4.62		ug/L		92	69 - 126	2	11
Trichloroethene	5.00	4.36		ug/L		87	80 - 125	1	13
1,2-Dichloropropane	5.00	4.92		ug/L		98	80 - 120	2	14
4-Methyl-2-pentanone (MIBK)	25.0	24.8		ug/L		99	59 - 141	1	22
Dibromomethane	5.00	4.80		ug/L		96	80 - 120	1	11
Dichlorobromomethane	5.00	5.07		ug/L		101	75 - 124	0	13
cis-1,3-Dichloropropene	5.00	4.40		ug/L		88	77 - 120	0	35
Toluene	5.00	4.72		ug/L		94	80 - 120	4	13
trans-1,3-Dichloropropene	5.00	4.46		ug/L		89	76 - 122	1	20
1,1,2-Trichloroethane	5.00	3.98		ug/L		80	80 - 121	1	14
Tetrachloroethene	5.00	4.34		ug/L		87	76 - 125	2	13
1,3-Dichloropropane	5.00	4.26		ug/L		85	79 - 120	0	19
Chlorodibromomethane	5.00	4.04		ug/L		81	73 - 125	0	13
Ethylene Dibromide	5.00	4.26		ug/L		85	79 - 126	0	12
Chlorobenzene	5.00	4.64		ug/L		93	80 - 120	2	10
1,1,1,2-Tetrachloroethane	5.00	3.96		ug/L		79	79 - 120	1	16
Ethylbenzene	5.00	5.21		ug/L		104	80 - 120	4	14
m-Xylene & p-Xylene	5.00	5.09		ug/L		102	80 - 120	5	14
o-Xylene	5.00	5.17		ug/L		103	80 - 120	4	16
Styrene	5.00	4.92		ug/L		98	76 - 122	3	16
Bromoform	5.00	4.43		ug/L		89	56 - 139	0	21
Isopropylbenzene	5.00	5.05		ug/L		101	80 - 123	4	19
Bromobenzene	5.00	4.66		ug/L		93	80 - 120	4	24
1,1,2,2-Tetrachloroethane	5.00	4.63		ug/L		93	74 - 124	1	25
1,2,3-Trichloropropane	5.00	4.48		ug/L		90	76 - 124	2	26
N-Propylbenzene	5.00	5.09		ug/L		102	80 - 122	3	22

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-508643/6

Matrix: Water

Analysis Batch: 508643

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Chlorotoluene	5.00	4.45		ug/L		89	80 - 120	3	20
4-Chlorotoluene	5.00	4.45		ug/L		89	73 - 129	3	29
tert-Butylbenzene	5.00	4.48		ug/L		90	75 - 123	13	21
1,2,4-Trimethylbenzene	5.00	4.78		ug/L		96	80 - 120	4	16
sec-Butylbenzene	5.00	5.00		ug/L		100	78 - 122	4	15
4-Isopropyltoluene	5.00	4.55		ug/L		91	77 - 126	3	20
1,3-Dichlorobenzene	5.00	4.82		ug/L		96	77 - 127	2	35
1,4-Dichlorobenzene	5.00	4.86		ug/L		97	80 - 120	3	17
n-Butylbenzene	5.00	4.07		ug/L		81	57 - 133	5	14
1,2-Dichlorobenzene	5.00	4.61		ug/L		92	80 - 120	3	15
1,2-Dibromo-3-Chloropropane	5.00	4.26		ug/L		85	65 - 133	1	25
1,2,4-Trichlorobenzene	5.00	4.56		ug/L		91	61 - 148	2	27
Hexachlorobutadiene	5.00	4.82		ug/L		96	74 - 131	4	22
Naphthalene	5.00	3.70		ug/L		74	63 - 150	4	33
1,2,3-Trichlorobenzene	5.00	4.54		ug/L		91	65 - 150	2	33
1,3,5-Trimethylbenzene	5.00	4.78		ug/L		96	80 - 122	4	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 580-508227/1-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 508227

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		11/12/25 10:02	11/19/25 17:40	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1
beta-BHC	ND		0.021	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1
delta-BHC	ND		0.015	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1
Heptachlor	ND		0.015	0.0040	ug/L		11/12/25 10:02	11/19/25 17:40	1
Aldrin	ND		0.024	0.0070	ug/L		11/12/25 10:02	11/19/25 17:40	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 17:40	1
trans-Chlordane	ND		0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 17:40	1
cis-Chlordane	ND		0.027	0.0080	ug/L		11/12/25 10:02	11/19/25 17:40	1
Endosulfan I	ND		0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 17:40	1
4,4'-DDE	ND		0.010	0.0030	ug/L		11/12/25 10:02	11/19/25 17:40	1
Dieldrin	ND		0.018	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1
Endrin	ND		0.012	0.0030	ug/L		11/12/25 10:02	11/19/25 17:40	1
4,4'-DDD	ND		0.015	0.0060	ug/L		11/12/25 10:02	11/19/25 17:40	1
Endosulfan II	ND		0.024	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1
4,4'-DDT	ND		0.020	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1
Endrin aldehyde	ND		0.060	0.034	ug/L		11/12/25 10:02	11/19/25 17:40	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		11/12/25 10:02	11/19/25 17:40	1
Methoxychlor	ND		0.10	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 580-508227/1-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 508227

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Endrin ketone	ND		0.020	0.0070	ug/L		11/12/25 10:02	11/19/25 17:40	1
Toxaphene	ND		2.0	0.46	ug/L		11/12/25 10:02	11/19/25 17:40	1
Chlordane (technical)	ND		0.20	0.062	ug/L		11/12/25 10:02	11/19/25 17:40	1
2,4'-DDD	ND		0.030	0.0090	ug/L		11/12/25 10:02	11/19/25 17:40	1
2,4'-DDE	ND		0.030	0.0050	ug/L		11/12/25 10:02	11/19/25 17:40	1
2,4'-DDT	ND		0.030	0.0090	ug/L		11/12/25 10:02	11/19/25 17:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		42 - 120	11/12/25 10:02	11/19/25 17:40	1
DCB Decachlorobiphenyl	67		50 - 120	11/12/25 10:02	11/19/25 17:40	1

Lab Sample ID: LCS 580-508227/2-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	5.00	2.99		ug/L		60	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	56		42 - 120
DCB Decachlorobiphenyl	58		50 - 120

Lab Sample ID: LCS 580-508227/4-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	0.200	0.115		ug/L		58	54 - 120
gamma-BHC (Lindane)	0.200	0.114		ug/L		57	55 - 120
beta-BHC	0.200	0.119		ug/L		60	54 - 120
delta-BHC	0.200	0.100	*	ug/L		50	51 - 120
Heptachlor	0.200	0.122		ug/L		61	35 - 120
Aldrin	0.200	0.114		ug/L		57	25 - 124
Heptachlor epoxide	0.200	0.123		ug/L		61	49 - 120
trans-Chlordane	0.200	0.121		ug/L		61	48 - 120
cis-Chlordane	0.200	0.120		ug/L		60	48 - 120
Endosulfan I	0.200	0.117		ug/L		59	45 - 123
4,4'-DDE	0.200	0.121		ug/L		61	47 - 120
Dieldrin	0.200	0.117		ug/L		59	48 - 122
Endrin	0.200	0.128		ug/L		64	48 - 120
4,4'-DDD	0.200	0.119		ug/L		59	53 - 120
Endosulfan II	0.200	0.119		ug/L		60	24 - 120
4,4'-DDT	0.200	0.126		ug/L		63	39 - 122
Endrin aldehyde	0.200	0.108		ug/L		54	26 - 139
Endosulfan sulfate	0.200	0.113		ug/L		57	56 - 120
Methoxychlor	0.200	0.130		ug/L		65	44 - 129
Endrin ketone	0.200	0.119		ug/L		59	51 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 580-508227/4-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508227

	LCS %Recovery	LCS Qualifier	Limits
<i>Surrogate</i>			
Tetrachloro-m-xylene	58		42 - 120
DCB Decachlorobiphenyl	57		50 - 120

Lab Sample ID: LCS 580-508227/6-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (technical)	1.00	0.731		ug/L		73	39 - 120
<i>Surrogate</i>							
Tetrachloro-m-xylene						70	42 - 120
DCB Decachlorobiphenyl						75	50 - 120

Lab Sample ID: LCS 580-508227/8-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.200	0.144		ug/L		72	50 - 120
2,4'-DDE	0.200	0.140		ug/L		70	50 - 120
2,4'-DDT	0.200	0.155		ug/L		78	50 - 120
<i>Surrogate</i>							
Tetrachloro-m-xylene						69	42 - 120
DCB Decachlorobiphenyl						64	50 - 120

Lab Sample ID: LCSD 580-508227/3-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Toxaphene	5.00	3.66	*1	ug/L		73	50 - 150	20	15
<i>Surrogate</i>									
Tetrachloro-m-xylene						68	42 - 120		
DCB Decachlorobiphenyl						69	50 - 120		

Lab Sample ID: LCSD 580-508227/5-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
alpha-BHC	0.200	0.144		ug/L		72	54 - 120	22	23
gamma-BHC (Lindane)	0.200	0.149		ug/L		75	55 - 120	21	21
beta-BHC	0.200	0.152	*1	ug/L		76	54 - 120	24	19
delta-BHC	0.200	0.124		ug/L		62	51 - 120	21	23
Heptachlor	0.200	0.154		ug/L		77	35 - 120	23	26

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QC Sample Results

Client: ERM-West

Job ID: 580-155638-1

Project/Site: Arkema-Quarterly 2025 Groundwater Event

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 580-508227/5-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aldrin	0.200	0.142		ug/L		71	25 - 124	22	35
Heptachlor epoxide	0.200	0.148		ug/L		74	49 - 120	20	24
trans-Chlordane	0.200	0.146		ug/L		73	48 - 120	21	28
cis-Chlordane	0.200	0.149		ug/L		75	48 - 120	22	27
Endosulfan I	0.200	0.151		ug/L		76	45 - 123	21	26
4,4'-DDE	0.200	0.152		ug/L		76	47 - 120	22	25
Dieldrin	0.200	0.150		ug/L		75	48 - 122	21	23
Endrin	0.200	0.167		ug/L		83	48 - 120	23	24
4,4'-DDD	0.200	0.155	*1	ug/L		77	53 - 120	24	19
Endosulfan II	0.200	0.154		ug/L		77	24 - 120	25	26
4,4'-DDT	0.200	0.158	*1	ug/L		79	39 - 122	27	20
Endrin aldehyde	0.200	0.144		ug/L		72	26 - 139	29	35
Endosulfan sulfate	0.200	0.161	*1	ug/L		81	56 - 120	28	21
Methoxychlor	0.200	0.178	*1	ug/L		89	44 - 129	29	20
Endrin ketone	0.200	0.145	*1	ug/L		72	51 - 120	27	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	72		42 - 120
DCB Decachlorobiphenyl	63		50 - 120

Lab Sample ID: LCSD 580-508227/7-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlordane (technical)	1.00	0.725		ug/L		73	39 - 120	1	28

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	70		42 - 120
DCB Decachlorobiphenyl	67		50 - 120

Lab Sample ID: LCSD 580-508227/9-A

Matrix: Water

Analysis Batch: 508787

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 508227

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	0.200	0.167		ug/L		83	50 - 120	15	24
2,4'-DDE	0.200	0.162		ug/L		81	50 - 120	15	27
2,4'-DDT	0.200	0.178		ug/L		89	50 - 120	14	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	82		42 - 120
DCB Decachlorobiphenyl	68		50 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 580-155638-1 MS

Matrix: Water

Analysis Batch: 508787

Client Sample ID: PMW-20g-110625

Prep Type: Dissolved

Prep Batch: 508227

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	ND		0.187	0.117		ug/L		62	54 - 120
gamma-BHC (Lindane)	ND	*1	0.187	0.121		ug/L		64	55 - 120
beta-BHC	ND	*1	0.187	0.122		ug/L		65	54 - 120
delta-BHC	ND	*-	0.187	0.0999		ug/L		53	51 - 120
Heptachlor	ND		0.187	0.123		ug/L		66	35 - 120
Aldrin	ND		0.187	0.116		ug/L		62	25 - 124
Heptachlor epoxide	ND		0.187	0.124		ug/L		66	49 - 120
trans-Chlordane	ND		0.187	0.114		ug/L		61	48 - 120
cis-Chlordane	ND		0.187	0.123		ug/L		66	48 - 120
Endosulfan I	ND		0.187	0.125		ug/L		67	45 - 123
4,4'-DDE	ND		0.187	0.127		ug/L		68	47 - 120
Dieldrin	ND		0.187	0.125		ug/L		67	48 - 122
Endrin	ND		0.187	0.146		ug/L		78	48 - 120
4,4'-DDD	ND	*1	0.187	0.129		ug/L		69	53 - 120
Endosulfan II	ND		0.187	0.128		ug/L		68	24 - 120
4,4'-DDT	ND	*1	0.187	0.132		ug/L		71	39 - 122
Endrin aldehyde	ND		0.187	0.120		ug/L		64	26 - 139
Endosulfan sulfate	ND	*1	0.187	0.135		ug/L		72	56 - 120
Methoxychlor	ND	*1	0.187	0.147		ug/L		78	44 - 129
Endrin ketone	ND	*1	0.187	0.121		ug/L		65	51 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	61		42 - 120
DCB Decachlorobiphenyl	57		50 - 120

Lab Sample ID: 580-155638-1 MSD

Matrix: Water

Analysis Batch: 508787

Client Sample ID: PMW-20g-110625

Prep Type: Dissolved

Prep Batch: 508227

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC	ND	*1	0.184	0.116		ug/L		63	54 - 120	6	23
gamma-BHC (Lindane)	ND	*1	0.184	0.120		ug/L		65	55 - 120	0	21
beta-BHC	ND	*1	0.184	0.121		ug/L		66	54 - 120	1	19
delta-BHC	ND	*1 *-	0.184	0.0999		ug/L		54	51 - 120	0	23
Heptachlor	ND		0.184	0.120		ug/L		65	35 - 120	3	26
Aldrin	ND		0.184	0.113		ug/L		61	25 - 124	3	35
Heptachlor epoxide	ND		0.184	0.121		ug/L		65	49 - 120	3	24
trans-Chlordane	ND		0.184	0.109		ug/L		59	48 - 120	5	28
cis-Chlordane	ND		0.184	0.119		ug/L		64	48 - 120	4	27
Endosulfan I	ND		0.184	0.121		ug/L		66	45 - 123	3	26
4,4'-DDE	ND		0.184	0.122		ug/L		66	47 - 120	5	25
Dieldrin	ND		0.184	0.121		ug/L		65	48 - 122	3	23
Endrin	ND		0.184	0.139		ug/L		75	48 - 120	5	24
4,4'-DDD	ND	*1	0.184	0.124		ug/L		67	53 - 120	4	19
Endosulfan II	ND		0.184	0.123		ug/L		67	24 - 120	4	26
4,4'-DDT	ND	*1	0.184	0.127		ug/L		69	39 - 122	4	20
Endrin aldehyde	ND		0.184	0.117		ug/L		63	26 - 139	2	35
Endosulfan sulfate	ND	*1	0.184	0.130		ug/L		70	56 - 120	4	21

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 580-155638-1 MSD

Matrix: Water

Analysis Batch: 508787

Client Sample ID: PMW-20g-110625

Prep Type: Dissolved

Prep Batch: 508227

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methoxychlor	ND	*1	0.184	0.140		ug/L		76	44 - 129	5	20
Endrin ketone	ND	*1	0.184	0.116		ug/L		63	51 - 120	4	25
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Tetrachloro-m-xylene	65		42 - 120								
DCB Decachlorobiphenyl	57		50 - 120								

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 570-657433/7

Matrix: Water

Analysis Batch: 657433

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			11/17/25 14:21	1

Lab Sample ID: LCS 570-657433/8

Matrix: Water

Analysis Batch: 657433

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	23.5		ug/L		94	85 - 115

Lab Sample ID: LCSD 570-657433/9

Matrix: Water

Analysis Batch: 657433

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	23.7		ug/L		95	85 - 115	1	15

Lab Sample ID: 580-155638-1 MS

Matrix: Water

Analysis Batch: 657433

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	4.0	F1	25.0	19.6	F1	ug/L		62	80 - 120

Lab Sample ID: 580-155638-1 MSD

Matrix: Water

Analysis Batch: 657433

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	4.0	F1	25.0	20.2	F1	ug/L		65	80 - 120	3	15

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QC Sample Results

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-508543/4

Matrix: Water

Analysis Batch: 508543

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.538	J	1.5	0.43	mg/L			11/14/25 20:11	1

Lab Sample ID: LCS 580-508543/5

Matrix: Water

Analysis Batch: 508543

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.6		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-508543/6

Matrix: Water

Analysis Batch: 508543

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	50.5		mg/L		101	90 - 110	2	15

Lab Sample ID: 580-155638-1 MS

Matrix: Water

Analysis Batch: 508543

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	180	B F1	50.0	208	F1	mg/L		59	90 - 110

Lab Sample ID: 580-155638-1 MSD

Matrix: Water

Analysis Batch: 508543

Client Sample ID: PMW-20g-110625

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	180	B F1	50.0	210	F1	mg/L		62	90 - 110	1	15

QC Association Summary

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

GC/MS VOA

Analysis Batch: 508533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155638-1	PMW-20g-110625	Total/NA	Water	8260D	
580-155638-2	PMW-19g-110625	Total/NA	Water	8260D	
MB 580-508533/7	Method Blank	Total/NA	Water	8260D	
LCS 580-508533/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-508533/5	Lab Control Sample Dup	Total/NA	Water	8260D	
580-155638-1 MS	PMW-20g-110625	Total/NA	Water	8260D	
580-155638-1 MSD	PMW-20g-110625	Total/NA	Water	8260D	

Analysis Batch: 508643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155638-3	PMW-19b-110625	Total/NA	Water	8260D	
580-155638-4	PMW-01b-110725	Total/NA	Water	8260D	
580-155638-5	PMW-01g-110725	Total/NA	Water	8260D	
580-155638-6	TB-110625	Total/NA	Water	8260D	
MB 580-508643/10	Method Blank	Total/NA	Water	8260D	
LCS 580-508643/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-508643/6	Lab Control Sample Dup	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 508227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155638-1	PMW-20g-110625	Dissolved	Water	3510C	
580-155638-2	PMW-19g-110625	Dissolved	Water	3510C	
580-155638-3	PMW-19b-110625	Dissolved	Water	3510C	
580-155638-4	PMW-01b-110725	Dissolved	Water	3510C	
580-155638-5	PMW-01g-110725	Dissolved	Water	3510C	
MB 580-508227/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-508227/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508227/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508227/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-508227/8-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-508227/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508227/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508227/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-508227/9-A	Lab Control Sample Dup	Total/NA	Water	3510C	
580-155638-1 MS	PMW-20g-110625	Dissolved	Water	3510C	
580-155638-1 MSD	PMW-20g-110625	Dissolved	Water	3510C	

Analysis Batch: 508787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155638-1	PMW-20g-110625	Dissolved	Water	8081B	508227
580-155638-2	PMW-19g-110625	Dissolved	Water	8081B	508227
580-155638-3	PMW-19b-110625	Dissolved	Water	8081B	508227
580-155638-4	PMW-01b-110725	Dissolved	Water	8081B	508227
580-155638-5	PMW-01g-110725	Dissolved	Water	8081B	508227
MB 580-508227/1-A	Method Blank	Total/NA	Water	8081B	508227
LCS 580-508227/2-A	Lab Control Sample	Total/NA	Water	8081B	508227
LCS 580-508227/4-A	Lab Control Sample	Total/NA	Water	8081B	508227
LCS 580-508227/6-A	Lab Control Sample	Total/NA	Water	8081B	508227
LCS 580-508227/8-A	Lab Control Sample	Total/NA	Water	8081B	508227

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QC Association Summary

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

GC Semi VOA (Continued)

Analysis Batch: 508787 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 580-508227/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	508227
LCSD 580-508227/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	508227
LCSD 580-508227/7-A	Lab Control Sample Dup	Total/NA	Water	8081B	508227
LCSD 580-508227/9-A	Lab Control Sample Dup	Total/NA	Water	8081B	508227
580-155638-1 MS	PMW-20g-110625	Dissolved	Water	8081B	508227
580-155638-1 MSD	PMW-20g-110625	Dissolved	Water	8081B	508227

HPLC/IC

Analysis Batch: 657433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155638-1	PMW-20g-110625	Total/NA	Water	314.0	
580-155638-2	PMW-19g-110625	Total/NA	Water	314.0	
580-155638-3	PMW-19b-110625	Total/NA	Water	314.0	
580-155638-4	PMW-01b-110725	Total/NA	Water	314.0	
580-155638-5	PMW-01g-110725	Total/NA	Water	314.0	
MB 570-657433/7	Method Blank	Total/NA	Water	314.0	
LCS 570-657433/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-657433/9	Lab Control Sample Dup	Total/NA	Water	314.0	
580-155638-1 MS	PMW-20g-110625	Total/NA	Water	314.0	
580-155638-1 MSD	PMW-20g-110625	Total/NA	Water	314.0	

General Chemistry

Analysis Batch: 508543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-155638-1	PMW-20g-110625	Total/NA	Water	300.0	
580-155638-2	PMW-19g-110625	Total/NA	Water	300.0	
580-155638-3	PMW-19b-110625	Total/NA	Water	300.0	
580-155638-4	PMW-01b-110725	Total/NA	Water	300.0	
580-155638-5	PMW-01g-110725	Total/NA	Water	300.0	
MB 580-508543/4	Method Blank	Total/NA	Water	300.0	
LCS 580-508543/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-508543/6	Lab Control Sample Dup	Total/NA	Water	300.0	
580-155638-1 MS	PMW-20g-110625	Total/NA	Water	300.0	
580-155638-1 MSD	PMW-20g-110625	Total/NA	Water	300.0	

Lab Chronicle

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-20g-110625

Lab Sample ID: 580-155638-1

Date Collected: 11/06/25 11:25

Matrix: Water

Date Received: 11/10/25 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508533	W1N	EET SEA	11/15/25 06:56
Dissolved	Prep	3510C			508227	J1H	EET SEA	11/12/25 10:02
Dissolved	Analysis	8081B		1	508787	EM	EET SEA	11/19/25 20:38
Total/NA	Analysis	314.0		1	657433	M5Z3	EET CAL 4	11/17/25 17:01
Total/NA	Analysis	300.0		5	508543	MLT	EET SEA	11/14/25 23:12

Client Sample ID: PMW-19g-110625

Lab Sample ID: 580-155638-2

Date Collected: 11/06/25 14:24

Matrix: Water

Date Received: 11/10/25 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508533	W1N	EET SEA	11/15/25 08:04
Dissolved	Prep	3510C			508227	J1H	EET SEA	11/12/25 10:02
Dissolved	Analysis	8081B		1	508787	EM	EET SEA	11/19/25 21:37
Total/NA	Analysis	314.0		1	657433	M5Z3	EET CAL 4	11/17/25 18:42
Total/NA	Analysis	300.0		5	508543	MLT	EET SEA	11/15/25 00:04

Client Sample ID: PMW-19b-110625

Lab Sample ID: 580-155638-3

Date Collected: 11/06/25 16:08

Matrix: Water

Date Received: 11/10/25 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508643	AA	EET SEA	11/18/25 03:53
Dissolved	Prep	3510C			508227	J1H	EET SEA	11/12/25 10:02
Dissolved	Analysis	8081B		1	508787	EM	EET SEA	11/19/25 21:56
Total/NA	Analysis	314.0		1	657433	M5Z3	EET CAL 4	11/17/25 19:15
Total/NA	Analysis	300.0		5	508543	MLT	EET SEA	11/15/25 00:30

Client Sample ID: PMW-01b-110725

Lab Sample ID: 580-155638-4

Date Collected: 11/07/25 09:00

Matrix: Water

Date Received: 11/10/25 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508643	AA	EET SEA	11/18/25 04:38
Dissolved	Prep	3510C			508227	J1H	EET SEA	11/12/25 10:02
Dissolved	Analysis	8081B		1	508787	EM	EET SEA	11/19/25 22:16
Total/NA	Analysis	314.0		1	657433	M5Z3	EET CAL 4	11/17/25 19:49
Total/NA	Analysis	300.0		1	508543	MLT	EET SEA	11/15/25 00:43

Lab Chronicle

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Client Sample ID: PMW-01g-110725

Lab Sample ID: 580-155638-5

Date Collected: 11/07/25 11:20

Matrix: Water

Date Received: 11/10/25 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508643	AA	EET SEA	11/18/25 04:16
Dissolved	Prep	3510C			508227	J1H	EET SEA	11/12/25 10:02
Dissolved	Analysis	8081B		1	508787	EM	EET SEA	11/19/25 22:36
Total/NA	Analysis	314.0		1	657433	M5Z3	EET CAL 4	11/17/25 20:31
Total/NA	Analysis	300.0		1	508543	MLT	EET SEA	11/15/25 01:34

Client Sample ID: TB-110625

Lab Sample ID: 580-155638-6

Date Collected: 11/06/25 00:00

Matrix: Water

Date Received: 11/10/25 11:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	508643	AA	EET SEA	11/18/25 01:37

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ERM-West

Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4167	07-07-26

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4175	02-02-26

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Sample Summary

Client: ERM-West
Project/Site: Arkema-Quarterly 2025 Groundwater Event

Job ID: 580-155638-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-155638-1	PMW-20g-110625	Water	11/06/25 11:25	11/10/25 11:45	Oregon
580-155638-2	PMW-19g-110625	Water	11/06/25 14:24	11/10/25 11:45	Oregon
580-155638-3	PMW-19b-110625	Water	11/06/25 16:08	11/10/25 11:45	Oregon
580-155638-4	PMW-01b-110725	Water	11/07/25 09:00	11/10/25 11:45	Oregon
580-155638-5	PMW-01g-110725	Water	11/07/25 11:20	11/10/25 11:45	Oregon
580-155638-6	TB-110625	Water	11/06/25 00:00	11/10/25 11:45	Oregon

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- 11
- 12

Chain of Custody Record

[illegible]

Chain of Custody Record



Client Information (Sub Contract Lab)				Sampler: N/A		Lab PM: Marshall, Antoinette C		Carrier Tracking No(s): N/A		COC No: 580-151559.1													
Client Contact: Shipping/Receiving				Phone: N/A		E-Mail: Antoinette.Marshall@et.eurofinsus.com		State of Origin: Oregon		Page: Page 1 of 1													
Company: Eurofins Environment Testing Southwest,						Accreditations Required (See note): NELAP - Oregon						Job #: 580-155638-1											
Address: 2841 Dow Avenue, Suite 100,				Due Date Requested: 11/19/2025		Analysis Requested								Preservation Codes: -									
City: Tustin				TAT Requested (days): N/A																			
State, Zip: CA, 92780																							
Phone: 714-895-5494(Tel)				PO #: N/A																			
Email: N/A				WO #: N/A																			
Project Name: Arkema-Quarterly 2025 Groundwater Event				Project #: 58016290																			
Site: N/A				SSOW#: N/A								Other: N/A											
Sample Identification - Client ID (Lab ID)				Sample Date		Sample Time		Sample Type (C=Comp, G=grab) BT=Tissue, A=Air		Matrix (W=Water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		314.0 Perchlorate		Total Number of containers		Special In			
												X X											
PMW-20g-110625 (580-155638-1)				11/6/25		11:25 Pacific		G		Water				X						1			
PMW-20g-110625 (580-155638-1MS)				11/6/25		11:25 Pacific		G		Water				X						1			
PMW-20g-110625 (580-155638-1MSD)				11/6/25		11:25 Pacific		G		Water				X						1			
PMW-19b-110625 (580-155638-2)				11/6/25		14:24 Pacific		G		Water				X						1			
PMW-19b-110625 (580-155638-3)				11/6/25		16:08 Pacific		G		Water				X						1			
PMW-01b-110725 (580-155638-4)				11/7/25		09:00 Pacific		G		Water				X						1			
PMW-01g-110725 (580-155638-5)				11/7/25		11:20 Pacific		G		Water				X						1			
										</													

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-155638-1

Login Number: 155638

List Source: Eurofins Seattle

List Number: 1

Creator: O'Connell, Jason I

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-155638-1

Login Number: 155638

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 11/12/25 01:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	



ANALYTICAL REPORT

PREPARED FOR

Attn: Avery Soplata
ERM-West
1050 SW 6th Avenue
Suite 1650
Portland, Oregon 97204
Generated 12/18/2025 11:56:05 AM

JOB DESCRIPTION

Arkema - Dec 2025 Groundwater Event

JOB NUMBER

580-156384-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



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12/18/2025 11:56:05 AM

Authorized for release by
Antoinette Marshall, Project Manager I
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(253)922-2310

Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	28
QC Association	36
Chronicle	38
Certification Summary	41
Sample Summary	42
Chain of Custody	43
Receipt Checklists	47



Case Narrative

Client: ERM-West
Project: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Job ID: 580-156384-1

Eurofins Seattle

Job Narrative 580-156384-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/10/2025 12:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.0°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-510208 recovered outside acceptance criteria, low biased, for Bromomethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The method blank for analytical batch 580-510208 contained Toluene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MWA-63-120925 (580-156384-9). Elevated reporting limits (RLs) are provided.

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 580-510208 recovered outside acceptance criteria, low biased, for Bromomethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D_LL: The method blank for analytical batch 580-510208 contained Toluene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 314.0: The following samples were diluted due to the nature of the sample matrix: MWA-81i-120825 (580-156384-3), PA-23d-120925 (580-156384-5) and PA-24d-120925 (580-156384-6). Elevated reporting limits (RLs) are provided.

Method 314.0: The following samples were diluted due to the nature of the sample matrix: PA-17iR-120925 (580-156384-10) and Dup-01-120925 (580-156384-11). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Seattle

Definitions/Glossary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: TB-120825

Lab Sample ID: 580-156384-1

Date Collected: 12/08/25 06:30

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/11/25 14:39	1
Chloromethane	ND		0.50	0.14	ug/L			12/11/25 14:39	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/11/25 14:39	1
Bromomethane	ND		0.50	0.13	ug/L			12/11/25 14:39	1
Chloroethane	ND		0.50	0.24	ug/L			12/11/25 14:39	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/11/25 14:39	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/11/25 14:39	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/11/25 14:39	1
Acetone	ND		10	3.1	ug/L			12/11/25 14:39	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/11/25 14:39	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/11/25 14:39	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/11/25 14:39	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/11/25 14:39	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/11/25 14:39	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/11/25 14:39	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/11/25 14:39	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/11/25 14:39	1
Chloroform	ND		0.20	0.030	ug/L			12/11/25 14:39	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/11/25 14:39	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/11/25 14:39	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/11/25 14:39	1
Benzene	ND		0.20	0.030	ug/L			12/11/25 14:39	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/11/25 14:39	1
Trichloroethene	ND		0.20	0.066	ug/L			12/11/25 14:39	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/11/25 14:39	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/11/25 14:39	1
Dibromomethane	ND		0.20	0.062	ug/L			12/11/25 14:39	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/11/25 14:39	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/11/25 14:39	1
Toluene	ND		0.20	0.050	ug/L			12/11/25 14:39	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/11/25 14:39	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/11/25 14:39	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/11/25 14:39	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/11/25 14:39	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/11/25 14:39	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/11/25 14:39	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/11/25 14:39	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/11/25 14:39	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/11/25 14:39	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/11/25 14:39	1
o-Xylene	ND		0.50	0.23	ug/L			12/11/25 14:39	1
Styrene	ND		1.0	0.33	ug/L			12/11/25 14:39	1
Bromoform	ND		0.50	0.16	ug/L			12/11/25 14:39	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/11/25 14:39	1
Bromobenzene	ND		0.20	0.038	ug/L			12/11/25 14:39	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/11/25 14:39	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/11/25 14:39	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/11/25 14:39	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/11/25 14:39	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: TB-120825

Lab Sample ID: 580-156384-1

Date Collected: 12/08/25 06:30

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/11/25 14:39	1
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/11/25 14:39	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/11/25 14:39	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/11/25 14:39	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/11/25 14:39	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/11/25 14:39	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 14:39	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 14:39	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/11/25 14:39	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/11/25 14:39	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/11/25 14:39	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/11/25 14:39	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/11/25 14:39	1
Naphthalene	ND		1.5	0.52	ug/L			12/11/25 14:39	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/11/25 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/11/25 14:39	1
Dibromofluoromethane (Surr)	109		80 - 120		12/11/25 14:39	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/11/25 14:39	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		12/11/25 14:39	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-82-120825

Lab Sample ID: 580-156384-2

Date Collected: 12/08/25 07:35

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/11/25 15:20	1
Chloromethane	ND		0.50	0.14	ug/L			12/11/25 15:20	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/11/25 15:20	1
Bromomethane	ND		0.50	0.13	ug/L			12/11/25 15:20	1
Chloroethane	ND		0.50	0.24	ug/L			12/11/25 15:20	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/11/25 15:20	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/11/25 15:20	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/11/25 15:20	1
Acetone	ND		10	3.1	ug/L			12/11/25 15:20	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/11/25 15:20	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/11/25 15:20	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/11/25 15:20	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/11/25 15:20	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/11/25 15:20	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/11/25 15:20	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/11/25 15:20	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/11/25 15:20	1
Chloroform	1.4		0.20	0.030	ug/L			12/11/25 15:20	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/11/25 15:20	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/11/25 15:20	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/11/25 15:20	1
Benzene	ND		0.20	0.030	ug/L			12/11/25 15:20	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/11/25 15:20	1
Trichloroethene	ND		0.20	0.066	ug/L			12/11/25 15:20	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/11/25 15:20	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/11/25 15:20	1
Dibromomethane	ND		0.20	0.062	ug/L			12/11/25 15:20	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/11/25 15:20	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/11/25 15:20	1
Toluene	ND		0.20	0.050	ug/L			12/11/25 15:20	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/11/25 15:20	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/11/25 15:20	1
Tetrachloroethene	0.42 J		0.50	0.084	ug/L			12/11/25 15:20	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/11/25 15:20	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/11/25 15:20	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/11/25 15:20	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/11/25 15:20	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/11/25 15:20	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/11/25 15:20	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/11/25 15:20	1
o-Xylene	ND		0.50	0.23	ug/L			12/11/25 15:20	1
Styrene	ND		1.0	0.33	ug/L			12/11/25 15:20	1
Bromoform	ND		0.50	0.16	ug/L			12/11/25 15:20	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/11/25 15:20	1
Bromobenzene	ND		0.20	0.038	ug/L			12/11/25 15:20	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/11/25 15:20	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/11/25 15:20	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/11/25 15:20	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/11/25 15:20	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-82-120825

Lab Sample ID: 580-156384-2

Date Collected: 12/08/25 07:35

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/11/25 15:20	1
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/11/25 15:20	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/11/25 15:20	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/11/25 15:20	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/11/25 15:20	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/11/25 15:20	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 15:20	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 15:20	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/11/25 15:20	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/11/25 15:20	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/11/25 15:20	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/11/25 15:20	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/11/25 15:20	1
Naphthalene	ND		1.5	0.52	ug/L			12/11/25 15:20	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/11/25 15:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		12/11/25 15:20	1
Dibromofluoromethane (Surr)	107		80 - 120		12/11/25 15:20	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/11/25 15:20	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		12/11/25 15:20	1

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	5.6		2.0	0.43	ug/L			12/15/25 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	8.5		1.5	0.43	mg/L			12/15/25 18:03	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-81i-120825

Lab Sample ID: 580-156384-3

Date Collected: 12/08/25 08:54

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/11/25 15:41	1
Chloromethane	ND		0.50	0.14	ug/L			12/11/25 15:41	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/11/25 15:41	1
Bromomethane	ND		0.50	0.13	ug/L			12/11/25 15:41	1
Chloroethane	ND		0.50	0.24	ug/L			12/11/25 15:41	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/11/25 15:41	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/11/25 15:41	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/11/25 15:41	1
Acetone	ND		10	3.1	ug/L			12/11/25 15:41	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/11/25 15:41	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/11/25 15:41	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/11/25 15:41	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/11/25 15:41	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/11/25 15:41	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/11/25 15:41	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/11/25 15:41	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/11/25 15:41	1
Chloroform	ND		0.20	0.030	ug/L			12/11/25 15:41	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/11/25 15:41	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/11/25 15:41	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/11/25 15:41	1
Benzene	ND		0.20	0.030	ug/L			12/11/25 15:41	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/11/25 15:41	1
Trichloroethene	ND		0.20	0.066	ug/L			12/11/25 15:41	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/11/25 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/11/25 15:41	1
Dibromomethane	ND		0.20	0.062	ug/L			12/11/25 15:41	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/11/25 15:41	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/11/25 15:41	1
Toluene	ND		0.20	0.050	ug/L			12/11/25 15:41	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/11/25 15:41	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/11/25 15:41	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/11/25 15:41	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/11/25 15:41	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/11/25 15:41	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/11/25 15:41	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/11/25 15:41	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/11/25 15:41	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/11/25 15:41	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/11/25 15:41	1
o-Xylene	ND		0.50	0.23	ug/L			12/11/25 15:41	1
Styrene	ND		1.0	0.33	ug/L			12/11/25 15:41	1
Bromoform	ND		0.50	0.16	ug/L			12/11/25 15:41	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/11/25 15:41	1
Bromobenzene	ND		0.20	0.038	ug/L			12/11/25 15:41	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/11/25 15:41	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/11/25 15:41	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/11/25 15:41	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/11/25 15:41	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-81i-120825

Lab Sample ID: 580-156384-3

Date Collected: 12/08/25 08:54

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/11/25 15:41	1
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/11/25 15:41	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/11/25 15:41	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/11/25 15:41	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/11/25 15:41	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/11/25 15:41	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 15:41	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 15:41	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/11/25 15:41	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/11/25 15:41	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/11/25 15:41	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/11/25 15:41	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/11/25 15:41	1
Naphthalene	ND		1.5	0.52	ug/L			12/11/25 15:41	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/11/25 15:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/11/25 15:41	1
Dibromofluoromethane (Surr)	107		80 - 120		12/11/25 15:41	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/11/25 15:41	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		12/11/25 15:41	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		40	8.6	ug/L			12/15/25 17:52	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	42		1.5	0.43	mg/L			12/15/25 19:47	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-41-120825

Lab Sample ID: 580-156384-4

Date Collected: 12/08/25 10:32

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/11/25 16:02	1
Chloromethane	ND		0.50	0.14	ug/L			12/11/25 16:02	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/11/25 16:02	1
Bromomethane	ND		0.50	0.13	ug/L			12/11/25 16:02	1
Chloroethane	ND		0.50	0.24	ug/L			12/11/25 16:02	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/11/25 16:02	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/11/25 16:02	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/11/25 16:02	1
Acetone	ND		10	3.1	ug/L			12/11/25 16:02	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/11/25 16:02	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/11/25 16:02	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/11/25 16:02	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/11/25 16:02	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/11/25 16:02	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/11/25 16:02	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/11/25 16:02	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/11/25 16:02	1
Chloroform	ND		0.20	0.030	ug/L			12/11/25 16:02	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/11/25 16:02	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/11/25 16:02	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/11/25 16:02	1
Benzene	ND		0.20	0.030	ug/L			12/11/25 16:02	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/11/25 16:02	1
Trichloroethene	ND		0.20	0.066	ug/L			12/11/25 16:02	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/11/25 16:02	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/11/25 16:02	1
Dibromomethane	ND		0.20	0.062	ug/L			12/11/25 16:02	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/11/25 16:02	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/11/25 16:02	1
Toluene	ND		0.20	0.050	ug/L			12/11/25 16:02	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/11/25 16:02	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/11/25 16:02	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/11/25 16:02	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/11/25 16:02	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/11/25 16:02	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/11/25 16:02	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/11/25 16:02	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/11/25 16:02	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/11/25 16:02	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/11/25 16:02	1
o-Xylene	ND		0.50	0.23	ug/L			12/11/25 16:02	1
Styrene	ND		1.0	0.33	ug/L			12/11/25 16:02	1
Bromoform	ND		0.50	0.16	ug/L			12/11/25 16:02	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/11/25 16:02	1
Bromobenzene	ND		0.20	0.038	ug/L			12/11/25 16:02	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/11/25 16:02	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/11/25 16:02	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/11/25 16:02	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/11/25 16:02	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-41-120825

Lab Sample ID: 580-156384-4

Date Collected: 12/08/25 10:32

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/11/25 16:02	1
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/11/25 16:02	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/11/25 16:02	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/11/25 16:02	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/11/25 16:02	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/11/25 16:02	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 16:02	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 16:02	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/11/25 16:02	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/11/25 16:02	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/11/25 16:02	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/11/25 16:02	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/11/25 16:02	1
Naphthalene	ND		1.5	0.52	ug/L			12/11/25 16:02	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/11/25 16:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/11/25 16:02	1
Dibromofluoromethane (Surr)	106		80 - 120		12/11/25 16:02	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/11/25 16:02	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		12/11/25 16:02	1

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/15/25 18:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	4.3		1.5	0.43	mg/L			12/15/25 19:59	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-23d-120925

Lab Sample ID: 580-156384-5

Date Collected: 12/09/25 07:51

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/11/25 16:23	1
Chloromethane	ND		1.0	0.23	ug/L			12/11/25 16:23	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/11/25 16:23	1
Bromomethane	ND		1.0	0.35	ug/L			12/11/25 16:23	1
Chloroethane	ND		1.0	0.34	ug/L			12/11/25 16:23	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/11/25 16:23	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/11/25 16:23	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/11/25 16:23	1
Acetone	ND		25	11	ug/L			12/11/25 16:23	1
Methylene Chloride	ND		15	6.8	ug/L			12/11/25 16:23	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/11/25 16:23	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/11/25 16:23	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/11/25 16:23	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/11/25 16:23	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/11/25 16:23	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/11/25 16:23	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/11/25 16:23	1
Chloroform	0.36	J	1.0	0.11	ug/L			12/11/25 16:23	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/11/25 16:23	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/11/25 16:23	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/11/25 16:23	1
Benzene	ND		1.0	0.47	ug/L			12/11/25 16:23	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/11/25 16:23	1
Trichloroethene	ND		1.0	0.27	ug/L			12/11/25 16:23	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/11/25 16:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/11/25 16:23	1
Dibromomethane	ND		1.0	0.28	ug/L			12/11/25 16:23	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/11/25 16:23	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/11/25 16:23	1
Toluene	ND		1.0	0.21	ug/L			12/11/25 16:23	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/11/25 16:23	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/11/25 16:23	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/11/25 16:23	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/11/25 16:23	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/11/25 16:23	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/11/25 16:23	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/11/25 16:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/11/25 16:23	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/11/25 16:23	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/11/25 16:23	1
o-Xylene	ND		1.0	0.22	ug/L			12/11/25 16:23	1
Styrene	ND		1.0	0.41	ug/L			12/11/25 16:23	1
Bromoform	ND		1.0	0.46	ug/L			12/11/25 16:23	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/11/25 16:23	1
Bromobenzene	ND		1.0	0.18	ug/L			12/11/25 16:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/11/25 16:23	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/11/25 16:23	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/11/25 16:23	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/11/25 16:23	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-23d-120925

Lab Sample ID: 580-156384-5

Date Collected: 12/09/25 07:51

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/11/25 16:23	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/11/25 16:23	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/11/25 16:23	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/11/25 16:23	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/11/25 16:23	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 16:23	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/11/25 16:23	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/11/25 16:23	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 16:23	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/11/25 16:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/11/25 16:23	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/11/25 16:23	1
Naphthalene	ND		3.0	1.4	ug/L			12/11/25 16:23	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/11/25 16:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/11/25 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/11/25 16:23	1
1,2-Dichloroethane-d4 (Surr)	116		80 - 120		12/11/25 16:23	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/11/25 16:23	1
Dibromofluoromethane (Surr)	109		80 - 120		12/11/25 16:23	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/15/25 18:59	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	29000		750	220	mg/L			12/17/25 12:24	500

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-24d-120925

Lab Sample ID: 580-156384-6

Date Collected: 12/09/25 09:12

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/11/25 16:43	1
Chloromethane	ND		1.0	0.23	ug/L			12/11/25 16:43	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/11/25 16:43	1
Bromomethane	ND		1.0	0.35	ug/L			12/11/25 16:43	1
Chloroethane	ND		1.0	0.34	ug/L			12/11/25 16:43	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/11/25 16:43	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/11/25 16:43	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/11/25 16:43	1
Acetone	ND		25	11	ug/L			12/11/25 16:43	1
Methylene Chloride	ND		15	6.8	ug/L			12/11/25 16:43	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/11/25 16:43	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/11/25 16:43	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/11/25 16:43	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/11/25 16:43	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/11/25 16:43	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/11/25 16:43	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/11/25 16:43	1
Chloroform	ND		1.0	0.11	ug/L			12/11/25 16:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/11/25 16:43	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/11/25 16:43	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/11/25 16:43	1
Benzene	ND		1.0	0.47	ug/L			12/11/25 16:43	1
1,2-Dichloroethane	0.94	J	1.0	0.16	ug/L			12/11/25 16:43	1
Trichloroethene	ND		1.0	0.27	ug/L			12/11/25 16:43	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/11/25 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/11/25 16:43	1
Dibromomethane	ND		1.0	0.28	ug/L			12/11/25 16:43	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/11/25 16:43	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/11/25 16:43	1
Toluene	ND		1.0	0.21	ug/L			12/11/25 16:43	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/11/25 16:43	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/11/25 16:43	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/11/25 16:43	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/11/25 16:43	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/11/25 16:43	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/11/25 16:43	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/11/25 16:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/11/25 16:43	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/11/25 16:43	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/11/25 16:43	1
o-Xylene	ND		1.0	0.22	ug/L			12/11/25 16:43	1
Styrene	ND		1.0	0.41	ug/L			12/11/25 16:43	1
Bromoform	ND		1.0	0.46	ug/L			12/11/25 16:43	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/11/25 16:43	1
Bromobenzene	ND		1.0	0.18	ug/L			12/11/25 16:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/11/25 16:43	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/11/25 16:43	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/11/25 16:43	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/11/25 16:43	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-24d-120925

Lab Sample ID: 580-156384-6

Date Collected: 12/09/25 09:12

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/11/25 16:43	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/11/25 16:43	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/11/25 16:43	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/11/25 16:43	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/11/25 16:43	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 16:43	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/11/25 16:43	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/11/25 16:43	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 16:43	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/11/25 16:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/11/25 16:43	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/11/25 16:43	1
Naphthalene	ND		3.0	1.4	ug/L			12/11/25 16:43	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/11/25 16:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/11/25 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/11/25 16:43	1
1,2-Dichloroethane-d4 (Surr)	116		80 - 120		12/11/25 16:43	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/11/25 16:43	1
Dibromofluoromethane (Surr)	109		80 - 120		12/11/25 16:43	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/15/25 19:33	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	32000		750	220	mg/L			12/17/25 12:37	500

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-31i(D)-120925

Lab Sample ID: 580-156384-7

Date Collected: 12/09/25 10:16

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/11/25 17:04	1
Chloromethane	ND		1.0	0.23	ug/L			12/11/25 17:04	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/11/25 17:04	1
Bromomethane	ND		1.0	0.35	ug/L			12/11/25 17:04	1
Chloroethane	ND		1.0	0.34	ug/L			12/11/25 17:04	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/11/25 17:04	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/11/25 17:04	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/11/25 17:04	1
Acetone	ND		25	11	ug/L			12/11/25 17:04	1
Methylene Chloride	ND		15	6.8	ug/L			12/11/25 17:04	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/11/25 17:04	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/11/25 17:04	1
1,1-Dichloroethane	0.46	J	1.0	0.22	ug/L			12/11/25 17:04	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/11/25 17:04	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/11/25 17:04	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/11/25 17:04	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/11/25 17:04	1
Chloroform	77		1.0	0.11	ug/L			12/11/25 17:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/11/25 17:04	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/11/25 17:04	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/11/25 17:04	1
Benzene	ND		1.0	0.47	ug/L			12/11/25 17:04	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/11/25 17:04	1
Trichloroethene	ND		1.0	0.27	ug/L			12/11/25 17:04	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/11/25 17:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/11/25 17:04	1
Dibromomethane	ND		1.0	0.28	ug/L			12/11/25 17:04	1
Dichlorobromomethane	0.19	J	1.0	0.18	ug/L			12/11/25 17:04	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/11/25 17:04	1
Toluene	ND		1.0	0.21	ug/L			12/11/25 17:04	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/11/25 17:04	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/11/25 17:04	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/11/25 17:04	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/11/25 17:04	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/11/25 17:04	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/11/25 17:04	1
Chlorobenzene	0.28	J	1.0	0.22	ug/L			12/11/25 17:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/11/25 17:04	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/11/25 17:04	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/11/25 17:04	1
o-Xylene	ND		1.0	0.22	ug/L			12/11/25 17:04	1
Styrene	ND		1.0	0.41	ug/L			12/11/25 17:04	1
Bromoform	ND		1.0	0.46	ug/L			12/11/25 17:04	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/11/25 17:04	1
Bromobenzene	ND		1.0	0.18	ug/L			12/11/25 17:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/11/25 17:04	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/11/25 17:04	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/11/25 17:04	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/11/25 17:04	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-31i(D)-120925

Lab Sample ID: 580-156384-7

Date Collected: 12/09/25 10:16

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/11/25 17:04	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/11/25 17:04	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/11/25 17:04	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/11/25 17:04	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/11/25 17:04	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 17:04	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/11/25 17:04	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/11/25 17:04	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 17:04	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/11/25 17:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/11/25 17:04	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/11/25 17:04	1
Naphthalene	ND		3.0	1.4	ug/L			12/11/25 17:04	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/11/25 17:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/11/25 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/11/25 17:04	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		12/11/25 17:04	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/11/25 17:04	1
Dibromofluoromethane (Surr)	111		80 - 120		12/11/25 17:04	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	120000		8000	1700	ug/L			12/17/25 00:03	4000

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	23000		750	220	mg/L			12/17/25 12:50	500

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-22d-120925

Lab Sample ID: 580-156384-8

Date Collected: 12/09/25 11:36

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/11/25 17:25	1
Chloromethane	ND		1.0	0.23	ug/L			12/11/25 17:25	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/11/25 17:25	1
Bromomethane	ND		1.0	0.35	ug/L			12/11/25 17:25	1
Chloroethane	ND		1.0	0.34	ug/L			12/11/25 17:25	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/11/25 17:25	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/11/25 17:25	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/11/25 17:25	1
Acetone	ND		25	11	ug/L			12/11/25 17:25	1
Methylene Chloride	ND		15	6.8	ug/L			12/11/25 17:25	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/11/25 17:25	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/11/25 17:25	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/11/25 17:25	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/11/25 17:25	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/11/25 17:25	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/11/25 17:25	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/11/25 17:25	1
Chloroform	19		1.0	0.11	ug/L			12/11/25 17:25	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/11/25 17:25	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/11/25 17:25	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/11/25 17:25	1
Benzene	ND		1.0	0.47	ug/L			12/11/25 17:25	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/11/25 17:25	1
Trichloroethene	ND		1.0	0.27	ug/L			12/11/25 17:25	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/11/25 17:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/11/25 17:25	1
Dibromomethane	ND		1.0	0.28	ug/L			12/11/25 17:25	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/11/25 17:25	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/11/25 17:25	1
Toluene	ND		1.0	0.21	ug/L			12/11/25 17:25	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/11/25 17:25	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/11/25 17:25	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/11/25 17:25	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/11/25 17:25	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/11/25 17:25	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/11/25 17:25	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/11/25 17:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/11/25 17:25	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/11/25 17:25	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/11/25 17:25	1
o-Xylene	ND		1.0	0.22	ug/L			12/11/25 17:25	1
Styrene	ND		1.0	0.41	ug/L			12/11/25 17:25	1
Bromoform	ND		1.0	0.46	ug/L			12/11/25 17:25	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/11/25 17:25	1
Bromobenzene	ND		1.0	0.18	ug/L			12/11/25 17:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/11/25 17:25	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/11/25 17:25	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/11/25 17:25	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/11/25 17:25	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-22d-120925

Lab Sample ID: 580-156384-8

Date Collected: 12/09/25 11:36

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/11/25 17:25	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/11/25 17:25	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/11/25 17:25	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/11/25 17:25	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/11/25 17:25	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 17:25	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/11/25 17:25	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/11/25 17:25	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 17:25	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/11/25 17:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/11/25 17:25	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/11/25 17:25	1
Naphthalene	ND		3.0	1.4	ug/L			12/11/25 17:25	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/11/25 17:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/11/25 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/11/25 17:25	1
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		12/11/25 17:25	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/11/25 17:25	1
Dibromofluoromethane (Surr)	110		80 - 120		12/11/25 17:25	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	10000		800	170	ug/L			12/17/25 00:36	400

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	4600		75	22	mg/L			12/17/25 13:03	50

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-63-120925

Lab Sample ID: 580-156384-9

Date Collected: 12/09/25 12:21

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/11/25 17:45	1
Chloromethane	ND		1.0	0.23	ug/L			12/11/25 17:45	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/11/25 17:45	1
Bromomethane	ND		1.0	0.35	ug/L			12/11/25 17:45	1
Chloroethane	ND		1.0	0.34	ug/L			12/11/25 17:45	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/11/25 17:45	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/11/25 17:45	1
1,1-Dichloroethene	0.26	J	1.0	0.23	ug/L			12/11/25 17:45	1
Acetone	ND		25	11	ug/L			12/11/25 17:45	1
Methylene Chloride	ND		15	6.8	ug/L			12/11/25 17:45	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/11/25 17:45	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/11/25 17:45	1
1,1-Dichloroethane	0.56	J	1.0	0.22	ug/L			12/11/25 17:45	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/11/25 17:45	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/11/25 17:45	1
cis-1,2-Dichloroethene	5.1		1.0	0.17	ug/L			12/11/25 17:45	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/11/25 17:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/11/25 17:45	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/11/25 17:45	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/11/25 17:45	1
Benzene	ND		1.0	0.47	ug/L			12/11/25 17:45	1
1,2-Dichloroethane	0.77	J	1.0	0.16	ug/L			12/11/25 17:45	1
Trichloroethene	3.6		1.0	0.27	ug/L			12/11/25 17:45	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/11/25 17:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/11/25 17:45	1
Dibromomethane	ND		1.0	0.28	ug/L			12/11/25 17:45	1
Dichlorobromomethane	1.3		1.0	0.18	ug/L			12/11/25 17:45	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/11/25 17:45	1
Toluene	ND		1.0	0.21	ug/L			12/11/25 17:45	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/11/25 17:45	1
1,1,2-Trichloroethane	0.54	J	1.0	0.16	ug/L			12/11/25 17:45	1
Tetrachloroethene	23		1.0	0.43	ug/L			12/11/25 17:45	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/11/25 17:45	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/11/25 17:45	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/11/25 17:45	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/11/25 17:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/11/25 17:45	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/11/25 17:45	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/11/25 17:45	1
o-Xylene	ND		1.0	0.22	ug/L			12/11/25 17:45	1
Styrene	ND		1.0	0.41	ug/L			12/11/25 17:45	1
Bromoform	ND		1.0	0.46	ug/L			12/11/25 17:45	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/11/25 17:45	1
Bromobenzene	ND		1.0	0.18	ug/L			12/11/25 17:45	1
1,1,2,2-Tetrachloroethane	0.22	J	1.0	0.18	ug/L			12/11/25 17:45	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/11/25 17:45	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/11/25 17:45	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/11/25 17:45	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/11/25 17:45	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: MWA-63-120925

Lab Sample ID: 580-156384-9

Date Collected: 12/09/25 12:21

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/11/25 17:45	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/11/25 17:45	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/11/25 17:45	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/11/25 17:45	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 17:45	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/11/25 17:45	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/11/25 17:45	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/11/25 17:45	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/11/25 17:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/11/25 17:45	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/11/25 17:45	1
Naphthalene	ND		3.0	1.4	ug/L			12/11/25 17:45	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/11/25 17:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/11/25 17:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/11/25 17:45	1
1,2-Dichloroethane-d4 (Surr)	116		80 - 120		12/11/25 17:45	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/11/25 17:45	1
Dibromofluoromethane (Surr)	110		80 - 120		12/11/25 17:45	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	1600		100	11	ug/L			12/13/25 09:16	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/13/25 09:16	100
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		12/13/25 09:16	100
4-Bromofluorobenzene (Surr)	102		80 - 120		12/13/25 09:16	100
Dibromofluoromethane (Surr)	105		80 - 120		12/13/25 09:16	100

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/15/25 21:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	14		1.5	0.43	mg/L			12/15/25 21:04	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-17iR-120925

Lab Sample ID: 580-156384-10

Date Collected: 12/09/25 13:15

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/11/25 18:06	1
Chloromethane	ND		0.50	0.14	ug/L			12/11/25 18:06	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/11/25 18:06	1
Bromomethane	ND		0.50	0.13	ug/L			12/11/25 18:06	1
Chloroethane	ND		0.50	0.24	ug/L			12/11/25 18:06	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/11/25 18:06	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/11/25 18:06	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/11/25 18:06	1
Acetone	ND		10	3.1	ug/L			12/11/25 18:06	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/11/25 18:06	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/11/25 18:06	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/11/25 18:06	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/11/25 18:06	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/11/25 18:06	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/11/25 18:06	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/11/25 18:06	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/11/25 18:06	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/11/25 18:06	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/11/25 18:06	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/11/25 18:06	1
Benzene	ND		0.20	0.030	ug/L			12/11/25 18:06	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/11/25 18:06	1
Trichloroethene	ND		0.20	0.066	ug/L			12/11/25 18:06	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/11/25 18:06	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/11/25 18:06	1
Dibromomethane	ND		0.20	0.062	ug/L			12/11/25 18:06	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/11/25 18:06	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/11/25 18:06	1
Toluene	0.13	J B	0.20	0.050	ug/L			12/11/25 18:06	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/11/25 18:06	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/11/25 18:06	1
Tetrachloroethene	0.11	J	0.50	0.084	ug/L			12/11/25 18:06	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/11/25 18:06	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/11/25 18:06	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/11/25 18:06	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/11/25 18:06	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/11/25 18:06	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/11/25 18:06	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/11/25 18:06	1
o-Xylene	ND		0.50	0.23	ug/L			12/11/25 18:06	1
Styrene	ND		1.0	0.33	ug/L			12/11/25 18:06	1
Bromoform	ND		0.50	0.16	ug/L			12/11/25 18:06	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/11/25 18:06	1
Bromobenzene	ND		0.20	0.038	ug/L			12/11/25 18:06	1
1,1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/11/25 18:06	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/11/25 18:06	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/11/25 18:06	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/11/25 18:06	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/11/25 18:06	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-17iR-120925

Lab Sample ID: 580-156384-10

Date Collected: 12/09/25 13:15

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/11/25 18:06	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/11/25 18:06	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/11/25 18:06	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/11/25 18:06	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/11/25 18:06	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 18:06	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 18:06	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/11/25 18:06	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/11/25 18:06	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/11/25 18:06	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/11/25 18:06	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/11/25 18:06	1
Naphthalene	ND		1.5	0.52	ug/L			12/11/25 18:06	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/11/25 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		12/11/25 18:06	1
Dibromofluoromethane (Surr)	108		80 - 120		12/11/25 18:06	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/11/25 18:06	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/11/25 18:06	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.20	0.030	ug/L			12/13/25 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/13/25 04:47	1
Dibromofluoromethane (Surr)	106		80 - 120		12/13/25 04:47	1
4-Bromofluorobenzene (Surr)	98		80 - 120		12/13/25 04:47	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		12/13/25 04:47	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/15/25 22:39	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	24		1.5	0.43	mg/L			12/15/25 21:17	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: Dup-01-120925

Lab Sample ID: 580-156384-11

Date Collected: 12/09/25 13:16

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/11/25 18:27	1
Chloromethane	ND		0.50	0.14	ug/L			12/11/25 18:27	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/11/25 18:27	1
Bromomethane	ND		0.50	0.13	ug/L			12/11/25 18:27	1
Chloroethane	ND		0.50	0.24	ug/L			12/11/25 18:27	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/11/25 18:27	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/11/25 18:27	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/11/25 18:27	1
Acetone	ND		10	3.1	ug/L			12/11/25 18:27	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/11/25 18:27	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/11/25 18:27	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/11/25 18:27	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/11/25 18:27	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/11/25 18:27	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/11/25 18:27	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/11/25 18:27	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/11/25 18:27	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/11/25 18:27	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/11/25 18:27	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/11/25 18:27	1
Benzene	ND		0.20	0.030	ug/L			12/11/25 18:27	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/11/25 18:27	1
Trichloroethene	ND		0.20	0.066	ug/L			12/11/25 18:27	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/11/25 18:27	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/11/25 18:27	1
Dibromomethane	ND		0.20	0.062	ug/L			12/11/25 18:27	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/11/25 18:27	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/11/25 18:27	1
Toluene	0.12 J B		0.20	0.050	ug/L			12/11/25 18:27	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/11/25 18:27	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/11/25 18:27	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/11/25 18:27	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/11/25 18:27	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/11/25 18:27	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/11/25 18:27	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/11/25 18:27	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/11/25 18:27	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/11/25 18:27	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/11/25 18:27	1
o-Xylene	ND		0.50	0.23	ug/L			12/11/25 18:27	1
Styrene	ND		1.0	0.33	ug/L			12/11/25 18:27	1
Bromoform	ND		0.50	0.16	ug/L			12/11/25 18:27	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/11/25 18:27	1
Bromobenzene	ND		0.20	0.038	ug/L			12/11/25 18:27	1
1,1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/11/25 18:27	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/11/25 18:27	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/11/25 18:27	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/11/25 18:27	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/11/25 18:27	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: Dup-01-120925

Lab Sample ID: 580-156384-11

Date Collected: 12/09/25 13:16

Matrix: Water

Date Received: 12/10/25 12:00

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/11/25 18:27	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/11/25 18:27	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/11/25 18:27	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/11/25 18:27	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/11/25 18:27	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 18:27	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 18:27	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/11/25 18:27	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/11/25 18:27	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/11/25 18:27	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/11/25 18:27	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/11/25 18:27	1
Naphthalene	ND		1.5	0.52	ug/L			12/11/25 18:27	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/11/25 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/11/25 18:27	1
Dibromofluoromethane (Surr)	106		80 - 120		12/11/25 18:27	1
4-Bromofluorobenzene (Surr)	98		80 - 120		12/11/25 18:27	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/11/25 18:27	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.20	0.030	ug/L			12/13/25 05:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/13/25 05:08	1
Dibromofluoromethane (Surr)	104		80 - 120		12/13/25 05:08	1
4-Bromofluorobenzene (Surr)	97		80 - 120		12/13/25 05:08	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/13/25 05:08	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/15/25 23:12	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	24		1.5	0.43	mg/L			12/15/25 21:30	1

QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-510208/10

Matrix: Water

Analysis Batch: 510208

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/11/25 13:58	1
Chloromethane	ND		0.50	0.14	ug/L			12/11/25 13:58	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/11/25 13:58	1
Bromomethane	ND		0.50	0.13	ug/L			12/11/25 13:58	1
Chloroethane	ND		0.50	0.24	ug/L			12/11/25 13:58	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/11/25 13:58	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/11/25 13:58	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/11/25 13:58	1
Acetone	ND		10	3.1	ug/L			12/11/25 13:58	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/11/25 13:58	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/11/25 13:58	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/11/25 13:58	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/11/25 13:58	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/11/25 13:58	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/11/25 13:58	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/11/25 13:58	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/11/25 13:58	1
Chloroform	ND		0.20	0.030	ug/L			12/11/25 13:58	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/11/25 13:58	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/11/25 13:58	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/11/25 13:58	1
Benzene	ND		0.20	0.030	ug/L			12/11/25 13:58	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/11/25 13:58	1
Trichloroethene	ND		0.20	0.066	ug/L			12/11/25 13:58	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/11/25 13:58	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/11/25 13:58	1
Dibromomethane	ND		0.20	0.062	ug/L			12/11/25 13:58	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/11/25 13:58	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/11/25 13:58	1
Toluene	0.0612	J	0.20	0.050	ug/L			12/11/25 13:58	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/11/25 13:58	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/11/25 13:58	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/11/25 13:58	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/11/25 13:58	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/11/25 13:58	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/11/25 13:58	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/11/25 13:58	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/11/25 13:58	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/11/25 13:58	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/11/25 13:58	1
o-Xylene	ND		0.50	0.23	ug/L			12/11/25 13:58	1
Styrene	ND		1.0	0.33	ug/L			12/11/25 13:58	1
Bromoform	ND		0.50	0.16	ug/L			12/11/25 13:58	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/11/25 13:58	1
Bromobenzene	ND		0.20	0.038	ug/L			12/11/25 13:58	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/11/25 13:58	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/11/25 13:58	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/11/25 13:58	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-510208/10

Matrix: Water

Analysis Batch: 510208

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/11/25 13:58	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/11/25 13:58	1
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/11/25 13:58	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/11/25 13:58	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/11/25 13:58	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/11/25 13:58	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/11/25 13:58	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 13:58	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/11/25 13:58	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/11/25 13:58	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/11/25 13:58	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/11/25 13:58	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/11/25 13:58	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/11/25 13:58	1
Naphthalene	ND		1.5	0.52	ug/L			12/11/25 13:58	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/11/25 13:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/11/25 13:58	1
Dibromofluoromethane (Surr)	107		80 - 120		12/11/25 13:58	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/11/25 13:58	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/11/25 13:58	1

Lab Sample ID: LCS 580-510208/5

Matrix: Water

Analysis Batch: 510208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	3.50		ug/L		70	20 - 150
Chloromethane	5.00	3.55		ug/L		71	32 - 150
Vinyl chloride	5.00	4.57		ug/L		91	41 - 150
Bromomethane	5.00	2.86		ug/L		57	51 - 148
Chloroethane	5.00	5.17		ug/L		103	54 - 140
Carbon disulfide	5.00	5.41		ug/L		108	54 - 142
Trichlorofluoromethane	5.00	4.96		ug/L		99	60 - 132
1,1-Dichloroethene	5.00	5.37		ug/L		107	60 - 129
Acetone	25.0	31.5		ug/L		126	49 - 150
Methylene Chloride	5.00	5.68		ug/L		114	40 - 142
Methyl tert-butyl ether	5.00	4.69		ug/L		94	61 - 131
2-Butanone (MEK)	25.0	24.7		ug/L		99	37 - 150
trans-1,2-Dichloroethene	5.00	4.85		ug/L		97	69 - 121
1,1-Dichloroethane	5.00	4.73		ug/L		95	74 - 120
2,2-Dichloropropane	5.00	5.13		ug/L		103	55 - 140
cis-1,2-Dichloroethene	5.00	4.93		ug/L		99	72 - 120
Chlorobromomethane	5.00	4.78		ug/L		96	79 - 121
Chloroform	5.00	4.98		ug/L		100	75 - 120
1,1,1-Trichloroethane	5.00	4.48		ug/L		90	70 - 121
Carbon tetrachloride	5.00	4.62		ug/L		92	66 - 130

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510208/5

Matrix: Water

Analysis Batch: 510208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	5.00	4.67		ug/L		93	72 - 125
Benzene	5.00	4.75		ug/L		95	80 - 120
1,2-Dichloroethane	5.00	4.87		ug/L		97	74 - 127
Trichloroethene	5.00	4.36		ug/L		87	72 - 120
1,2-Dichloropropane	5.00	5.09		ug/L		102	69 - 130
4-Methyl-2-pentanone (MIBK)	25.0	24.0		ug/L		96	63 - 137
Dibromomethane	5.00	4.54		ug/L		91	65 - 141
Dichlorobromomethane	5.00	4.74		ug/L		95	74 - 131
cis-1,3-Dichloropropene	5.00	4.49		ug/L		90	77 - 131
Toluene	5.00	5.12		ug/L		102	80 - 126
trans-1,3-Dichloropropene	5.00	4.86		ug/L		97	71 - 138
1,1,2-Trichloroethane	5.00	5.04		ug/L		101	73 - 127
Tetrachloroethene	5.00	4.54		ug/L		91	75 - 124
1,3-Dichloropropane	5.00	4.46		ug/L		89	69 - 138
Chlorodibromomethane	5.00	4.74		ug/L		95	62 - 141
Ethylene Dibromide	5.00	5.15		ug/L		103	61 - 143
Chlorobenzene	5.00	4.74		ug/L		95	74 - 123
1,1,1,2-Tetrachloroethane	5.00	5.01		ug/L		100	69 - 127
Ethylbenzene	5.00	4.90		ug/L		98	80 - 124
m-Xylene & p-Xylene	5.00	4.99		ug/L		100	75 - 124
o-Xylene	5.00	4.89		ug/L		98	71 - 124
Styrene	5.00	4.52		ug/L		90	74 - 127
Bromoform	5.00	4.87		ug/L		97	48 - 127
Isopropylbenzene	5.00	4.99		ug/L		100	71 - 123
Bromobenzene	5.00	4.63		ug/L		93	74 - 130
1,1,2,2-Tetrachloroethane	5.00	5.09		ug/L		102	67 - 136
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	67 - 135
N-Propylbenzene	5.00	4.93		ug/L		99	72 - 126
2-Chlorotoluene	5.00	4.65		ug/L		93	73 - 120
4-Chlorotoluene	5.00	4.69		ug/L		94	75 - 124
1,3,5-Trimethylbenzene	5.00	4.97		ug/L		99	75 - 123
tert-Butylbenzene	5.00	4.30		ug/L		86	70 - 129
1,2,4-Trimethylbenzene	5.00	5.07		ug/L		101	71 - 127
sec-Butylbenzene	5.00	4.86		ug/L		97	75 - 126
4-Isopropyltoluene	5.00	4.35		ug/L		87	78 - 125
1,3-Dichlorobenzene	5.00	4.72		ug/L		94	72 - 125
1,4-Dichlorobenzene	5.00	4.81		ug/L		96	71 - 129
n-Butylbenzene	5.00	3.78		ug/L		76	69 - 127
1,2-Dichlorobenzene	5.00	4.67		ug/L		93	72 - 129
1,2-Dibromo-3-Chloropropane	5.00	4.46		ug/L		89	55 - 135
1,2,4-Trichlorobenzene	5.00	4.41		ug/L		88	60 - 130
Hexachlorobutadiene	5.00	4.53		ug/L		91	63 - 130
Naphthalene	5.00	3.90		ug/L		78	54 - 137
1,2,3-Trichlorobenzene	5.00	4.40		ug/L		88	60 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	96		80 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510208/5

Matrix: Water

Analysis Batch: 510208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		80 - 120
1,2-Dichloroethane-d4 (Surr)	98		80 - 120

Lab Sample ID: LCSD 580-510208/6

Matrix: Water

Analysis Batch: 510208

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	3.70		ug/L		74	20 - 150	6	30
Chloromethane	5.00	3.68		ug/L		74	32 - 150	4	33
Vinyl chloride	5.00	4.81		ug/L		96	41 - 150	5	32
Bromomethane	5.00	3.35		ug/L		67	51 - 148	16	35
Chloroethane	5.00	5.24		ug/L		105	54 - 140	1	33
Carbon disulfide	5.00	5.73		ug/L		115	54 - 142	6	34
Trichlorofluoromethane	5.00	5.24		ug/L		105	60 - 132	5	32
1,1-Dichloroethene	5.00	5.67		ug/L		113	60 - 129	5	29
Acetone	25.0	32.7		ug/L		131	49 - 150	4	24
Methylene Chloride	5.00	5.98		ug/L		120	40 - 142	5	25
Methyl tert-butyl ether	5.00	4.86		ug/L		97	61 - 131	4	27
2-Butanone (MEK)	25.0	26.0		ug/L		104	37 - 150	5	35
trans-1,2-Dichloroethene	5.00	5.20		ug/L		104	69 - 121	7	27
1,1-Dichloroethane	5.00	5.01		ug/L		100	74 - 120	6	26
2,2-Dichloropropane	5.00	5.25		ug/L		105	55 - 140	2	31
cis-1,2-Dichloroethene	5.00	5.25		ug/L		105	72 - 120	6	22
Chlorobromomethane	5.00	5.07		ug/L		101	79 - 121	6	20
Chloroform	5.00	5.25		ug/L		105	75 - 120	5	21
1,1,1-Trichloroethane	5.00	4.65		ug/L		93	70 - 121	4	24
Carbon tetrachloride	5.00	4.80		ug/L		96	66 - 130	4	24
1,1-Dichloropropene	5.00	4.77		ug/L		95	72 - 125	2	23
Benzene	5.00	4.94		ug/L		99	80 - 120	4	22
1,2-Dichloroethane	5.00	5.24		ug/L		105	74 - 127	7	21
Trichloroethene	5.00	4.52		ug/L		90	72 - 120	4	22
1,2-Dichloropropane	5.00	5.34		ug/L		107	69 - 130	5	22
4-Methyl-2-pentanone (MIBK)	25.0	25.2		ug/L		101	63 - 137	5	26
Dibromomethane	5.00	4.78		ug/L		96	65 - 141	5	22
Dichlorobromomethane	5.00	4.96		ug/L		99	74 - 131	5	21
cis-1,3-Dichloropropene	5.00	4.66		ug/L		93	77 - 131	4	24
Toluene	5.00	5.16		ug/L		103	80 - 126	1	20
trans-1,3-Dichloropropene	5.00	5.09		ug/L		102	71 - 138	5	26
1,1,2-Trichloroethane	5.00	5.19		ug/L		104	73 - 127	3	22
Tetrachloroethene	5.00	4.74		ug/L		95	75 - 124	4	20
1,3-Dichloropropane	5.00	4.67		ug/L		93	69 - 138	5	19
Chlorodibromomethane	5.00	5.02		ug/L		100	62 - 141	6	22
Ethylene Dibromide	5.00	5.35		ug/L		107	61 - 143	4	22
Chlorobenzene	5.00	5.02		ug/L		100	74 - 123	6	21
1,1,1,2-Tetrachloroethane	5.00	5.14		ug/L		103	69 - 127	3	22
Ethylbenzene	5.00	5.05		ug/L		101	80 - 124	3	22
m-Xylene & p-Xylene	5.00	5.02		ug/L		100	75 - 124	1	22

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-510208/6

Matrix: Water

Analysis Batch: 510208

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
o-Xylene	5.00	5.09		ug/L		102	71 - 124	4	23
Styrene	5.00	4.76		ug/L		95	74 - 127	5	22
Bromoform	5.00	5.01		ug/L		100	48 - 127	3	23
Isopropylbenzene	5.00	5.22		ug/L		104	71 - 123	5	23
Bromobenzene	5.00	4.71		ug/L		94	74 - 130	2	23
1,1,2,2-Tetrachloroethane	5.00	5.25		ug/L		105	67 - 136	3	24
1,2,3-Trichloropropane	5.00	5.27		ug/L		105	67 - 135	2	25
N-Propylbenzene	5.00	5.11		ug/L		102	72 - 126	4	20
2-Chlorotoluene	5.00	4.87		ug/L		97	73 - 120	5	22
4-Chlorotoluene	5.00	4.91		ug/L		98	75 - 124	4	23
1,3,5-Trimethylbenzene	5.00	5.05		ug/L		101	75 - 123	2	23
tert-Butylbenzene	5.00	4.54		ug/L		91	70 - 129	5	24
1,2,4-Trimethylbenzene	5.00	5.03		ug/L		101	71 - 127	1	23
sec-Butylbenzene	5.00	5.03		ug/L		101	75 - 126	3	23
4-Isopropyltoluene	5.00	4.52		ug/L		90	78 - 125	4	24
1,3-Dichlorobenzene	5.00	4.96		ug/L		99	72 - 125	5	22
1,4-Dichlorobenzene	5.00	5.05		ug/L		101	71 - 129	5	22
n-Butylbenzene	5.00	3.88		ug/L		78	69 - 127	3	24
1,2-Dichlorobenzene	5.00	4.92		ug/L		98	72 - 129	5	22
1,2-Dibromo-3-Chloropropane	5.00	4.53		ug/L		91	55 - 135	2	29
1,2,4-Trichlorobenzene	5.00	4.63		ug/L		93	60 - 130	5	26
Hexachlorobutadiene	5.00	4.82		ug/L		96	63 - 130	6	26
Naphthalene	5.00	3.99		ug/L		80	54 - 137	2	28
1,2,3-Trichlorobenzene	5.00	4.67		ug/L		93	60 - 136	6	28

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120

Lab Sample ID: MB 580-510404/10

Matrix: Water

Analysis Batch: 510404

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.20	0.030	ug/L			12/13/25 02:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120					12/13/25 02:22	1
Dibromofluoromethane (Surr)	103		80 - 120					12/13/25 02:22	1
4-Bromofluorobenzene (Surr)	98		80 - 120					12/13/25 02:22	1
1,2-Dichloroethane-d4 (Surr)	99		80 - 120					12/13/25 02:22	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510404/5

Matrix: Water

Analysis Batch: 510404

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	5.00	5.21		ug/L		104	75 - 120
Surrogate							
	LCS %Recovery	LCS Qualifier	Limits				
Toluene-d8 (Surr)	101		80 - 120				
Dibromofluoromethane (Surr)	94		80 - 120				
4-Bromofluorobenzene (Surr)	96		80 - 120				
1,2-Dichloroethane-d4 (Surr)	97		80 - 120				

Lab Sample ID: LCSD 580-510404/6

Matrix: Water

Analysis Batch: 510404

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroform	5.00	5.31		ug/L		106	75 - 120	2	21
Surrogate									
	LCSD %Recovery	LCSD Qualifier	Limits						
Toluene-d8 (Surr)	101		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
4-Bromofluorobenzene (Surr)	99		80 - 120						
1,2-Dichloroethane-d4 (Surr)	94		80 - 120						

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 570-670186/7

Matrix: Water

Analysis Batch: 670186

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/15/25 14:08	1

Lab Sample ID: LCS 570-670186/8

Matrix: Water

Analysis Batch: 670186

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	24.0		ug/L		96	85 - 115

Lab Sample ID: LCSD 570-670186/9

Matrix: Water

Analysis Batch: 670186

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	23.2		ug/L		93	85 - 115	4	15

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 314.0 - Perchlorate (IC) (Continued)

Lab Sample ID: MB 570-670917/7

Matrix: Water

Analysis Batch: 670917

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/16/25 14:07	1

Lab Sample ID: LCS 570-670917/8

Matrix: Water

Analysis Batch: 670917

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	24.5		ug/L		98	85 - 115

Lab Sample ID: LCSD 570-670917/9

Matrix: Water

Analysis Batch: 670917

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	24.1		ug/L		96	85 - 115	2	15

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-510682/4

Matrix: Water

Analysis Batch: 510682

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/15/25 16:59	1

Lab Sample ID: LCS 580-510682/5

Matrix: Water

Analysis Batch: 510682

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.4		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-510682/6

Matrix: Water

Analysis Batch: 510682

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	50.3		mg/L		101	90 - 110	0	15

Lab Sample ID: 580-156384-2 MS

Matrix: Water

Analysis Batch: 510682

Client Sample ID: MWA-82-120825

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	8.5		50.0	58.9		mg/L		101	90 - 110

Eurofins Seattle

QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 580-156384-2 MSD

Matrix: Water

Analysis Batch: 510682

Client Sample ID: MWA-82-120825

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	8.5		50.0	57.8		mg/L		99	90 - 110	2	15

Lab Sample ID: MB 580-510774/4

Matrix: Water

Analysis Batch: 510774

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/17/25 11:45	1

Lab Sample ID: LCS 580-510774/5

Matrix: Water

Analysis Batch: 510774

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-510774/6

Matrix: Water

Analysis Batch: 510774

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	51.3		mg/L		103	90 - 110	0	15

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

GC/MS VOA

Analysis Batch: 510208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156384-1	TB-120825	Total/NA	Water	8260D	
580-156384-2	MWA-82-120825	Total/NA	Water	8260D	
580-156384-3	MWA-81i-120825	Total/NA	Water	8260D	
580-156384-4	MWA-41-120825	Total/NA	Water	8260D	
580-156384-5	PA-23d-120925	Total/NA	Water	8260D	
580-156384-6	PA-24d-120925	Total/NA	Water	8260D	
580-156384-7	MWA-31i(D)-120925	Total/NA	Water	8260D	
580-156384-8	PA-22d-120925	Total/NA	Water	8260D	
580-156384-9	MWA-63-120925	Total/NA	Water	8260D	
580-156384-10	PA-17iR-120925	Total/NA	Water	8260D	
580-156384-11	Dup-01-120925	Total/NA	Water	8260D	
MB 580-510208/10	Method Blank	Total/NA	Water	8260D	
LCS 580-510208/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510208/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 510404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156384-9 - DL	MWA-63-120925	Total/NA	Water	8260D	
580-156384-10 - RA	PA-17iR-120925	Total/NA	Water	8260D	
580-156384-11 - RA	Dup-01-120925	Total/NA	Water	8260D	
MB 580-510404/10	Method Blank	Total/NA	Water	8260D	
LCS 580-510404/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510404/6	Lab Control Sample Dup	Total/NA	Water	8260D	

HPLC/IC

Analysis Batch: 670186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156384-2	MWA-82-120825	Total/NA	Water	314.0	
580-156384-3 - DL	MWA-81i-120825	Total/NA	Water	314.0	
580-156384-4	MWA-41-120825	Total/NA	Water	314.0	
580-156384-5 - DL	PA-23d-120925	Total/NA	Water	314.0	
580-156384-6 - DL	PA-24d-120925	Total/NA	Water	314.0	
580-156384-9	MWA-63-120925	Total/NA	Water	314.0	
580-156384-10 - DL	PA-17iR-120925	Total/NA	Water	314.0	
580-156384-11 - DL	Dup-01-120925	Total/NA	Water	314.0	
MB 570-670186/7	Method Blank	Total/NA	Water	314.0	
LCS 570-670186/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-670186/9	Lab Control Sample Dup	Total/NA	Water	314.0	

Analysis Batch: 670917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156384-7 - DL	MWA-31i(D)-120925	Total/NA	Water	314.0	
580-156384-8 - DL	PA-22d-120925	Total/NA	Water	314.0	
MB 570-670917/7	Method Blank	Total/NA	Water	314.0	
LCS 570-670917/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-670917/9	Lab Control Sample Dup	Total/NA	Water	314.0	

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

General Chemistry

Analysis Batch: 510682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156384-2	MWA-82-120825	Total/NA	Water	300.0	
580-156384-3	MWA-81i-120825	Total/NA	Water	300.0	
580-156384-4	MWA-41-120825	Total/NA	Water	300.0	
580-156384-9	MWA-63-120925	Total/NA	Water	300.0	
580-156384-10	PA-17iR-120925	Total/NA	Water	300.0	
580-156384-11	Dup-01-120925	Total/NA	Water	300.0	
MB 580-510682/4	Method Blank	Total/NA	Water	300.0	
LCS 580-510682/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-510682/6	Lab Control Sample Dup	Total/NA	Water	300.0	
580-156384-2 MS	MWA-82-120825	Total/NA	Water	300.0	
580-156384-2 MSD	MWA-82-120825	Total/NA	Water	300.0	

Analysis Batch: 510774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156384-5	PA-23d-120925	Total/NA	Water	300.0	
580-156384-6	PA-24d-120925	Total/NA	Water	300.0	
580-156384-7	MWA-31i(D)-120925	Total/NA	Water	300.0	
580-156384-8	PA-22d-120925	Total/NA	Water	300.0	
MB 580-510774/4	Method Blank	Total/NA	Water	300.0	
LCS 580-510774/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-510774/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: TB-120825

Lab Sample ID: 580-156384-1

Date Collected: 12/08/25 06:30

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 14:39

Client Sample ID: MWA-82-120825

Lab Sample ID: 580-156384-2

Date Collected: 12/08/25 07:35

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 15:20
Total/NA	Analysis	314.0		1	670186	M5Z3	EET CAL 4	12/15/25 17:18
Total/NA	Analysis	300.0		1	510682	MLT	EET SEA	12/15/25 18:03

Client Sample ID: MWA-81i-120825

Lab Sample ID: 580-156384-3

Date Collected: 12/08/25 08:54

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 15:41
Total/NA	Analysis	314.0	DL	20	670186	M5Z3	EET CAL 4	12/15/25 17:52
Total/NA	Analysis	300.0		1	510682	MLT	EET SEA	12/15/25 19:47

Client Sample ID: MWA-41-120825

Lab Sample ID: 580-156384-4

Date Collected: 12/08/25 10:32

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 16:02
Total/NA	Analysis	314.0		1	670186	M5Z3	EET CAL 4	12/15/25 18:26
Total/NA	Analysis	300.0		1	510682	MLT	EET SEA	12/15/25 19:59

Client Sample ID: PA-23d-120925

Lab Sample ID: 580-156384-5

Date Collected: 12/09/25 07:51

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 16:23
Total/NA	Analysis	314.0	DL	40	670186	M5Z3	EET CAL 4	12/15/25 18:59
Total/NA	Analysis	300.0		500	510774	MLT	EET SEA	12/17/25 12:24

Client Sample ID: PA-24d-120925

Lab Sample ID: 580-156384-6

Date Collected: 12/09/25 09:12

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 16:43
Total/NA	Analysis	314.0	DL	40	670186	M5Z3	EET CAL 4	12/15/25 19:33

Eurofins Seattle

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Client Sample ID: PA-24d-120925

Lab Sample ID: 580-156384-6

Date Collected: 12/09/25 09:12

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		500	510774	MLT	EET SEA	12/17/25 12:37

Client Sample ID: MWA-31i(D)-120925

Lab Sample ID: 580-156384-7

Date Collected: 12/09/25 10:16

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 17:04
Total/NA	Analysis	314.0	DL	4000	670917	M5Z3	EET CAL 4	12/17/25 00:03
Total/NA	Analysis	300.0		500	510774	MLT	EET SEA	12/17/25 12:50

Client Sample ID: PA-22d-120925

Lab Sample ID: 580-156384-8

Date Collected: 12/09/25 11:36

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 17:25
Total/NA	Analysis	314.0	DL	400	670917	M5Z3	EET CAL 4	12/17/25 00:36
Total/NA	Analysis	300.0		50	510774	MLT	EET SEA	12/17/25 13:03

Client Sample ID: MWA-63-120925

Lab Sample ID: 580-156384-9

Date Collected: 12/09/25 12:21

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 17:45
Total/NA	Analysis	8260D	DL	100	510404	W1N	EET SEA	12/13/25 09:16
Total/NA	Analysis	314.0		1	670186	M5Z3	EET CAL 4	12/15/25 21:14
Total/NA	Analysis	300.0		1	510682	MLT	EET SEA	12/15/25 21:04

Client Sample ID: PA-17iR-120925

Lab Sample ID: 580-156384-10

Date Collected: 12/09/25 13:15

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 18:06
Total/NA	Analysis	8260D	RA	1	510404	W1N	EET SEA	12/13/25 04:47
Total/NA	Analysis	314.0	DL	40	670186	M5Z3	EET CAL 4	12/15/25 22:39
Total/NA	Analysis	300.0		1	510682	MLT	EET SEA	12/15/25 21:17

Lab Chronicle

Client: ERM-West

Job ID: 580-156384-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: Dup-01-120925

Lab Sample ID: 580-156384-11

Date Collected: 12/09/25 13:16

Matrix: Water

Date Received: 12/10/25 12:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510208	K1K	EET SEA	12/11/25 18:27
Total/NA	Analysis	8260D	RA	1	510404	W1N	EET SEA	12/13/25 05:08
Total/NA	Analysis	314.0	DL	40	670186	M5Z3	EET CAL 4	12/15/25 23:12
Total/NA	Analysis	300.0		1	510682	MLT	EET SEA	12/15/25 21:30

Laboratory References:
EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494
EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4167	07-07-26

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4175	02-02-26

1
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10
11
12

Sample Summary

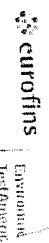
Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156384-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-156384-1	TB-120825	Water	12/08/25 06:30	12/10/25 12:00	Oregon
580-156384-2	MWA-82-120825	Water	12/08/25 07:35	12/10/25 12:00	Oregon
580-156384-3	MWA-81i-120825	Water	12/08/25 08:54	12/10/25 12:00	Oregon
580-156384-4	MWA-41-120825	Water	12/08/25 10:32	12/10/25 12:00	Oregon
580-156384-5	PA-23d-120925	Water	12/09/25 07:51	12/10/25 12:00	Oregon
580-156384-6	PA-24d-120925	Water	12/09/25 09:12	12/10/25 12:00	Oregon
580-156384-7	MWA-31i(D)-120925	Water	12/09/25 10:16	12/10/25 12:00	Oregon
580-156384-8	PA-22d-120925	Water	12/09/25 11:36	12/10/25 12:00	Oregon
580-156384-9	MWA-63-120925	Water	12/09/25 12:21	12/10/25 12:00	Oregon
580-156384-10	PA-17iR-120925	Water	12/09/25 13:15	12/10/25 12:00	Oregon
580-156384-11	Dup-01-120925	Water	12/09/25 13:16	12/10/25 12:00	Oregon

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record



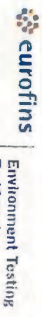
Client Information		Sampler: Scott Terranova		Lab Pk: Marshall, Tony		Center Tracking Note:		COC No:	
Client Contact: Avery Soplat		Phone:		E-Mail: antoinette.marshall@eurofins.com				Page: 1 of 1	
Company: ERM-West		Date Date Requested:		Analysis Requested				Job #:	
Address: 1050 SW 6th Avenue Suite 1650		TAT Requested (days):		Standard					
City: Portland									
Suite Zip: OR, 97204		PO #:							
Phone: PN 073710.507		WO #:							
Email: avery.soplat@erm.com		Project #:							
Arteme - December 2025 Groundwater Event		073710.507							
Site:		SSON#:							
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, B=Blank, A=V)		Matrix (Name, Brand, Brix, A=V)	
TB-120825		12/8/25		0630		G		Water	
MW A-82-120825				0735		G		Water	
MW A-81-120825				0854		G		Water	
MW A-41-120825				1032		G		Water	
PA-23d-120925		12/9/25		0751		G		Water	
PA-24d-120925				0812		G		Water	
MW A-31(d)-120925				1016		G		Water	
PA-22d-120925				1136		G		Water	
MW A-63-120925				1221		G		Water	
PA-17iR-120925				1315		G		Water	
DAP-01-120925				1316		G		Water	
Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Silica ☐ Inert ☐ Poison B ☐ Unknown ☐ Radiological							
Deliverable Requested: I, II, III, IV, Other (specify)									
Empty Kit Relinquished by:		Date/Time:		Date:		Time:		Method of Shipment:	
Relinquished by: [Signature]		12/10/25						Received by: [Signature]	
Relinquished by: [Signature]		12/10/25						Received by: [Signature]	
Relinquished by: [Signature]		12/10/25						Received by: [Signature]	
Custody Seal Intact: ☐ Yes ☐ No		Custody Seal No.:						Cooler Temperature(s) °C and Other Remarks:	
								1.4/20 20x 52.2	



580-156384 COC

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record



Client Information		Sampler:	Lab Pk:	COC No:
Client Contact:	Scott Terranova	Marshall, Tony		
Client Email:	antonette.marshall@eurofins.com			

Company:	ERM-West	Due Date Requested:	Analysis Requested	
Address:	1050 SW 6th Avenue Suite 1650			
City:	Portland	TAT Requested (days):	Standard	
State, Zip:	OR, 97204			
Phone:		PO #:		
		PN 073710.507		
Email:	avery.soplate@erm.com	MO #:		
		WO #:		
Project Name:	Arkema - December 2025 Groundwater Event	Project #:		
		0773710.507		
Site:		SSOW:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (In-house, E-mail, Other, A=H)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C regular level standard VOA list-Seattle	8260C_LL - Standard VOA list-Seattle	300.0_28D-Chloride-Seattle	314 Perchlorate	8081B- Pesticides, standard list	8081B Pesticides, standard list - Field Filtered	Total Number of containers	Special Instructions/Note:
TS-120825	12/8/25	0630	G	Water			X	X	X	X	X	X	2	
MW A-82-120825		0735		Water			X	X	X	X	X	X	5	
MW A-81-120825		0854		Water			X	X	X	X	X	X	5	
MW A-41-120825		1032		Water			X	X	X	X	X	X	5	
PA-23d-120925	12/9/25	0751	G	Water			X	X	X	X	X	X	5	
PA-24d-120925		0912		Water			X	X	X	X	X	X	5	
MW A-31(d)-120925		1016		Water			X	X	X	X	X	X	5	
PA-22d-120925		1136		Water			X	X	X	X	X	X	5	
MW A-63-120925		1221		Water			X	X	X	X	X	X	5	
PA-17iR-120925		1315		Water			X	X	X	X	X	X	5	
DUP-01-120925		1316		Water			X	X	X	X	X	X	5	

Possible Hazard Identification		Non-Hazard	Flammable	Slightly Inert	Poison B	Unknown	Biological
Deliverable Requested: I, II, III, IV, Other (Specify)							

Empty Kit Relinquished By:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
LM	12/10/25	ERM	Antonette Marshall	12/10/25	ERM

Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Antonette Marshall	12/10/25	ERM	Antonette Marshall	12/10/25	ERM

Custody Seal Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No		5811 2.0/2.8 1.4/2.0 20x SC 22



580-156384 COC

5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310

Chain of Custody Record



End

Loc: 580

156384

Client Information (Sub Contract Lab)		Sampler: N/A	Lab PM: Marshall, Antoinette C	Carrier Tracking No(s): N/A	COC No: 580-152351.1		
Client Contact:		Phone: N/A	E-Mail: Antoinette.Marshall@et.eurofinsus.com	State of Origin: Oregon	Page: Page 1 of 2		
Shipping/Receiving							
Company: Eurofins Environment Testing Southwest, Address: 2841 Dow Avenue, Suite 100, City: Tustin State, Zip: CA, 92780 Phone: 714-895-5494(Tel) Email: N/A Project Name: Arkema - Q4 2025 Groundwater Event Site: N/A			Accreditations Required (See note): NELAP - Oregon		Job #: 580-156384-1 Preservation Codes:		
			Analysis Requested				
Due Date Requested: 12/17/2025 TAT Requested (days): N/A							
PO #: N/A WO #: N/A Project #: 58016290 SSOW#: N/A							
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 314.0Pchlorate	Total Number of containers	Special Instructions
MWA-82-120825 (580-156384-2)	12/8/25	07:35 Pacific	G	Water	X		
MWA-81i-120825 (580-156384-3)	12/8/25	08:54 Pacific	G	Water	X		
MWA-41-120825 (580-156384-4)	12/8/25	10:32 Pacific	G	Water	X		
PA-23d-120925 (580-156384-5)	12/9/25	07:51 Pacific	G	Water	X		
PA-24d-120925 (580-156384-6)	12/9/25	09:12 Pacific	G	Water	X		
MWA-31i(D)-120925 (580-156384-7)	12/9/25	10:16 Pacific	G	Water	X		
PA-22d-120925 (580-156384-8)	12/9/25	11:36 Pacific	G	Water	X		
MWA-63-120925 (580-156384-9)	12/9/25	12:21 Pacific	G	Water	X		
PA-17IR-120925 (580-156384-10)	12/9/25	13:15 Pacific	G	Water	X		
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laborator does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northwest, LLC.							
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
Unconfirmed					Return To Client Disposal By Lab Archive For _____ Months		
Deliverable Requested: I, II, III, IV, Other (specify) _____			Primary Deliverable Rank: 2		Special Instructions/QC Requirements:		
Empty Kit Relinquished by:			Date:	Time:	Method of Shipment:		
Relinquished by: [Signature]			Date/Time: 12/16/15 1526	Company: EES	Received by: Julie Jewel		Date/Time: 12/11/25 1005 Company: EC
Relinquished by:			Date/Time:	Company:	Received by:		Date/Time: Company:
Relinquished by:			Date/Time:	Company:	Received by:		Date/Time: Company:
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.: _____		Cooler Temperature(s) °C and Other Remarks: 4.9 / 4.4 IR4			

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156384-1

Login Number: 156384

List Source: Eurofins Seattle

List Number: 1

Creator: Mcalpine, James 1

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156384-1

Login Number: 156384

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 12/11/25 01:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Avery Soplata
ERM-West
1050 SW 6th Avenue
Suite 1650
Portland, Oregon 97204
Generated 12/22/2025 8:10:50 AM

JOB DESCRIPTION

Arkema - Dec 2025 Groundwater Event

JOB NUMBER

580-156488-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
12/22/2025 8:10:50 AM

Authorized for release by
Antoinette Marshall, Project Manager I
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Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	15
QC Association	22
Chronicle	24
Certification Summary	26
Sample Summary	27
Chain of Custody	28
Receipt Checklists	34



Case Narrative

Client: ERM-West
Project: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Job ID: 580-156488-1

Eurofins Seattle

Job Narrative 580-156488-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/12/2025 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

Pesticides

Method 8081B: The following samples required a copper clean-up (Cu_Powder_00002), via EPA Method 3660B, to reduce matrix interferences: PMW-18b-121025 (580-156488-2), PMW-09b-121025 (580-156488-3), PMW-09b-121025 (580-156488-3[MS]), PMW-09b-121025 (580-156488-3[MSD]), PMW-09G-121025 (580-156488-4), PMW-06b2-121025 (580-156488-5), PMW-06b-121025 (580-156488-6), PMW-05b2-121025 (580-156488-7), PMW-05b-121125 (580-156488-8), Dup-02-121125 (580-156488-9), PMW-04b-121125 (580-156488-10), (LCS 580-510614/2-A), (LCS 580-510614/3-A), (LCS 580-510614/5-A), (LCS 580-510614/7-A), (LCSD 580-510614/4-A), (LCSD 580-510614/6-A), (LCSD 580-510614/8-A) and (MB 580-510614/1-A).

Method 8081B - Dissolved: The following samples required a copper clean-up (Cu_Powder_00002), via EPA Method 3660B, to reduce matrix interferences: PMW-18b-121025 (580-156488-2), PMW-09b-121025 (580-156488-3), PMW-09b-121025 (580-156488-3[MS]), PMW-09b-121025 (580-156488-3[MSD]), PMW-09G-121025 (580-156488-4), PMW-06b2-121025 (580-156488-5), PMW-06b-121025 (580-156488-6), PMW-05b2-121025 (580-156488-7), PMW-05b-121125 (580-156488-8), Dup-02-121125 (580-156488-9), PMW-04b-121125 (580-156488-10), (LCS 580-510614/2-A), (LCS 580-510614/3-A), (LCS 580-510614/5-A), (LCS 580-510614/7-A), (LCSD 580-510614/4-A), (LCSD 580-510614/6-A), (LCSD 580-510614/8-A) and (MB 580-510614/1-A).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 314.0: The following sample was diluted due to the nature of the sample matrix: PMW-18b-121025 (580-156488-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

Method 300.0_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 580-510977 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Seattle

Definitions/Glossary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-18b-121025

Lab Sample ID: 580-156488-2

Date Collected: 12/10/25 06:41

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.015	0.0060	ug/L		12/16/25 11:55	12/18/25 16:48	1
4,4'-DDE	ND		0.0099	0.0030	ug/L		12/16/25 11:55	12/18/25 16:48	1
4,4'-DDT	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
Aldrin	ND		0.024	0.0069	ug/L		12/16/25 11:55	12/18/25 16:48	1
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 11:55	12/18/25 16:48	1
cis-Chlordane	ND		0.027	0.0079	ug/L		12/16/25 11:55	12/18/25 16:48	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
Chlordane (technical)	ND		0.20	0.062	ug/L		12/16/25 11:55	12/18/25 16:48	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 16:48	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 16:48	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 11:55	12/18/25 16:48	1
Endrin aldehyde	ND		0.060	0.034	ug/L		12/16/25 11:55	12/18/25 16:48	1
Endrin ketone	ND		0.020	0.0069	ug/L		12/16/25 11:55	12/18/25 16:48	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 16:48	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 11:55	12/18/25 16:48	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 16:48	1
Methoxychlor	ND		0.099	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 11:55	12/18/25 16:48	1
2,4'-DDD	ND		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 16:48	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/16/25 11:55	12/18/25 16:48	1
2,4'-DDT	ND		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	63		50 - 120	12/16/25 11:55	12/18/25 16:48	1
Tetrachloro-m-xylene	56		42 - 120	12/16/25 11:55	12/18/25 16:48	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		10	2.1	ug/L			12/16/25 15:54	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	1400		75	22	mg/L			12/19/25 13:54	50

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-09b-121025

Lab Sample ID: 580-156488-3

Date Collected: 12/10/25 08:31

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 11:55	12/18/25 17:07	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 11:55	12/18/25 17:07	1
Aldrin	ND		0.024	0.0069	ug/L		12/16/25 11:55	12/18/25 17:07	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 17:07	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 17:07	1
cis-Chlordane	ND		0.027	0.0079	ug/L		12/16/25 11:55	12/18/25 17:07	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 17:07	1
4,4'-DDE	ND		0.0099	0.0030	ug/L		12/16/25 11:55	12/18/25 17:07	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 11:55	12/18/25 17:07	1
4,4'-DDD	ND		0.015	0.0060	ug/L		12/16/25 11:55	12/18/25 17:07	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
4,4'-DDT	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
Endrin aldehyde	ND		0.060	0.034	ug/L		12/16/25 11:55	12/18/25 17:07	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 17:07	1
Methoxychlor	ND		0.099	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
Endrin ketone	ND		0.020	0.0069	ug/L		12/16/25 11:55	12/18/25 17:07	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 11:55	12/18/25 17:07	1
Chlordane (technical)	ND		0.20	0.062	ug/L		12/16/25 11:55	12/18/25 17:07	1
2,4'-DDD	ND		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 17:07	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/16/25 11:55	12/18/25 17:07	1
2,4'-DDT	ND		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 17:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	55		42 - 120	12/16/25 11:55	12/18/25 17:07	1
DCB Decachlorobiphenyl	56		50 - 120	12/16/25 11:55	12/18/25 17:07	1

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	23		2.0	0.43	ug/L			12/16/25 16:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	140	F1	7.5	2.2	mg/L			12/18/25 21:45	5

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-09G-121025

Lab Sample ID: 580-156488-4

Date Collected: 12/10/25 10:46

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 11:55	12/18/25 18:07	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 11:55	12/18/25 18:07	1
Aldrin	ND		0.024	0.0070	ug/L		12/16/25 11:55	12/18/25 18:07	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:07	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:07	1
cis-Chlordane	ND		0.027	0.0079	ug/L		12/16/25 11:55	12/18/25 18:07	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:07	1
4,4'-DDE	ND		0.0099	0.0030	ug/L		12/16/25 11:55	12/18/25 18:07	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 11:55	12/18/25 18:07	1
4,4'-DDD	ND		0.015	0.0060	ug/L		12/16/25 11:55	12/18/25 18:07	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
4,4'-DDT	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
Endrin aldehyde	ND		0.060	0.034	ug/L		12/16/25 11:55	12/18/25 18:07	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:07	1
Methoxychlor	ND		0.099	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
Endrin ketone	ND		0.020	0.0070	ug/L		12/16/25 11:55	12/18/25 18:07	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 11:55	12/18/25 18:07	1
Chlordane (technical)	ND		0.20	0.062	ug/L		12/16/25 11:55	12/18/25 18:07	1
2,4'-DDD	ND		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 18:07	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/16/25 11:55	12/18/25 18:07	1
2,4'-DDT	ND		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 18:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		42 - 120	12/16/25 11:55	12/18/25 18:07	1
DCB Decachlorobiphenyl	67		50 - 120	12/16/25 11:55	12/18/25 18:07	1

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	22		2.0	0.43	ug/L			12/16/25 18:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	160		7.5	2.2	mg/L			12/19/25 11:32	5

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-06b2-121025

Lab Sample ID: 580-156488-5

Date Collected: 12/10/25 12:03

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.0094	J	0.015	0.0060	ug/L		12/16/25 11:55	12/18/25 18:27	1
4,4'-DDE	ND		0.0099	0.0030	ug/L		12/16/25 11:55	12/18/25 18:27	1
4,4'-DDT	0.044		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
Aldrin	ND		0.024	0.0070	ug/L		12/16/25 11:55	12/18/25 18:27	1
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 11:55	12/18/25 18:27	1
cis-Chlordane	ND		0.027	0.0080	ug/L		12/16/25 11:55	12/18/25 18:27	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
Chlordane (technical)	ND		0.20	0.062	ug/L		12/16/25 11:55	12/18/25 18:27	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:27	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:27	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 11:55	12/18/25 18:27	1
Endrin aldehyde	ND		0.060	0.034	ug/L		12/16/25 11:55	12/18/25 18:27	1
Endrin ketone	ND		0.020	0.0070	ug/L		12/16/25 11:55	12/18/25 18:27	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:27	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 11:55	12/18/25 18:27	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:27	1
Methoxychlor	ND		0.099	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 11:55	12/18/25 18:27	1
2,4'-DDD	ND		0.030	0.0090	ug/L		12/16/25 11:55	12/18/25 18:27	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/16/25 11:55	12/18/25 18:27	1
2,4'-DDT	0.016	J	0.030	0.0090	ug/L		12/16/25 11:55	12/18/25 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	60		50 - 120	12/16/25 11:55	12/18/25 18:27	1
Tetrachloro-m-xylene	68		42 - 120	12/16/25 11:55	12/18/25 18:27	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	5100		400	86	ug/L			12/18/25 15:13	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	3900		150	43	mg/L			12/19/25 11:45	100

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-06b-121025

Lab Sample ID: 580-156488-6

Date Collected: 12/10/25 12:56

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.093		0.015	0.0059	ug/L		12/16/25 11:55	12/18/25 18:47	1
4,4'-DDE	0.030		0.0099	0.0030	ug/L		12/16/25 11:55	12/18/25 18:47	1
4,4'-DDT	0.93		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
Aldrin	ND		0.024	0.0069	ug/L		12/16/25 11:55	12/18/25 18:47	1
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 11:55	12/18/25 18:47	1
cis-Chlordane	ND		0.027	0.0079	ug/L		12/16/25 11:55	12/18/25 18:47	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
Chlordane (technical)	ND		0.20	0.061	ug/L		12/16/25 11:55	12/18/25 18:47	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:47	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:47	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 11:55	12/18/25 18:47	1
Endrin aldehyde	ND		0.059	0.034	ug/L		12/16/25 11:55	12/18/25 18:47	1
Endrin ketone	ND		0.020	0.0069	ug/L		12/16/25 11:55	12/18/25 18:47	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:47	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 11:55	12/18/25 18:47	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 18:47	1
Methoxychlor	ND		0.099	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 11:55	12/18/25 18:47	1
2,4'-DDD	0.067		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 18:47	1
2,4'-DDE	0.0085 J		0.030	0.0050	ug/L		12/16/25 11:55	12/18/25 18:47	1
2,4'-DDT	0.31		0.030	0.0089	ug/L		12/16/25 11:55	12/18/25 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	56		50 - 120	12/16/25 11:55	12/18/25 18:47	1
Tetrachloro-m-xylene	65		42 - 120	12/16/25 11:55	12/18/25 18:47	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	710		80	17	ug/L			12/18/25 15:30	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	1100		75	22	mg/L			12/19/25 14:07	50

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-05b2-121025

Lab Sample ID: 580-156488-7

Date Collected: 12/10/25 14:25

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	0.024		0.015	0.0061	ug/L		12/16/25 11:55	12/18/25 19:07	1
4,4'-DDE	ND		0.010	0.0030	ug/L		12/16/25 11:55	12/18/25 19:07	1
4,4'-DDT	0.12		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
Aldrin	ND		0.024	0.0071	ug/L		12/16/25 11:55	12/18/25 19:07	1
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 11:55	12/18/25 19:07	1
cis-Chlordane	ND		0.027	0.0081	ug/L		12/16/25 11:55	12/18/25 19:07	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
Chlordane (technical)	ND		0.20	0.063	ug/L		12/16/25 11:55	12/18/25 19:07	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 19:07	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 19:07	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 11:55	12/18/25 19:07	1
Endrin aldehyde	ND		0.061	0.034	ug/L		12/16/25 11:55	12/18/25 19:07	1
Endrin ketone	ND		0.020	0.0071	ug/L		12/16/25 11:55	12/18/25 19:07	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 19:07	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 11:55	12/18/25 19:07	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 19:07	1
Methoxychlor	ND		0.10	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 11:55	12/18/25 19:07	1
2,4'-DDD	0.011 J		0.030	0.0091	ug/L		12/16/25 11:55	12/18/25 19:07	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/16/25 11:55	12/18/25 19:07	1
2,4'-DDT	0.048		0.030	0.0091	ug/L		12/16/25 11:55	12/18/25 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	53		50 - 120	12/16/25 11:55	12/18/25 19:07	1
Tetrachloro-m-xylene	63		42 - 120	12/16/25 11:55	12/18/25 19:07	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	4900		400	86	ug/L			12/18/25 15:47	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	2400		75	22	mg/L			12/19/25 12:11	50

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-05b-121125

Lab Sample ID: 580-156488-8

Date Collected: 12/11/25 06:39

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.015	0.0060	ug/L		12/16/25 13:05	12/18/25 19:27	1
4,4'-DDE	ND		0.010	0.0030	ug/L		12/16/25 13:05	12/18/25 19:27	1
4,4'-DDT	0.036		0.020	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
Aldrin	ND		0.024	0.0070	ug/L		12/16/25 13:05	12/18/25 19:27	1
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 13:05	12/18/25 19:27	1
cis-Chlordane	ND		0.027	0.0080	ug/L		12/16/25 13:05	12/18/25 19:27	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
Chlordane (technical)	ND		0.20	0.062	ug/L		12/16/25 13:05	12/18/25 19:27	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 19:27	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 19:27	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 13:05	12/18/25 19:27	1
Endrin aldehyde	ND		0.060	0.034	ug/L		12/16/25 13:05	12/18/25 19:27	1
Endrin ketone	ND		0.020	0.0070	ug/L		12/16/25 13:05	12/18/25 19:27	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 19:27	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 13:05	12/18/25 19:27	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 19:27	1
Methoxychlor	ND		0.10	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 13:05	12/18/25 19:27	1
2,4'-DDD	ND		0.030	0.0090	ug/L		12/16/25 13:05	12/18/25 19:27	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/16/25 13:05	12/18/25 19:27	1
2,4'-DDT	ND		0.030	0.0090	ug/L		12/16/25 13:05	12/18/25 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	53		50 - 120	12/16/25 13:05	12/18/25 19:27	1
Tetrachloro-m-xylene	63		42 - 120	12/16/25 13:05	12/18/25 19:27	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	6200		400	86	ug/L			12/18/25 16:04	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	1700		75	22	mg/L			12/19/25 14:20	50

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: Dup-02-121125

Lab Sample ID: 580-156488-9

Date Collected: 12/11/25 06:40

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.015	0.0059	ug/L		12/16/25 13:05	12/18/25 20:06	1
4,4'-DDE	ND		0.0098	0.0030	ug/L		12/16/25 13:05	12/18/25 20:06	1
4,4'-DDT	0.0084	J	0.020	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
Aldrin	ND		0.024	0.0069	ug/L		12/16/25 13:05	12/18/25 20:06	1
alpha-BHC	ND		0.018	0.0039	ug/L		12/16/25 13:05	12/18/25 20:06	1
cis-Chlordane	ND		0.027	0.0079	ug/L		12/16/25 13:05	12/18/25 20:06	1
beta-BHC	ND		0.021	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
Chlordane (technical)	ND		0.20	0.061	ug/L		12/16/25 13:05	12/18/25 20:06	1
delta-BHC	ND		0.015	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
Dieldrin	ND		0.018	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 20:06	1
Endosulfan II	ND		0.024	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 20:06	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 13:05	12/18/25 20:06	1
Endrin aldehyde	ND		0.059	0.033	ug/L		12/16/25 13:05	12/18/25 20:06	1
Endrin ketone	ND		0.020	0.0069	ug/L		12/16/25 13:05	12/18/25 20:06	1
gamma-BHC (Lindane)	ND		0.020	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 20:06	1
Heptachlor	ND		0.015	0.0039	ug/L		12/16/25 13:05	12/18/25 20:06	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 13:05	12/18/25 20:06	1
Methoxychlor	ND		0.098	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
Toxaphene	ND		2.0	0.45	ug/L		12/16/25 13:05	12/18/25 20:06	1
2,4'-DDD	ND		0.030	0.0089	ug/L		12/16/25 13:05	12/18/25 20:06	1
2,4'-DDE	ND		0.030	0.0049	ug/L		12/16/25 13:05	12/18/25 20:06	1
2,4'-DDT	ND		0.030	0.0089	ug/L		12/16/25 13:05	12/18/25 20:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	52		50 - 120	12/16/25 13:05	12/18/25 20:06	1
Tetrachloro-m-xylene	61		42 - 120	12/16/25 13:05	12/18/25 20:06	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	6400		400	86	ug/L			12/18/25 16:21	200

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	1700		75	22	mg/L			12/19/25 14:33	50

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-04b-121125

Lab Sample ID: 580-156488-10

Date Collected: 12/11/25 08:19

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.015	0.0059	ug/L		12/16/25 13:05	12/18/25 19:47	1
4,4'-DDE	ND		0.0098	0.0029	ug/L		12/16/25 13:05	12/18/25 19:47	1
4,4'-DDT	0.027		0.020	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
Aldrin	ND		0.024	0.0069	ug/L		12/16/25 13:05	12/18/25 19:47	1
alpha-BHC	ND		0.018	0.0039	ug/L		12/16/25 13:05	12/18/25 19:47	1
cis-Chlordane	ND		0.026	0.0078	ug/L		12/16/25 13:05	12/18/25 19:47	1
beta-BHC	ND		0.021	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
Chlordane (technical)	ND		0.20	0.061	ug/L		12/16/25 13:05	12/18/25 19:47	1
delta-BHC	ND		0.015	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
Dieldrin	ND		0.018	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
Endosulfan I	ND		0.020	0.0029	ug/L		12/16/25 13:05	12/18/25 19:47	1
Endosulfan II	ND		0.024	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
Endosulfan sulfate	ND		0.020	0.0029	ug/L		12/16/25 13:05	12/18/25 19:47	1
Endrin	ND		0.012	0.0029	ug/L		12/16/25 13:05	12/18/25 19:47	1
Endrin aldehyde	ND		0.059	0.033	ug/L		12/16/25 13:05	12/18/25 19:47	1
Endrin ketone	ND		0.020	0.0069	ug/L		12/16/25 13:05	12/18/25 19:47	1
gamma-BHC (Lindane)	ND		0.020	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
trans-Chlordane	ND		0.020	0.0029	ug/L		12/16/25 13:05	12/18/25 19:47	1
Heptachlor	ND		0.015	0.0039	ug/L		12/16/25 13:05	12/18/25 19:47	1
Heptachlor epoxide	ND		0.020	0.0029	ug/L		12/16/25 13:05	12/18/25 19:47	1
Methoxychlor	ND		0.098	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
Toxaphene	ND		2.0	0.45	ug/L		12/16/25 13:05	12/18/25 19:47	1
2,4'-DDD	0.039		0.029	0.0088	ug/L		12/16/25 13:05	12/18/25 19:47	1
2,4'-DDE	ND		0.029	0.0049	ug/L		12/16/25 13:05	12/18/25 19:47	1
2,4'-DDT	ND		0.029	0.0088	ug/L		12/16/25 13:05	12/18/25 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	58		50 - 120	12/16/25 13:05	12/18/25 19:47	1
Tetrachloro-m-xylene	69		42 - 120	12/16/25 13:05	12/18/25 19:47	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	2100		200	43	ug/L			12/18/25 16:38	100

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	460		15	4.3	mg/L			12/19/25 12:50	10

QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 580-510614/1-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 510614

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		12/16/25 11:55	12/18/25 14:09	1
beta-BHC	ND		0.021	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
Aldrin	ND		0.024	0.0070	ug/L		12/16/25 11:55	12/18/25 14:09	1
delta-BHC	ND		0.015	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
cis-Chlordane	ND		0.027	0.0080	ug/L		12/16/25 11:55	12/18/25 14:09	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 14:09	1
4,4'-DDE	ND		0.010	0.0030	ug/L		12/16/25 11:55	12/18/25 14:09	1
Dieldrin	ND		0.018	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
Endrin	ND		0.012	0.0030	ug/L		12/16/25 11:55	12/18/25 14:09	1
4,4'-DDD	ND		0.015	0.0060	ug/L		12/16/25 11:55	12/18/25 14:09	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
4,4'-DDT	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
Endrin aldehyde	ND		0.060	0.034	ug/L		12/16/25 11:55	12/18/25 14:09	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 14:09	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 14:09	1
Heptachlor	ND		0.015	0.0040	ug/L		12/16/25 11:55	12/18/25 14:09	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/16/25 11:55	12/18/25 14:09	1
Endrin ketone	ND		0.020	0.0070	ug/L		12/16/25 11:55	12/18/25 14:09	1
Methoxychlor	ND		0.10	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
Chlordane (technical)	ND		0.20	0.062	ug/L		12/16/25 11:55	12/18/25 14:09	1
Toxaphene	ND		2.0	0.46	ug/L		12/16/25 11:55	12/18/25 14:09	1
2,4'-DDD	ND		0.030	0.0090	ug/L		12/16/25 11:55	12/18/25 14:09	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/16/25 11:55	12/18/25 14:09	1
2,4'-DDT	ND		0.030	0.0090	ug/L		12/16/25 11:55	12/18/25 14:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	73		50 - 120	12/16/25 11:55	12/18/25 14:09	1
Tetrachloro-m-xylene	70		42 - 120	12/16/25 11:55	12/18/25 14:09	1

Lab Sample ID: LCS 580-510614/2-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510614

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	0.200	0.149		ug/L		75	54 - 120
beta-BHC	0.200	0.155		ug/L		77	54 - 120
Aldrin	0.200	0.135		ug/L		68	25 - 124
delta-BHC	0.200	0.147		ug/L		73	51 - 120
cis-Chlordane	0.200	0.144		ug/L		72	48 - 120
Endosulfan I	0.200	0.151		ug/L		75	45 - 123
4,4'-DDE	0.200	0.151		ug/L		76	47 - 120
Dieldrin	0.200	0.151		ug/L		76	48 - 122
Endrin	0.200	0.186		ug/L		93	48 - 120
4,4'-DDD	0.200	0.161		ug/L		81	53 - 120
Endosulfan II	0.200	0.157		ug/L		78	24 - 120
4,4'-DDT	0.200	0.175		ug/L		88	39 - 122
gamma-BHC (Lindane)	0.200	0.152		ug/L		76	55 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCS 580-510614/2-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510614

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Endrin aldehyde	0.200	0.132		ug/L		66	26 - 139
trans-Chlordane	0.200	0.146		ug/L		73	48 - 120
Endosulfan sulfate	0.200	0.184		ug/L		92	56 - 120
Heptachlor	0.200	0.162		ug/L		81	35 - 120
Heptachlor epoxide	0.200	0.154		ug/L		77	49 - 120
Endrin ketone	0.200	0.140		ug/L		70	51 - 120
Methoxychlor	0.200	0.188		ug/L		94	44 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	75		50 - 120
Tetrachloro-m-xylene	66		42 - 120

Lab Sample ID: LCS 580-510614/3-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510614

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (technical)	1.00	0.813		ug/L		81	39 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	77		50 - 120
Tetrachloro-m-xylene	73		42 - 120

Lab Sample ID: LCS 580-510614/5-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510614

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	5.00	4.89		ug/L		98	50 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	82		50 - 120
Tetrachloro-m-xylene	72		42 - 120

Lab Sample ID: LCS 580-510614/7-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510614

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.200	0.151		ug/L		75	50 - 120
2,4'-DDE	0.200	0.147		ug/L		73	50 - 120
2,4'-DDT	0.200	0.173		ug/L		87	50 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	69		50 - 120
Tetrachloro-m-xylene	69		42 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 580-510614/4-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510614

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlordane (technical)			1.00	0.783		ug/L		78	39 - 120	4	28
			LCSD %Recovery	LCSD Qualifier	Limits						
Surrogate											
DCB Decachlorobiphenyl			75						50 - 120		
Tetrachloro-m-xylene			71						42 - 120		

Lab Sample ID: LCSD 580-510614/6-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510614

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toxaphene			5.00	4.48		ug/L		90	50 - 150	9	15
			LCSD %Recovery	LCSD Qualifier	Limits						
Surrogate											
DCB Decachlorobiphenyl			77						50 - 120		
Tetrachloro-m-xylene			62						42 - 120		

Lab Sample ID: LCSD 580-510614/8-A

Matrix: Water

Analysis Batch: 510817

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510614

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD			0.200	0.150		ug/L		75	50 - 120	0	24
2,4'-DDE			0.200	0.146		ug/L		73	50 - 120	1	27
2,4'-DDT			0.200	0.173		ug/L		87	50 - 120	0	26
			LCSD %Recovery	LCSD Qualifier	Limits						
Surrogate											
DCB Decachlorobiphenyl			70						50 - 120		
Tetrachloro-m-xylene			69						42 - 120		

Lab Sample ID: 580-156488-3 MS

Matrix: Water

Analysis Batch: 510817

Client Sample ID: PMW-09b-121025

Prep Type: Dissolved

Prep Batch: 510614

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
alpha-BHC	ND		0.199	0.127		ug/L		64	54 - 120		
gamma-BHC (Lindane)	ND		0.199	0.130		ug/L		65	55 - 120		
beta-BHC	ND		0.199	0.136		ug/L		69	54 - 120		
delta-BHC	ND		0.199	0.124		ug/L		63	51 - 120		
Heptachlor	ND		0.199	0.140		ug/L		70	35 - 120		
Aldrin	ND		0.199	0.118		ug/L		59	25 - 124		
Heptachlor epoxide	ND		0.199	0.126		ug/L		64	49 - 120		
trans-Chlordane	ND		0.199	0.116		ug/L		58	48 - 120		
cis-Chlordane	ND		0.199	0.121		ug/L		61	48 - 120		
Endosulfan I	ND		0.199	0.123		ug/L		62	45 - 123		
4,4'-DDE	ND		0.199	0.125		ug/L		63	47 - 120		
Dieldrin	ND		0.199	0.114		ug/L		58	48 - 122		
Endrin	ND		0.199	0.153		ug/L		77	48 - 120		

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 580-156488-3 MS

Matrix: Water

Analysis Batch: 510817

Client Sample ID: PMW-09b-121025

Prep Type: Dissolved

Prep Batch: 510614

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4,4'-DDD	ND		0.199	0.132		ug/L		66	53 - 120
Endosulfan II	ND		0.199	0.124		ug/L		62	24 - 120
4,4'-DDT	ND		0.199	0.116		ug/L		59	39 - 122
Endrin aldehyde	ND		0.199	0.111		ug/L		56	26 - 139
Endosulfan sulfate	ND		0.199	0.152		ug/L		77	56 - 120
Methoxychlor	ND		0.199	0.153		ug/L		77	44 - 129
Endrin ketone	ND		0.199	0.116		ug/L		58	51 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	57		42 - 120
DCB Decachlorobiphenyl	59		50 - 120

Lab Sample ID: 580-156488-3 MSD

Matrix: Water

Analysis Batch: 510817

Client Sample ID: PMW-09b-121025

Prep Type: Dissolved

Prep Batch: 510614

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC	ND		0.198	0.134		ug/L		68	54 - 120	5	23
gamma-BHC (Lindane)	ND		0.198	0.131		ug/L		66	55 - 120	1	21
beta-BHC	ND		0.198	0.134		ug/L		68	54 - 120	2	19
delta-BHC	ND		0.198	0.124		ug/L		63	51 - 120	2	23
Heptachlor	ND		0.198	0.141		ug/L		71	35 - 120	1	26
Aldrin	ND		0.198	0.125		ug/L		63	25 - 124	6	35
Heptachlor epoxide	ND		0.198	0.133		ug/L		67	49 - 120	5	24
trans-Chlordane	ND		0.198	0.122		ug/L		62	48 - 120	5	28
cis-Chlordane	ND		0.198	0.128		ug/L		65	48 - 120	6	27
Endosulfan I	ND		0.198	0.132		ug/L		67	45 - 123	8	26
4,4'-DDE	ND		0.198	0.134		ug/L		68	47 - 120	7	25
Dieldrin	ND		0.198	0.129		ug/L		65	48 - 122	12	23
Endrin	ND		0.198	0.164		ug/L		83	48 - 120	7	24
4,4'-DDD	ND		0.198	0.141		ug/L		71	53 - 120	7	19
Endosulfan II	ND		0.198	0.135		ug/L		68	24 - 120	9	26
4,4'-DDT	ND		0.198	0.125		ug/L		63	39 - 122	7	20
Endrin aldehyde	ND		0.198	0.116		ug/L		59	26 - 139	4	35
Endosulfan sulfate	ND		0.198	0.164		ug/L		83	56 - 120	8	21
Methoxychlor	ND		0.198	0.166		ug/L		84	44 - 129	8	20
Endrin ketone	ND		0.198	0.125		ug/L		63	51 - 120	8	25

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	58		42 - 120
DCB Decachlorobiphenyl	64		50 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 570-670917/7

Matrix: Water

Analysis Batch: 670917

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/16/25 14:07	1

Lab Sample ID: LCS 570-670917/8

Matrix: Water

Analysis Batch: 670917

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	24.5		ug/L		98	85 - 115

Lab Sample ID: LCSD 570-670917/9

Matrix: Water

Analysis Batch: 670917

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	24.1		ug/L		96	85 - 115	2	15

Lab Sample ID: 580-156488-3 MS

Matrix: Water

Analysis Batch: 670917

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	23		25.0	52.0		ug/L		115	80 - 120

Lab Sample ID: 580-156488-3 MSD

Matrix: Water

Analysis Batch: 670917

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	23		25.0	50.8		ug/L		111	80 - 120	2	15

Lab Sample ID: MB 570-672151/7

Matrix: Water

Analysis Batch: 672151

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/18/25 11:51	1

Lab Sample ID: LCS 570-672151/8

Matrix: Water

Analysis Batch: 672151

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	24.6		ug/L		98	85 - 115

Lab Sample ID: LCSD 570-672151/9

Matrix: Water

Analysis Batch: 672151

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	24.7		ug/L		99	85 - 115	1	15

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-510977/4

Matrix: Water

Analysis Batch: 510977

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/18/25 20:15	1

Lab Sample ID: LCS 580-510977/5

Matrix: Water

Analysis Batch: 510977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.9		mg/L		104	90 - 110

Lab Sample ID: LCSD 580-510977/6

Matrix: Water

Analysis Batch: 510977

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	51.8		mg/L		104	90 - 110	0	15

Lab Sample ID: 580-156488-3 MS

Matrix: Water

Analysis Batch: 510977

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	140	F1	50.0	182	F1	mg/L		76	90 - 110

Lab Sample ID: 580-156488-3 MSD

Matrix: Water

Analysis Batch: 510977

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	140	F1	50.0	182	F1	mg/L		75	90 - 110	0	15

Lab Sample ID: MB 580-510978/38

Matrix: Water

Analysis Batch: 510978

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/19/25 08:57	1

Lab Sample ID: MB 580-510978/7

Matrix: Water

Analysis Batch: 510978

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/19/25 02:17	1

Lab Sample ID: LCS 580-510978/8

Matrix: Water

Analysis Batch: 510978

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	52.2		mg/L		104	90 - 110

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 580-510978/9
Matrix: Water
Analysis Batch: 510978

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	52.1		mg/L	-	104	90 - 110	0	15

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

GC Semi VOA

Prep Batch: 510614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-2	PMW-18b-121025	Total/NA	Water	3510C	
580-156488-3	PMW-09b-121025	Dissolved	Water	3510C	
580-156488-4	PMW-09G-121025	Dissolved	Water	3510C	
580-156488-5	PMW-06b2-121025	Total/NA	Water	3510C	
580-156488-6	PMW-06b-121025	Total/NA	Water	3510C	
580-156488-7	PMW-05b2-121025	Total/NA	Water	3510C	
580-156488-8	PMW-05b-121125	Total/NA	Water	3510C	
580-156488-9	Dup-02-121125	Total/NA	Water	3510C	
580-156488-10	PMW-04b-121125	Total/NA	Water	3510C	
MB 580-510614/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-510614/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-510614/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-510614/5-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-510614/7-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-510614/4-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-510614/6-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-510614/8-A	Lab Control Sample Dup	Total/NA	Water	3510C	
580-156488-3 MS	PMW-09b-121025	Dissolved	Water	3510C	
580-156488-3 MSD	PMW-09b-121025	Dissolved	Water	3510C	

Analysis Batch: 510817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-2	PMW-18b-121025	Total/NA	Water	8081B	510614
580-156488-3	PMW-09b-121025	Dissolved	Water	8081B	510614
580-156488-4	PMW-09G-121025	Dissolved	Water	8081B	510614
580-156488-5	PMW-06b2-121025	Total/NA	Water	8081B	510614
580-156488-6	PMW-06b-121025	Total/NA	Water	8081B	510614
580-156488-7	PMW-05b2-121025	Total/NA	Water	8081B	510614
580-156488-8	PMW-05b-121125	Total/NA	Water	8081B	510614
580-156488-9	Dup-02-121125	Total/NA	Water	8081B	510614
580-156488-10	PMW-04b-121125	Total/NA	Water	8081B	510614
MB 580-510614/1-A	Method Blank	Total/NA	Water	8081B	510614
LCS 580-510614/2-A	Lab Control Sample	Total/NA	Water	8081B	510614
LCS 580-510614/3-A	Lab Control Sample	Total/NA	Water	8081B	510614
LCS 580-510614/5-A	Lab Control Sample	Total/NA	Water	8081B	510614
LCS 580-510614/7-A	Lab Control Sample	Total/NA	Water	8081B	510614
LCSD 580-510614/4-A	Lab Control Sample Dup	Total/NA	Water	8081B	510614
LCSD 580-510614/6-A	Lab Control Sample Dup	Total/NA	Water	8081B	510614
LCSD 580-510614/8-A	Lab Control Sample Dup	Total/NA	Water	8081B	510614
580-156488-3 MS	PMW-09b-121025	Dissolved	Water	8081B	510614
580-156488-3 MSD	PMW-09b-121025	Dissolved	Water	8081B	510614

HPLC/IC

Analysis Batch: 670917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-2 - DL	PMW-18b-121025	Total/NA	Water	314.0	
580-156488-3	PMW-09b-121025	Total/NA	Water	314.0	
580-156488-4	PMW-09G-121025	Total/NA	Water	314.0	
MB 570-670917/7	Method Blank	Total/NA	Water	314.0	
LCS 570-670917/8	Lab Control Sample	Total/NA	Water	314.0	

Eurofins Seattle

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

HPLC/IC (Continued)

Analysis Batch: 670917 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 570-670917/9	Lab Control Sample Dup	Total/NA	Water	314.0	
580-156488-3 MS	PMW-09b-121025	Total/NA	Water	314.0	
580-156488-3 MSD	PMW-09b-121025	Total/NA	Water	314.0	

Analysis Batch: 672151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-5 - DL	PMW-06b2-121025	Total/NA	Water	314.0	
580-156488-6 - DL	PMW-06b-121025	Total/NA	Water	314.0	
580-156488-7 - DL	PMW-05b2-121025	Total/NA	Water	314.0	
580-156488-8 - DL	PMW-05b-121125	Total/NA	Water	314.0	
580-156488-9 - DL	Dup-02-121125	Total/NA	Water	314.0	
580-156488-10 - DL	PMW-04b-121125	Total/NA	Water	314.0	
MB 570-672151/7	Method Blank	Total/NA	Water	314.0	
LCS 570-672151/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-672151/9	Lab Control Sample Dup	Total/NA	Water	314.0	

General Chemistry

Analysis Batch: 510977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-3	PMW-09b-121025	Total/NA	Water	300.0	
MB 580-510977/4	Method Blank	Total/NA	Water	300.0	
LCS 580-510977/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-510977/6	Lab Control Sample Dup	Total/NA	Water	300.0	
580-156488-3 MS	PMW-09b-121025	Total/NA	Water	300.0	
580-156488-3 MSD	PMW-09b-121025	Total/NA	Water	300.0	

Analysis Batch: 510978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-2	PMW-18b-121025	Total/NA	Water	300.0	
580-156488-4	PMW-09G-121025	Total/NA	Water	300.0	
580-156488-5	PMW-06b2-121025	Total/NA	Water	300.0	
580-156488-6	PMW-06b-121025	Total/NA	Water	300.0	
580-156488-7	PMW-05b2-121025	Total/NA	Water	300.0	
580-156488-8	PMW-05b-121125	Total/NA	Water	300.0	
580-156488-9	Dup-02-121125	Total/NA	Water	300.0	
580-156488-10	PMW-04b-121125	Total/NA	Water	300.0	
MB 580-510978/38	Method Blank	Total/NA	Water	300.0	
MB 580-510978/7	Method Blank	Total/NA	Water	300.0	
LCS 580-510978/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-510978/9	Lab Control Sample Dup	Total/NA	Water	300.0	

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-18b-121025

Lab Sample ID: 580-156488-2

Date Collected: 12/10/25 06:41

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			510614	AT	EET SEA	12/16/25 11:55
Total/NA	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 16:48
Total/NA	Analysis	314.0	DL	5	670917	M5Z3	EET CAL 4	12/16/25 15:54
Total/NA	Analysis	300.0		50	510978	MLT	EET SEA	12/19/25 13:54

Client Sample ID: PMW-09b-121025

Lab Sample ID: 580-156488-3

Date Collected: 12/10/25 08:31

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3510C			510614	AT	EET SEA	12/16/25 11:55
Dissolved	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 17:07
Total/NA	Analysis	314.0		1	670917	M5Z3	EET CAL 4	12/16/25 16:27
Total/NA	Analysis	300.0		5	510977	MLT	EET SEA	12/18/25 21:45

Client Sample ID: PMW-09G-121025

Lab Sample ID: 580-156488-4

Date Collected: 12/10/25 10:46

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3510C			510614	AT	EET SEA	12/16/25 11:55
Dissolved	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 18:07
Total/NA	Analysis	314.0		1	670917	M5Z3	EET CAL 4	12/16/25 18:09
Total/NA	Analysis	300.0		5	510978	MLT	EET SEA	12/19/25 11:32

Client Sample ID: PMW-06b2-121025

Lab Sample ID: 580-156488-5

Date Collected: 12/10/25 12:03

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			510614	AT	EET SEA	12/16/25 11:55
Total/NA	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 18:27
Total/NA	Analysis	314.0	DL	200	672151	M5Z3	EET CAL 4	12/18/25 15:13
Total/NA	Analysis	300.0		100	510978	MLT	EET SEA	12/19/25 11:45

Client Sample ID: PMW-06b-121025

Lab Sample ID: 580-156488-6

Date Collected: 12/10/25 12:56

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			510614	AT	EET SEA	12/16/25 11:55
Total/NA	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 18:47
Total/NA	Analysis	314.0	DL	40	672151	M5Z3	EET CAL 4	12/18/25 15:30
Total/NA	Analysis	300.0		50	510978	MLT	EET SEA	12/19/25 14:07

Eurofins Seattle

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Client Sample ID: PMW-05b2-121025

Lab Sample ID: 580-156488-7

Date Collected: 12/10/25 14:25

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			510614	AT	EET SEA	12/16/25 11:55
Total/NA	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 19:07
Total/NA	Analysis	314.0	DL	200	672151	M5Z3	EET CAL 4	12/18/25 15:47
Total/NA	Analysis	300.0		50	510978	MLT	EET SEA	12/19/25 12:11

Client Sample ID: PMW-05b-121125

Lab Sample ID: 580-156488-8

Date Collected: 12/11/25 06:39

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			510614	AT	EET SEA	12/16/25 13:05
Total/NA	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 19:27
Total/NA	Analysis	314.0	DL	200	672151	M5Z3	EET CAL 4	12/18/25 16:04
Total/NA	Analysis	300.0		50	510978	MLT	EET SEA	12/19/25 14:20

Client Sample ID: Dup-02-121125

Lab Sample ID: 580-156488-9

Date Collected: 12/11/25 06:40

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			510614	AT	EET SEA	12/16/25 13:05
Total/NA	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 20:06
Total/NA	Analysis	314.0	DL	200	672151	M5Z3	EET CAL 4	12/18/25 16:21
Total/NA	Analysis	300.0		50	510978	MLT	EET SEA	12/19/25 14:33

Client Sample ID: PMW-04b-121125

Lab Sample ID: 580-156488-10

Date Collected: 12/11/25 08:19

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			510614	AT	EET SEA	12/16/25 13:05
Total/NA	Analysis	8081B		1	510817	K1K	EET SEA	12/18/25 19:47
Total/NA	Analysis	314.0	DL	100	672151	M5Z3	EET CAL 4	12/18/25 16:38
Total/NA	Analysis	300.0		10	510978	MLT	EET SEA	12/19/25 12:50

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ERM-West

Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4167	07-07-26

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4175	02-02-26

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Sample Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-156488-2	PMW-18b-121025	Water	12/10/25 06:41	12/12/25 10:55	Oregon
580-156488-3	PMW-09b-121025	Water	12/10/25 08:31	12/12/25 10:55	Oregon
580-156488-4	PMW-09G-121025	Water	12/10/25 10:46	12/12/25 10:55	Oregon
580-156488-5	PMW-06b2-121025	Water	12/10/25 12:03	12/12/25 10:55	Oregon
580-156488-6	PMW-06b-121025	Water	12/10/25 12:56	12/12/25 10:55	Oregon
580-156488-7	PMW-05b2-121025	Water	12/10/25 14:25	12/12/25 10:55	Oregon
580-156488-8	PMW-05b-121125	Water	12/11/25 06:39	12/12/25 10:55	Oregon
580-156488-9	Dup-02-121125	Water	12/11/25 06:40	12/12/25 10:55	Oregon
580-156488-10	PMW-04b-121125	Water	12/11/25 08:19	12/12/25 10:55	Oregon

Lawrence Construction, Seattle
5755 8th Street East
Tacoma, WA 98424

Chain of Custody Record



Phone (253) 922-2310 Fax (253) 922-3047		Lab PM:	Carrier Tracking Note(s):	COC No:												
Client Information		Sample:														
Client Contact:		Scotti Terranova														
Avery Sopale		Phone:														
Company:																
ERM-West																
Address:		Due Date Requested:	Analysis Requested													
1050 SW 6th Avenue Suite 1650																
City:		TAT Requested (days):														
Portland																
State, Zip:																
OR, 97204																
Phone:		PO #:														
		PN 073710.507														
Email:		MO #:														
avery.sopale@erm.com																
Project Name:		Project #:														
Arkema - December 2025 Groundwater Event		073710.507														
Site:		SSOV#:														
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Soil, B=Bottom, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C regular level standard VOA list-Seattle	8260C_LL - Standard VOA list-Seattle	300.0_28D-Chloride-Seattle	314 Perchlorate	8081B- Pesticides, standard list	8081B Pesticides, standard list - Field Filtered	Total Number of containers	Special Instructions/Note:	
TB-121025		12/10/25	0600	G	Water	X	A	A	N	N	N	N	N	MS/MSD		
PMW-106-121025			0641	G	Water	X	X	X	X	X	X	X	X			
PMW-096-121025			0831		Water	X	X	X	X	X	X	X	X			
PMW-096-121025			1046		Water	X	X	X	X	X	X	X	X			
PMW-066a-121025			1208		Water	X	X	X	X	X	X	X	X			
PMW-066b-121025			1256		Water	X	X	X	X	X	X	X	X			
PMW-056b2-121025			1425		Water	X	X	X	X	X	X	X	X			
PMW-056b-121125		12/11/25	0639	G	Water	X	X	X	X	X	X	X	X			
Dyp-02-121125			0640		Water	X	X	X	X	X	X	X	X			
PMW-046-121125			0819		Water	X	X	X	X	X	X	X	X			
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)														
☐ Non-Hazard ☐ Flammable ☐ Silica/Liquid ☐ Poison B ☐ Unknown ☐ Radiological		☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months														
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/OC Requirements: please run at lowest dilution possible for NID.														
Empty Kit Relinquished by:		Date:	Time:												Method of Shipment:	
Relinquished by:		Date/Time:	Received by:												Date/Time:	
Relinquished by:		Date/Time:	Received by:												Date/Time:	
Relinquished by:		Date/Time:	Received by:												Date/Time:	
Custody Seals Intact:		Custody Seal No.:	Color Temperature(s) °C and Other Remarks:													
A Yes A No			0.3/1.3 POK SE R													
Page:		1 of 1														
Job #:																
Preservation Codes:		A-HCL B-NaOH C-Zn Acetate D-Nitric Acid E-NaHSO4 F-MeOH G-Archiver H-Ascorbic acid I-For Water J-DI Water K-EDTA L-EDK M-Hexane N-None O-AsnCO2 P-NEZCHS Q-NEZSO3 R-NEZSO3 S-H2SO4 T-TSP Dodecylsulfate U-Absorbing V-MK 445 W-pH 4.5 Z-Other (specify)														
Special Instructions/Note:																

5755 8th Street East
Tacoma, WA 98424
Phone (253) 822-2310 Fax (253) 822-5047

Chain of Custody Record

Client Information Client Contact: <u>Scott Terranova</u> Phone: <u></u> E-Mail: <u>antonette.marshall@eurofins.com</u>				Lab PM: <u>Marshall, Tony</u> Carrier Tracking No(s): <u></u>			
Company: <u>ERM-West</u> Address: <u>1050 SW 6th Avenue Suite 1650</u> City: <u>Portland</u> State, Zip: <u>OR 97204</u> Phone: <u></u> Email: <u>avery.sopalea@erm.com</u>				Due Date Requested: <u></u> TAT Requested (days): <u>Standard</u> PO #: <u>PN 0773710.507</u> WO #: <u></u>			
Project Name: <u>Arkema - December 2025 Groundwater Event</u> Site: <u></u> Project #: <u>0773710.507</u> SOW#: <u></u>				Analysis Requested Field Filtered Sample (Yes or No): <u></u> Perform MS/MSD (Yes or No): <u>MS/MSD</u>			
Sample Identification Sample Date: <u>12/10/25</u> Sample Time: <u>0600</u> Sample Type (C=Comp, G=grab): <u>G</u> Matrix (Water, Soil, Sludge, Biotin, A=V): <u>Water</u> Preservation Code: <u></u>				Field Filtered Sample (Yes or No): <u></u> Perform MS/MSD (Yes or No): <u>MS/MSD</u>			
TB-121025 PMW-106-121025 PMW-096-121025 PMW-096-121025 PMW-066-121025 PMW-066-121025 PMW-056-121025 PMW-056-121025 Dye-02-121125 PMW-046-121125				12/10/25 0641 0831 1046 1202 1256 1425 0639 0640 0819 Water Water Water Water Water Water Water Water Water			
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Silica/Inert ☐ Poison B ☐ Unknown ☐ Radiological				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For <u>Months</u>			
Deliverable Requested: I, II, III, IV, Other (specify) <u></u> Empty Kit Relinquished by: <u></u> Relinquished by: <u>AN</u> Relinquished by: <u>Morgan W</u> Relinquished by: <u>AN</u> Custody Seals Intact: <u>Δ Yes Δ No</u> Custody Seal No.: <u></u>				Date: <u>12/10/25</u> Time: <u>0950</u> Company: <u>AN-e</u> Date: <u>12/12/25</u> Time: <u>1055</u> Company: <u>AN-e</u> Date: <u>12/12/25</u> Time: <u>1420</u> Company: <u>ERM</u> Received by: <u>Morgan W</u> Received by: <u>AN</u> Received by: <u>AN</u> Date: <u>12/13/25</u> Time: <u>0940</u> Company: <u>AN</u> Method of Shipment: <u></u> Special Instructions/AC Requirements: Please run at lowest dilution possible for ND.			
Total Number of containers: <u>2</u> Special Instructions/Note: <u></u>				Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O2S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify) <u></u>			



12/11 4:24:8

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

Client Information		Sampler: Scott Terranova		Lab PM: Marshall, Tony		Carrier Tracking No(s):		COC No:	
Client Contact: Avery Soplat		Phone:		E-Mail: antonette.marshall@eurofins.com				Page: 1 of 1	
Company: ERM-West		Due Date Requested:		Analysis Requested				Job #:	
Address: 1050 SW 6th Avenue Suite 1650		TAT Requested (days):						Preservation Codes:	
City: Portland		State, Zip: OR, 97204		* 72hr on VOCs				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anhydrous H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsHAc2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
Email: avery.soplat@erm.com		PO #: PN 0773710.507						Other:	
Project Name: Arkema - December 2025 Groundwater Event		Project #: 0773710.507						Special Instructions/Note:	
Site: SSOW#:									
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Sediment, Benthos, Air)	
TB-121025		12/10/25		0600		G		Water	
PMW-186-121025				0641				Water	
PMW-096-121025				0831				Water	
PMW-096-121025				1046				Water	
PMW-0662-121025				1203				Water	
PMW-0662-121025				1256				Water	
PMW-0562-121025				1425				Water	
PMW-0562-121025				0639		G		Water	
DHP-02-121125				0640				Water	
PMW-046-121125				0819				Water	
Possible Hazard Identification									
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological									
Deliverable Requested: I, II, III, IV, Other (specify)									
Empty Kit Relinquished by:		Date:		Time:					
Relinquished by: [Signature]		12/02/25		0950		Erm		Received by: [Signature]	
Relinquished by: [Signature]		12/12/25		1055		M.E.		Received by: [Signature]	
Relinquished by: [Signature]		12/12/25		1425		Erm		Received by: [Signature]	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:						Conflict Temperature(s) and Other Remarks:	
								0.7/1.3 PR Se R	



1R11 4.7/4.8

ORIGIN ID: HIOA (503) 906-9200
JASON O'CONNELL
EUROFINS - PORTLAND
9725 SW COMMERCE CIR
SUITE A2
WILSONVILLE, OR 97070
UNITED STATES US

SHIP DATE: 12DEC25
ACTWGT: 39.20 LB
CAD: 5112144/INET4535

BILL SENDER



580-156488 Waybill

TO **SAMPLE RECEIVING**
EUROFINS-CALSCIENCE
2841 DOW AVENUE
SUITE 100
TUSTIN CA 92780

580-156488 Waybill

(714) 895-5494
INV:
PO:

REF:

DEPT:



FedEx
Express



SATURDAY 1:30P
PRIORITY OVERNIGHT

TRK#
0201 8870 3082 2632

X0 DTHA

92780

CA-US SNA



Custody Seal

DATE

SIGNATURE

Environment 1
TestAmerica

eurolins

2696321

Eurofins Seattle

5755 8th Street East

Tacoma, WA 98424

Phone: 253-922-2310

Chain of Custody Record



Enviro

Loc: 580

156488

Client Information (Sub Contract Lab)		Sampler: N/A		Lab PM: Marshall, Antoinette C		Carrier Tracking No(s): N/A		COC No: 580-152403.1			
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Antoinette.Marshall@et.eurofinsus.com		State of Origin: Oregon		Page: Page 1 of 2			
Company: Eurofins Environment Testing Southwest,				Accreditations Required (See note): NELAP - Oregon				Job #: 580-156488-1			
Address: 2841 Dow Avenue, Suite 100,		Due Date Requested: 12/22/2025		Analysis Requested						Preservation Codes:	
City: Tustin		TAT Requested (days): N/A								Other:	
State, Zip: CA, 92780										N/A	
Phone: 714-895-5494(Tel)		PO #: N/A									
Email: N/A		WO #: N/A									
Project Name: Arkema - Dec 2025 Groundwater Event		Project #: 58016290									
Site: N/A		SSOW#: N/A									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	314.0Perchlorate	Total Number of containers	Special Instru	
PMW-18b-121025 (580-156488-2)		12/10/25	06:41 Pacific	G	Water		X			1	
PMW-09b-121025 (580-156488-3)		12/10/25	08:31 Pacific	G	Water		X			1	
PMW-09b-121025 (580-156488-3MS)		12/10/25	08:31 Pacific	G	Water		X			1	
PMW-09b-121025 (580-156488-3MSD)		12/10/25	08:31 Pacific	G	Water		X			1	
PMW-09G-121025 (580-156488-4)		12/10/25	10:46 Pacific	G	Water		X			1	
PMW-06b2-121025 (580-156488-5)		12/10/25	12:03 Pacific	G	Water		X			1	
PMW-06b-121025 (580-156488-6)		12/10/25	12:56 Pacific	G	Water		X			1	
PMW-05b2-121025 (580-156488-7)		12/10/25	14:25 Pacific	G	Water		X			1	
PMW-05b-121125 (580-156488-8)		12/11/25	06:39 Pacific	G	Water		X			1	
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northwest, LLC.											
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)					
Unconfirmed						☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months					
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:					
Empty Kit Relinquished by:						Date:		Time:		Method of Shipment:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:							
Δ Yes Δ No				1.1/1.6 1R3							



580-156488 Chain of Custody

 eurofins | Environment Testing

Ver: 10/10/2024
12/22/2025

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156488-1

Login Number: 156488

List Source: Eurofins Seattle

List Number: 1

Creator: O'Connell, Jason I

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Seattle

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156488-1

Login Number: 156488

List Number: 2

Creator: Khana, Piyush

List Source: Eurofins Calscience

List Creation: 12/15/25 05:44 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Seattle



ANALYTICAL REPORT

PREPARED FOR

Attn: Avery Soplata
ERM-West
1050 SW 6th Avenue
Suite 1650
Portland, Oregon 97204
Generated 12/18/2025 5:17:09 PM

JOB DESCRIPTION

Arkema - Dec 2025 Groundwater Event

JOB NUMBER

580-156488-2

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Authorized for release by
Antoinette Marshall, Project Manager I
Antoinette.Marshall@et.eurofinsus.com
(253)922-2310

Generated
12/18/2025 5:17:09 PM

Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	5
Client Sample Results	6
QC Sample Results	26
QC Association	35
Chronicle	36
Certification Summary	38
Sample Summary	39
Chain of Custody	40
Receipt Checklists	44



Case Narrative

Client: ERM-West
Project: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Job ID: 580-156488-2

Eurofins Seattle

Job Narrative 580-156488-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/12/2025 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-510727 recovered outside acceptance criteria, low biased, for Dichlorodifluoromethane and Carbon tetrachloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 580-510727 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: Internal standard responses were outside of acceptance limits for the following sample: PMW-04b-121125 (580-156488-10). The sample(s) shows evidence of matrix interference.

Method 8260D: Surrogate recovery for the following samples were outside control limits: PMW-05b2-121025 (580-156488-7), PMW-05b-121125 (580-156488-8), Dup-02-121125 (580-156488-9) and PMW-04b-121125 (580-156488-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Definitions/Glossary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: TB-121025

Lab Sample ID: 580-156488-1

Date Collected: 12/10/25 06:00

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 17:32	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 17:32	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 17:32	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 17:32	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 17:32	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 17:32	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 17:32	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 17:32	1
Acetone	ND		25	11	ug/L			12/17/25 17:32	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 17:32	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 17:32	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 17:32	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/17/25 17:32	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 17:32	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 17:32	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/17/25 17:32	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 17:32	1
Chloroform	ND		1.0	0.11	ug/L			12/17/25 17:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 17:32	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 17:32	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 17:32	1
Benzene	ND		1.0	0.47	ug/L			12/17/25 17:32	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/17/25 17:32	1
Trichloroethene	ND		1.0	0.27	ug/L			12/17/25 17:32	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 17:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 17:32	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 17:32	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 17:32	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 17:32	1
Toluene	ND		1.0	0.21	ug/L			12/17/25 17:32	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 17:32	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 17:32	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 17:32	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 17:32	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 17:32	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 17:32	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/17/25 17:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 17:32	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 17:32	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 17:32	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 17:32	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 17:32	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 17:32	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 17:32	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 17:32	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 17:32	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 17:32	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 17:32	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: TB-121025

Lab Sample ID: 580-156488-1

Date Collected: 12/10/25 06:00

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 17:32	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 17:32	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 17:32	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 17:32	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 17:32	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 17:32	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 17:32	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 17:32	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 17:32	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 17:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 17:32	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 17:32	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 17:32	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 17:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/17/25 17:32	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		12/17/25 17:32	1
4-Bromofluorobenzene (Surr)	103		80 - 120		12/17/25 17:32	1
Dibromofluoromethane (Surr)	114		80 - 120		12/17/25 17:32	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-18b-121025

Lab Sample ID: 580-156488-2

Date Collected: 12/10/25 06:41

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 18:54	1
Chloromethane	0.28	J	1.0	0.23	ug/L			12/17/25 18:54	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 18:54	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 18:54	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 18:54	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 18:54	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 18:54	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 18:54	1
Acetone	ND		25	11	ug/L			12/17/25 18:54	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 18:54	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 18:54	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 18:54	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/17/25 18:54	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 18:54	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 18:54	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/17/25 18:54	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 18:54	1
Chloroform	ND		1.0	0.11	ug/L			12/17/25 18:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 18:54	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 18:54	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 18:54	1
Benzene	ND		1.0	0.47	ug/L			12/17/25 18:54	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/17/25 18:54	1
Trichloroethene	ND		1.0	0.27	ug/L			12/17/25 18:54	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 18:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 18:54	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 18:54	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 18:54	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 18:54	1
Toluene	ND		1.0	0.21	ug/L			12/17/25 18:54	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 18:54	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 18:54	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 18:54	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 18:54	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 18:54	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 18:54	1
Chlorobenzene	0.23	J	1.0	0.22	ug/L			12/17/25 18:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 18:54	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 18:54	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 18:54	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 18:54	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 18:54	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 18:54	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 18:54	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 18:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 18:54	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 18:54	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 18:54	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 18:54	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-18b-121025

Lab Sample ID: 580-156488-2

Date Collected: 12/10/25 06:41

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 18:54	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 18:54	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 18:54	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 18:54	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 18:54	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 18:54	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 18:54	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 18:54	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 18:54	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 18:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 18:54	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 18:54	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 18:54	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 18:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 18:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		12/17/25 18:54	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		12/17/25 18:54	1
4-Bromofluorobenzene (Surr)	103		80 - 120		12/17/25 18:54	1
Dibromofluoromethane (Surr)	114		80 - 120		12/17/25 18:54	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-09b-121025

Lab Sample ID: 580-156488-3

Date Collected: 12/10/25 08:31

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND	F1	1.0	0.33	ug/L			12/17/25 17:52	1
Chloromethane	0.27	J	1.0	0.23	ug/L			12/17/25 17:52	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 17:52	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 17:52	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 17:52	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 17:52	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 17:52	1
1,1-Dichloroethene	ND	F1	1.0	0.23	ug/L			12/17/25 17:52	1
Acetone	ND		25	11	ug/L			12/17/25 17:52	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 17:52	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 17:52	1
trans-1,2-Dichloroethene	ND	F1	1.0	0.18	ug/L			12/17/25 17:52	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/17/25 17:52	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 17:52	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 17:52	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/17/25 17:52	1
Chlorobromomethane	ND	F1	1.0	0.21	ug/L			12/17/25 17:52	1
Chloroform	ND		1.0	0.11	ug/L			12/17/25 17:52	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 17:52	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 17:52	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 17:52	1
Benzene	ND	F1	1.0	0.47	ug/L			12/17/25 17:52	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/17/25 17:52	1
Trichloroethene	ND		1.0	0.27	ug/L			12/17/25 17:52	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 17:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 17:52	1
Dibromomethane	ND	F1	1.0	0.28	ug/L			12/17/25 17:52	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 17:52	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 17:52	1
Toluene	0.74	J	1.0	0.21	ug/L			12/17/25 17:52	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 17:52	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 17:52	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 17:52	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 17:52	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 17:52	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 17:52	1
Chlorobenzene	2.6		1.0	0.22	ug/L			12/17/25 17:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 17:52	1
Ethylbenzene	0.16	J	1.0	0.16	ug/L			12/17/25 17:52	1
m-Xylene & p-Xylene	ND	F1	2.0	0.27	ug/L			12/17/25 17:52	1
o-Xylene	ND	F1	1.0	0.22	ug/L			12/17/25 17:52	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 17:52	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 17:52	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 17:52	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 17:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 17:52	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 17:52	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 17:52	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 17:52	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-09b-121025

Lab Sample ID: 580-156488-3

Date Collected: 12/10/25 08:31

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 17:52	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 17:52	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 17:52	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 17:52	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 17:52	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 17:52	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 17:52	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 17:52	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 17:52	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 17:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 17:52	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 17:52	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 17:52	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 17:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/17/25 17:52	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		12/17/25 17:52	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/17/25 17:52	1
Dibromofluoromethane (Surr)	113		80 - 120		12/17/25 17:52	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-09G-121025

Lab Sample ID: 580-156488-4

Date Collected: 12/10/25 10:46

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 19:15	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 19:15	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 19:15	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 19:15	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 19:15	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 19:15	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 19:15	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 19:15	1
Acetone	ND		25	11	ug/L			12/17/25 19:15	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 19:15	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 19:15	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 19:15	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/17/25 19:15	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 19:15	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 19:15	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/17/25 19:15	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 19:15	1
Chloroform	ND		1.0	0.11	ug/L			12/17/25 19:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 19:15	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 19:15	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 19:15	1
Benzene	ND		1.0	0.47	ug/L			12/17/25 19:15	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/17/25 19:15	1
Trichloroethene	ND		1.0	0.27	ug/L			12/17/25 19:15	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 19:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 19:15	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 19:15	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 19:15	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 19:15	1
Toluene	ND		1.0	0.21	ug/L			12/17/25 19:15	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 19:15	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 19:15	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 19:15	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 19:15	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 19:15	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 19:15	1
Chlorobenzene	4.8		1.0	0.22	ug/L			12/17/25 19:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 19:15	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 19:15	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 19:15	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 19:15	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 19:15	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 19:15	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 19:15	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 19:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 19:15	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 19:15	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 19:15	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 19:15	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-09G-121025

Lab Sample ID: 580-156488-4

Date Collected: 12/10/25 10:46

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 19:15	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 19:15	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 19:15	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 19:15	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 19:15	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 19:15	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 19:15	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 19:15	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 19:15	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 19:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 19:15	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 19:15	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 19:15	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 19:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/17/25 19:15	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 120		12/17/25 19:15	1
4-Bromofluorobenzene (Surr)	104		80 - 120		12/17/25 19:15	1
Dibromofluoromethane (Surr)	118		80 - 120		12/17/25 19:15	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-06b2-121025

Lab Sample ID: 580-156488-5

Date Collected: 12/10/25 12:03

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 19:36	1
Chloromethane	0.35	J	1.0	0.23	ug/L			12/17/25 19:36	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 19:36	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 19:36	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 19:36	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 19:36	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 19:36	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 19:36	1
Acetone	ND		25	11	ug/L			12/17/25 19:36	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 19:36	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 19:36	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 19:36	1
1,1-Dichloroethane	0.32	J	1.0	0.22	ug/L			12/17/25 19:36	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 19:36	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 19:36	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/17/25 19:36	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 19:36	1
Chloroform	11		1.0	0.11	ug/L			12/17/25 19:36	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 19:36	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 19:36	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 19:36	1
Benzene	ND		1.0	0.47	ug/L			12/17/25 19:36	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/17/25 19:36	1
Trichloroethene	ND		1.0	0.27	ug/L			12/17/25 19:36	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 19:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 19:36	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 19:36	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 19:36	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 19:36	1
Toluene	1.5		1.0	0.21	ug/L			12/17/25 19:36	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 19:36	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 19:36	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 19:36	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 19:36	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 19:36	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 19:36	1
Chlorobenzene	22		1.0	0.22	ug/L			12/17/25 19:36	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 19:36	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 19:36	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 19:36	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 19:36	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 19:36	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 19:36	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 19:36	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 19:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 19:36	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 19:36	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 19:36	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 19:36	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-06b2-121025

Lab Sample ID: 580-156488-5

Date Collected: 12/10/25 12:03

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 19:36	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 19:36	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 19:36	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 19:36	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 19:36	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 19:36	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 19:36	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 19:36	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 19:36	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 19:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 19:36	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 19:36	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 19:36	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 19:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 19:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/17/25 19:36	1
1,2-Dichloroethane-d4 (Surr)	118		80 - 120		12/17/25 19:36	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/17/25 19:36	1
Dibromofluoromethane (Surr)	117		80 - 120		12/17/25 19:36	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-06b-121025

Lab Sample ID: 580-156488-6

Date Collected: 12/10/25 12:56

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 19:56	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 19:56	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 19:56	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 19:56	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 19:56	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 19:56	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 19:56	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 19:56	1
Acetone	ND		25	11	ug/L			12/17/25 19:56	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 19:56	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 19:56	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 19:56	1
1,1-Dichloroethane	1.4		1.0	0.22	ug/L			12/17/25 19:56	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 19:56	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 19:56	1
cis-1,2-Dichloroethene	0.19	J	1.0	0.17	ug/L			12/17/25 19:56	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 19:56	1
Chloroform	1.8		1.0	0.11	ug/L			12/17/25 19:56	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 19:56	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 19:56	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 19:56	1
Benzene	0.80	J	1.0	0.47	ug/L			12/17/25 19:56	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/17/25 19:56	1
Trichloroethene	0.37	J	1.0	0.27	ug/L			12/17/25 19:56	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 19:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 19:56	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 19:56	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 19:56	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 19:56	1
Toluene	ND		1.0	0.21	ug/L			12/17/25 19:56	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 19:56	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 19:56	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 19:56	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 19:56	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 19:56	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 19:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 19:56	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 19:56	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 19:56	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 19:56	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 19:56	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 19:56	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 19:56	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 19:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 19:56	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 19:56	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 19:56	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 19:56	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 19:56	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-06b-121025

Lab Sample ID: 580-156488-6

Date Collected: 12/10/25 12:56

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 19:56	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 19:56	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 19:56	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 19:56	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 19:56	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 19:56	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 19:56	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 19:56	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 19:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 19:56	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 19:56	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 19:56	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 19:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/17/25 19:56	1
1,2-Dichloroethane-d4 (Surr)	118		80 - 120		12/17/25 19:56	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/17/25 19:56	1
Dibromofluoromethane (Surr)	113		80 - 120		12/17/25 19:56	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	120		100	22	ug/L			12/18/25 13:58	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		12/18/25 13:58	100
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		12/18/25 13:58	100
4-Bromofluorobenzene (Surr)	93		80 - 120		12/18/25 13:58	100
Dibromofluoromethane (Surr)	94		80 - 120		12/18/25 13:58	100

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-05b2-121025

Lab Sample ID: 580-156488-7

Date Collected: 12/10/25 14:25

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 20:17	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 20:17	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 20:17	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 20:17	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 20:17	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 20:17	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 20:17	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 20:17	1
Acetone	ND		25	11	ug/L			12/17/25 20:17	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 20:17	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 20:17	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 20:17	1
1,1-Dichloroethane	1.2		1.0	0.22	ug/L			12/17/25 20:17	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 20:17	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 20:17	1
cis-1,2-Dichloroethene	0.79	J	1.0	0.17	ug/L			12/17/25 20:17	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 20:17	1
Chloroform	4.6		1.0	0.11	ug/L			12/17/25 20:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 20:17	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 20:17	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 20:17	1
Benzene	2.6		1.0	0.47	ug/L			12/17/25 20:17	1
1,2-Dichloroethane	0.40	J	1.0	0.16	ug/L			12/17/25 20:17	1
Trichloroethene	0.69	J	1.0	0.27	ug/L			12/17/25 20:17	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 20:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 20:17	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 20:17	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 20:17	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 20:17	1
Toluene	ND		1.0	0.21	ug/L			12/17/25 20:17	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 20:17	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 20:17	1
Tetrachloroethene	0.50	J	1.0	0.43	ug/L			12/17/25 20:17	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 20:17	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 20:17	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 20:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 20:17	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 20:17	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 20:17	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 20:17	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 20:17	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 20:17	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 20:17	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 20:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 20:17	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 20:17	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 20:17	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 20:17	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 20:17	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-05b2-121025

Lab Sample ID: 580-156488-7

Date Collected: 12/10/25 14:25

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 20:17	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 20:17	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 20:17	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 20:17	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 20:17	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 20:17	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 20:17	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 20:17	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 20:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 20:17	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 20:17	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 20:17	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 20:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 20:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	121	S1+	80 - 120		12/17/25 20:17	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		12/17/25 20:17	1
4-Bromofluorobenzene (Surr)	105		80 - 120		12/17/25 20:17	1
Dibromofluoromethane (Surr)	104		80 - 120		12/17/25 20:17	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	1300		100	22	ug/L			12/18/25 14:21	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		80 - 120		12/18/25 14:21	100
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		12/18/25 14:21	100
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 14:21	100
Dibromofluoromethane (Surr)	94		80 - 120		12/18/25 14:21	100

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-05b-121125

Lab Sample ID: 580-156488-8

Date Collected: 12/11/25 06:39

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 20:38	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 20:38	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 20:38	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 20:38	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 20:38	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 20:38	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 20:38	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 20:38	1
Acetone	ND		25	11	ug/L			12/17/25 20:38	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 20:38	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 20:38	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 20:38	1
1,1-Dichloroethane	1.7		1.0	0.22	ug/L			12/17/25 20:38	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 20:38	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 20:38	1
cis-1,2-Dichloroethene	0.92	J	1.0	0.17	ug/L			12/17/25 20:38	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 20:38	1
Chloroform	4.5		1.0	0.11	ug/L			12/17/25 20:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 20:38	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 20:38	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 20:38	1
Benzene	2.6		1.0	0.47	ug/L			12/17/25 20:38	1
1,2-Dichloroethane	0.57	J	1.0	0.16	ug/L			12/17/25 20:38	1
Trichloroethene	1.0		1.0	0.27	ug/L			12/17/25 20:38	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 20:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 20:38	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 20:38	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 20:38	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 20:38	1
Toluene	0.68	J	1.0	0.21	ug/L			12/17/25 20:38	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 20:38	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 20:38	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 20:38	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 20:38	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 20:38	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 20:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 20:38	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 20:38	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 20:38	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 20:38	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 20:38	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 20:38	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 20:38	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 20:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 20:38	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 20:38	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 20:38	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 20:38	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 20:38	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-05b-121125

Lab Sample ID: 580-156488-8

Date Collected: 12/11/25 06:39

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 20:38	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 20:38	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 20:38	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 20:38	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 20:38	1
1,4-Dichlorobenzene	0.26	J	1.0	0.18	ug/L			12/17/25 20:38	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 20:38	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 20:38	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 20:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 20:38	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 20:38	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 20:38	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 20:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	131	S1+	80 - 120		12/17/25 20:38	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		12/17/25 20:38	1
4-Bromofluorobenzene (Surr)	110		80 - 120		12/17/25 20:38	1
Dibromofluoromethane (Surr)	103		80 - 120		12/17/25 20:38	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	2000		100	22	ug/L			12/18/25 14:44	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 14:44	100
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/18/25 14:44	100
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 14:44	100
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 14:44	100

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: Dup-02-121125

Lab Sample ID: 580-156488-9

Date Collected: 12/11/25 06:40

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 20:59	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 20:59	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 20:59	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 20:59	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 20:59	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 20:59	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 20:59	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 20:59	1
Acetone	ND		25	11	ug/L			12/17/25 20:59	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 20:59	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 20:59	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 20:59	1
1,1-Dichloroethane	1.7		1.0	0.22	ug/L			12/17/25 20:59	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 20:59	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 20:59	1
cis-1,2-Dichloroethene	0.90	J	1.0	0.17	ug/L			12/17/25 20:59	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 20:59	1
Chloroform	4.4		1.0	0.11	ug/L			12/17/25 20:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 20:59	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 20:59	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 20:59	1
Benzene	2.5		1.0	0.47	ug/L			12/17/25 20:59	1
1,2-Dichloroethane	0.55	J	1.0	0.16	ug/L			12/17/25 20:59	1
Trichloroethene	0.97	J	1.0	0.27	ug/L			12/17/25 20:59	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 20:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 20:59	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 20:59	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 20:59	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 20:59	1
Toluene	0.68	J	1.0	0.21	ug/L			12/17/25 20:59	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 20:59	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 20:59	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 20:59	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 20:59	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 20:59	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 20:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 20:59	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 20:59	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 20:59	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 20:59	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 20:59	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 20:59	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 20:59	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 20:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 20:59	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 20:59	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 20:59	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 20:59	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 20:59	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: Dup-02-121125

Lab Sample ID: 580-156488-9

Date Collected: 12/11/25 06:40

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 20:59	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 20:59	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 20:59	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 20:59	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 20:59	1
1,4-Dichlorobenzene	0.26	J	1.0	0.18	ug/L			12/17/25 20:59	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 20:59	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 20:59	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 20:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 20:59	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 20:59	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 20:59	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 20:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	131	S1+	80 - 120		12/17/25 20:59	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		12/17/25 20:59	1
4-Bromofluorobenzene (Surr)	110		80 - 120		12/17/25 20:59	1
Dibromofluoromethane (Surr)	102		80 - 120		12/17/25 20:59	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	2000		100	22	ug/L			12/18/25 15:08	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 15:08	100
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/18/25 15:08	100
4-Bromofluorobenzene (Surr)	93		80 - 120		12/18/25 15:08	100
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 15:08	100

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-04b-121125

Lab Sample ID: 580-156488-10

Date Collected: 12/11/25 08:19

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 21:19	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 21:19	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 21:19	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 21:19	1
Chloroethane	3.0		1.0	0.34	ug/L			12/17/25 21:19	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 21:19	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 21:19	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 21:19	1
Acetone	ND		25	11	ug/L			12/17/25 21:19	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 21:19	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 21:19	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 21:19	1
1,1-Dichloroethane	1.8		1.0	0.22	ug/L			12/17/25 21:19	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 21:19	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 21:19	1
cis-1,2-Dichloroethene	0.86	J	1.0	0.17	ug/L			12/17/25 21:19	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 21:19	1
Chloroform	40		1.0	0.11	ug/L			12/17/25 21:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 21:19	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 21:19	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 21:19	1
Benzene	2.5		1.0	0.47	ug/L			12/17/25 21:19	1
1,2-Dichloroethane	2.1		1.0	0.16	ug/L			12/17/25 21:19	1
Trichloroethene	3.6		1.0	0.27	ug/L			12/17/25 21:19	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 21:19	1
4-Methyl-2-pentanone (MIBK)	3.2	J *3	5.0	1.4	ug/L			12/17/25 21:19	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 21:19	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 21:19	1
cis-1,3-Dichloropropene	ND	*3	1.0	0.28	ug/L			12/17/25 21:19	1
Toluene	16	*3	1.0	0.21	ug/L			12/17/25 21:19	1
trans-1,3-Dichloropropene	ND	*3	1.0	0.46	ug/L			12/17/25 21:19	1
1,1,2-Trichloroethane	ND	*3	1.0	0.16	ug/L			12/17/25 21:19	1
Tetrachloroethene	45	*3	1.0	0.43	ug/L			12/17/25 21:19	1
1,3-Dichloropropane	ND	*3	1.0	0.13	ug/L			12/17/25 21:19	1
Chlorodibromomethane	ND	*3	1.0	0.46	ug/L			12/17/25 21:19	1
Ethylene Dibromide	ND	*3	1.0	0.18	ug/L			12/17/25 21:19	1
1,1,1,2-Tetrachloroethane	ND	*3	1.0	0.25	ug/L			12/17/25 21:19	1
Ethylbenzene	ND	*3	1.0	0.16	ug/L			12/17/25 21:19	1
m-Xylene & p-Xylene	ND	*3	2.0	0.27	ug/L			12/17/25 21:19	1
o-Xylene	1.6	*3	1.0	0.22	ug/L			12/17/25 21:19	1
Styrene	0.79	J *3	1.0	0.41	ug/L			12/17/25 21:19	1
Bromoform	ND	*3	1.0	0.46	ug/L			12/17/25 21:19	1
Isopropylbenzene	0.75	J *3	1.0	0.45	ug/L			12/17/25 21:19	1
Bromobenzene	1.0		1.0	0.18	ug/L			12/17/25 21:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 21:19	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 21:19	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 21:19	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 21:19	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 21:19	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-04b-121125

Lab Sample ID: 580-156488-10

Date Collected: 12/11/25 08:19

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 21:19	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 21:19	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 21:19	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 21:19	1
1,3-Dichlorobenzene	0.26	J	1.0	0.19	ug/L			12/17/25 21:19	1
1,4-Dichlorobenzene	11		1.0	0.18	ug/L			12/17/25 21:19	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 21:19	1
1,2-Dichlorobenzene	4.6		1.0	0.19	ug/L			12/17/25 21:19	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 21:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 21:19	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 21:19	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 21:19	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 21:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 21:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	539	S1+ *3	80 - 120		12/17/25 21:19	1
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		12/17/25 21:19	1
4-Bromofluorobenzene (Surr)	398	S1+ *3	80 - 120		12/17/25 21:19	1
Dibromofluoromethane (Surr)	82		80 - 120		12/17/25 21:19	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	41000		1000	220	ug/L			12/18/25 15:31	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 15:31	1000
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/18/25 15:31	1000
4-Bromofluorobenzene (Surr)	93		80 - 120		12/18/25 15:31	1000
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 15:31	1000

QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-510727/10

Matrix: Water

Analysis Batch: 510727

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/17/25 14:25	1
Chloromethane	ND		1.0	0.23	ug/L			12/17/25 14:25	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/17/25 14:25	1
Bromomethane	ND		1.0	0.35	ug/L			12/17/25 14:25	1
Chloroethane	ND		1.0	0.34	ug/L			12/17/25 14:25	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/17/25 14:25	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/17/25 14:25	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/17/25 14:25	1
Acetone	ND		25	11	ug/L			12/17/25 14:25	1
Methylene Chloride	ND		15	6.8	ug/L			12/17/25 14:25	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/17/25 14:25	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/17/25 14:25	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/17/25 14:25	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/17/25 14:25	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/17/25 14:25	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/17/25 14:25	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/17/25 14:25	1
Chloroform	ND		1.0	0.11	ug/L			12/17/25 14:25	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/17/25 14:25	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/17/25 14:25	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/17/25 14:25	1
Benzene	ND		1.0	0.47	ug/L			12/17/25 14:25	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/17/25 14:25	1
Trichloroethene	ND		1.0	0.27	ug/L			12/17/25 14:25	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/17/25 14:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/17/25 14:25	1
Dibromomethane	ND		1.0	0.28	ug/L			12/17/25 14:25	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/17/25 14:25	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/17/25 14:25	1
Toluene	ND		1.0	0.21	ug/L			12/17/25 14:25	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/17/25 14:25	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/17/25 14:25	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/17/25 14:25	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/17/25 14:25	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/17/25 14:25	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/17/25 14:25	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/17/25 14:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/17/25 14:25	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/17/25 14:25	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/17/25 14:25	1
o-Xylene	ND		1.0	0.22	ug/L			12/17/25 14:25	1
Styrene	ND		1.0	0.41	ug/L			12/17/25 14:25	1
Bromoform	ND		1.0	0.46	ug/L			12/17/25 14:25	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/17/25 14:25	1
Bromobenzene	ND		1.0	0.18	ug/L			12/17/25 14:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/17/25 14:25	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/17/25 14:25	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/17/25 14:25	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-510727/10

Matrix: Water

Analysis Batch: 510727

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/17/25 14:25	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/17/25 14:25	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/17/25 14:25	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/17/25 14:25	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/17/25 14:25	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/17/25 14:25	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 14:25	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/17/25 14:25	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/17/25 14:25	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/17/25 14:25	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/17/25 14:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/17/25 14:25	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/17/25 14:25	1
Naphthalene	ND		3.0	1.4	ug/L			12/17/25 14:25	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/17/25 14:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/17/25 14:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/17/25 14:25	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		12/17/25 14:25	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/17/25 14:25	1
Dibromofluoromethane (Surr)	106		80 - 120		12/17/25 14:25	1

Lab Sample ID: LCS 580-510727/5

Matrix: Water

Analysis Batch: 510727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	5.07		ug/L		101	20 - 150
Chloromethane	5.00	5.52		ug/L		110	25 - 150
Vinyl chloride	5.00	5.71		ug/L		114	31 - 150
Bromomethane	5.00	6.43		ug/L		129	36 - 150
Chloroethane	5.00	5.69		ug/L		114	38 - 150
Trichlorofluoromethane	5.00	5.79		ug/L		116	45 - 148
Carbon disulfide	5.00	5.56		ug/L		111	63 - 134
1,1-Dichloroethene	5.00	5.80		ug/L		116	70 - 129
Acetone	25.0	29.1		ug/L		117	44 - 150
Methylene Chloride	5.00	ND		ug/L		109	77 - 125
Methyl tert-butyl ether	5.00	5.30		ug/L		106	72 - 120
trans-1,2-Dichloroethene	5.00	5.76		ug/L		115	75 - 120
1,1-Dichloroethane	5.00	5.32		ug/L		106	80 - 120
2-Butanone (MEK)	25.0	26.9		ug/L		108	65 - 137
2,2-Dichloropropane	5.00	5.49		ug/L		110	66 - 126
cis-1,2-Dichloroethene	5.00	5.57		ug/L		111	76 - 120
Chlorobromomethane	5.00	5.71		ug/L		114	78 - 120
Chloroform	5.00	5.71		ug/L		114	78 - 127
1,1,1-Trichloroethane	5.00	5.13		ug/L		103	74 - 130
Carbon tetrachloride	5.00	4.55		ug/L		91	72 - 129

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510727/5

Matrix: Water

Analysis Batch: 510727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	5.00	5.44		ug/L		109	74 - 120
Benzene	5.00	5.33		ug/L		107	80 - 122
1,2-Dichloroethane	5.00	5.37		ug/L		107	69 - 126
Trichloroethene	5.00	4.98		ug/L		100	80 - 125
1,2-Dichloropropane	5.00	5.19		ug/L		104	80 - 120
4-Methyl-2-pentanone (MIBK)	25.0	27.3		ug/L		109	59 - 141
Dibromomethane	5.00	5.64		ug/L		113	80 - 120
Dichlorobromomethane	5.00	5.06		ug/L		101	75 - 124
cis-1,3-Dichloropropene	5.00	4.86		ug/L		97	77 - 120
Toluene	5.00	5.89		ug/L		118	80 - 120
trans-1,3-Dichloropropene	5.00	5.04		ug/L		101	76 - 122
1,1,2-Trichloroethane	5.00	5.30		ug/L		106	80 - 121
Tetrachloroethene	5.00	5.12		ug/L		102	76 - 125
1,3-Dichloropropane	5.00	4.99		ug/L		100	79 - 120
Chlorodibromomethane	5.00	5.05		ug/L		101	73 - 125
Ethylene Dibromide	5.00	5.11		ug/L		102	79 - 126
Chlorobenzene	5.00	5.32		ug/L		106	80 - 120
1,1,1,2-Tetrachloroethane	5.00	5.04		ug/L		101	79 - 120
Ethylbenzene	5.00	5.76		ug/L		115	80 - 120
m-Xylene & p-Xylene	5.00	6.01		ug/L		120	80 - 120
o-Xylene	5.00	5.98		ug/L		120	80 - 120
Styrene	5.00	5.22		ug/L		104	76 - 122
Bromoform	5.00	5.07		ug/L		101	56 - 139
Isopropylbenzene	5.00	5.79		ug/L		116	80 - 123
Bromobenzene	5.00	5.24		ug/L		105	80 - 120
1,1,2,2-Tetrachloroethane	5.00	5.27		ug/L		105	74 - 124
1,2,3-Trichloropropane	5.00	5.36		ug/L		107	76 - 124
N-Propylbenzene	5.00	5.66		ug/L		113	80 - 122
2-Chlorotoluene	5.00	5.11		ug/L		102	80 - 120
4-Chlorotoluene	5.00	5.02		ug/L		100	73 - 129
tert-Butylbenzene	5.00	4.98		ug/L		100	75 - 123
1,2,4-Trimethylbenzene	5.00	5.38		ug/L		108	80 - 120
sec-Butylbenzene	5.00	5.21		ug/L		104	78 - 122
4-Isopropyltoluene	5.00	4.91		ug/L		98	77 - 126
1,3-Dichlorobenzene	5.00	5.26		ug/L		105	77 - 127
1,4-Dichlorobenzene	5.00	5.43		ug/L		109	80 - 120
n-Butylbenzene	5.00	4.74		ug/L		95	57 - 133
1,2-Dichlorobenzene	5.00	5.53		ug/L		111	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	5.04		ug/L		101	65 - 133
1,2,4-Trichlorobenzene	5.00	5.40		ug/L		108	61 - 148
Hexachlorobutadiene	5.00	5.59		ug/L		112	74 - 131
Naphthalene	5.00	5.06		ug/L		101	63 - 150
1,2,3-Trichlorobenzene	5.00	5.50		ug/L		110	65 - 150
1,3,5-Trimethylbenzene	5.00	5.28		ug/L		106	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		80 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510727/5

Matrix: Water

Analysis Batch: 510727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120

Lab Sample ID: LCSD 580-510727/6

Matrix: Water

Analysis Batch: 510727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	4.71		ug/L		94	20 - 150	7	33
Chloromethane	5.00	5.13		ug/L		103	25 - 150	7	26
Vinyl chloride	5.00	5.27		ug/L		105	31 - 150	8	26
Bromomethane	5.00	6.03		ug/L		121	36 - 150	6	33
Chloroethane	5.00	5.16		ug/L		103	38 - 150	10	28
Trichlorofluoromethane	5.00	5.33		ug/L		107	45 - 148	8	35
Carbon disulfide	5.00	5.11		ug/L		102	63 - 134	8	24
1,1-Dichloroethene	5.00	5.43		ug/L		109	70 - 129	7	23
Acetone	25.0	29.6		ug/L		119	44 - 150	2	33
Methylene Chloride	5.00	ND		ug/L		104	77 - 125	5	18
Methyl tert-butyl ether	5.00	4.88		ug/L		98	72 - 120	8	18
trans-1,2-Dichloroethene	5.00	5.37		ug/L		107	75 - 120	7	21
1,1-Dichloroethane	5.00	4.95		ug/L		99	80 - 120	7	15
2-Butanone (MEK)	25.0	25.6		ug/L		103	65 - 137	5	34
2,2-Dichloropropane	5.00	4.95		ug/L		99	66 - 126	10	22
cis-1,2-Dichloroethene	5.00	5.21		ug/L		104	76 - 120	7	20
Chlorobromomethane	5.00	5.39		ug/L		108	78 - 120	6	13
Chloroform	5.00	5.33		ug/L		107	78 - 127	7	14
1,1,1-Trichloroethane	5.00	4.70		ug/L		94	74 - 130	9	19
Carbon tetrachloride	5.00	4.20		ug/L		84	72 - 129	8	19
1,1-Dichloropropene	5.00	4.99		ug/L		100	74 - 120	9	14
Benzene	5.00	4.96		ug/L		99	80 - 122	7	14
1,2-Dichloroethane	5.00	5.09		ug/L		102	69 - 126	5	11
Trichloroethene	5.00	4.58		ug/L		92	80 - 125	8	13
1,2-Dichloropropane	5.00	4.80		ug/L		96	80 - 120	8	14
4-Methyl-2-pentanone (MIBK)	25.0	25.8		ug/L		103	59 - 141	6	22
Dibromomethane	5.00	5.31		ug/L		106	80 - 120	6	11
Dichlorobromomethane	5.00	4.65		ug/L		93	75 - 124	8	13
cis-1,3-Dichloropropene	5.00	4.40		ug/L		88	77 - 120	10	35
Toluene	5.00	5.18		ug/L		104	80 - 120	13	13
trans-1,3-Dichloropropene	5.00	4.74		ug/L		95	76 - 122	6	20
1,1,2-Trichloroethane	5.00	4.89		ug/L		98	80 - 121	8	14
Tetrachloroethene	5.00	4.63		ug/L		93	76 - 125	10	13
1,3-Dichloropropane	5.00	4.61		ug/L		92	79 - 120	8	19
Chlorodibromomethane	5.00	4.58		ug/L		92	73 - 125	10	13
Ethylene Dibromide	5.00	4.78		ug/L		96	79 - 126	7	12
Chlorobenzene	5.00	4.93		ug/L		99	80 - 120	8	10
1,1,1,2-Tetrachloroethane	5.00	4.58		ug/L		92	79 - 120	9	16
Ethylbenzene	5.00	5.17		ug/L		103	80 - 120	11	14
m-Xylene & p-Xylene	5.00	5.31		ug/L		106	80 - 120	12	14

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-510727/6

Matrix: Water

Analysis Batch: 510727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
o-Xylene	5.00	5.43		ug/L		109	80 - 120	10	16
Styrene	5.00	4.75		ug/L		95	76 - 122	9	16
Bromoform	5.00	4.84		ug/L		97	56 - 139	5	21
Isopropylbenzene	5.00	5.24		ug/L		105	80 - 123	10	19
Bromobenzene	5.00	4.77		ug/L		95	80 - 120	9	24
1,1,2,2-Tetrachloroethane	5.00	4.92		ug/L		98	74 - 124	7	25
1,2,3-Trichloropropane	5.00	5.04		ug/L		101	76 - 124	6	26
N-Propylbenzene	5.00	5.18		ug/L		104	80 - 122	9	22
2-Chlorotoluene	5.00	4.67		ug/L		93	80 - 120	9	20
4-Chlorotoluene	5.00	4.60		ug/L		92	73 - 129	9	29
tert-Butylbenzene	5.00	4.55		ug/L		91	75 - 123	9	21
1,2,4-Trimethylbenzene	5.00	4.79		ug/L		96	80 - 120	12	16
sec-Butylbenzene	5.00	4.77		ug/L		95	78 - 122	9	15
4-Isopropyltoluene	5.00	4.50		ug/L		90	77 - 126	9	20
1,3-Dichlorobenzene	5.00	4.84		ug/L		97	77 - 127	8	35
1,4-Dichlorobenzene	5.00	5.04		ug/L		101	80 - 120	7	17
n-Butylbenzene	5.00	4.28		ug/L		86	57 - 133	10	14
1,2-Dichlorobenzene	5.00	5.09		ug/L		102	80 - 120	8	15
1,2-Dibromo-3-Chloropropane	5.00	4.69		ug/L		94	65 - 133	7	25
1,2,4-Trichlorobenzene	5.00	5.08		ug/L		102	61 - 148	6	27
Hexachlorobutadiene	5.00	5.22		ug/L		104	74 - 131	7	22
Naphthalene	5.00	4.62		ug/L		92	63 - 150	9	33
1,2,3-Trichlorobenzene	5.00	5.18		ug/L		104	65 - 150	6	33
1,3,5-Trimethylbenzene	5.00	4.74		ug/L		95	80 - 122	11	21

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120

Lab Sample ID: 580-156488-3 MS

Matrix: Water

Analysis Batch: 510727

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	ND	F1	5.00	7.32		ug/L		146	20 - 150
Chloromethane	0.27	J	5.00	7.21		ug/L		139	25 - 150
Vinyl chloride	ND		5.00	6.90		ug/L		138	31 - 150
Bromomethane	ND		5.00	5.92		ug/L		118	36 - 150
Chloroethane	ND		5.00	6.22		ug/L		124	38 - 150
Trichlorofluoromethane	ND		5.00	6.83		ug/L		137	45 - 148
Carbon disulfide	ND		5.00	6.20		ug/L		124	63 - 134
1,1-Dichloroethene	ND	F1	5.00	6.26		ug/L		125	70 - 129
Acetone	ND		25.0	29.0		ug/L		116	44 - 150
Methylene Chloride	ND		5.00	ND		ug/L		NC	77 - 125
Methyl tert-butyl ether	ND		5.00	4.77		ug/L		95	72 - 120
trans-1,2-Dichloroethene	ND	F1	5.00	5.95		ug/L		119	75 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-156488-3 MS

Matrix: Water

Analysis Batch: 510727

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethane	ND		5.00	5.49		ug/L		110	80 - 120
2-Butanone (MEK)	ND		25.0	23.9		ug/L		95	65 - 137
2,2-Dichloropropane	ND		5.00	5.54		ug/L		111	66 - 126
cis-1,2-Dichloroethene	ND		5.00	5.60		ug/L		112	76 - 120
Chlorobromomethane	ND	F1	5.00	5.90		ug/L		118	78 - 120
Chloroform	ND		5.00	5.94		ug/L		119	78 - 127
1,1,1-Trichloroethane	ND		5.00	5.40		ug/L		108	74 - 130
Carbon tetrachloride	ND		5.00	4.91		ug/L		98	72 - 129
1,1-Dichloropropene	ND		5.00	5.54		ug/L		111	74 - 120
Benzene	ND	F1	5.00	5.83		ug/L		117	80 - 122
1,2-Dichloroethane	ND		5.00	5.51		ug/L		110	69 - 126
Trichloroethene	ND		5.00	4.99		ug/L		100	80 - 125
1,2-Dichloropropane	ND		5.00	5.15		ug/L		103	80 - 120
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.2		ug/L		97	59 - 141
Dibromomethane	ND	F1	5.00	5.74		ug/L		115	80 - 120
Dichlorobromomethane	ND		5.00	5.07		ug/L		101	75 - 124
cis-1,3-Dichloropropene	ND		5.00	4.42		ug/L		88	77 - 120
Toluene	0.74	J	5.00	6.32		ug/L		112	80 - 120
trans-1,3-Dichloropropene	ND		5.00	4.58		ug/L		92	76 - 122
1,1,2-Trichloroethane	ND		5.00	5.14		ug/L		103	80 - 121
Tetrachloroethene	ND		5.00	5.18		ug/L		104	76 - 125
1,3-Dichloropropane	ND		5.00	4.78		ug/L		96	79 - 120
Chlorodibromomethane	ND		5.00	4.94		ug/L		99	73 - 125
Ethylene Dibromide	ND		5.00	4.92		ug/L		98	79 - 126
Chlorobenzene	2.6		5.00	7.96		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	ND		5.00	4.92		ug/L		98	79 - 120
Ethylbenzene	0.16	J	5.00	5.65		ug/L		110	80 - 120
m-Xylene & p-Xylene	ND	F1	5.00	5.74		ug/L		115	80 - 120
o-Xylene	ND	F1	5.00	5.69		ug/L		114	80 - 120
Styrene	ND		5.00	4.99		ug/L		100	76 - 122
Bromoform	ND		5.00	4.97		ug/L		99	56 - 139
Isopropylbenzene	ND		5.00	5.01		ug/L		100	80 - 123
Bromobenzene	ND		5.00	4.80		ug/L		96	80 - 120
1,1,2,2-Tetrachloroethane	ND		5.00	4.99		ug/L		100	74 - 124
1,2,3-Trichloropropane	ND		5.00	4.93		ug/L		99	76 - 124
N-Propylbenzene	ND		5.00	5.38		ug/L		108	80 - 122
2-Chlorotoluene	ND		5.00	4.86		ug/L		97	80 - 120
4-Chlorotoluene	ND		5.00	4.89		ug/L		98	73 - 129
tert-Butylbenzene	ND		5.00	5.07		ug/L		101	75 - 123
1,2,4-Trimethylbenzene	ND		5.00	4.94		ug/L		99	80 - 120
sec-Butylbenzene	ND		5.00	5.00		ug/L		100	78 - 122
4-Isopropyltoluene	ND		5.00	4.90		ug/L		98	77 - 126
1,3-Dichlorobenzene	ND		5.00	5.13		ug/L		103	77 - 127
1,4-Dichlorobenzene	ND		5.00	5.23		ug/L		105	80 - 120
n-Butylbenzene	ND		5.00	4.81		ug/L		96	57 - 133
1,2-Dichlorobenzene	ND		5.00	5.28		ug/L		106	80 - 120
1,2-Dibromo-3-Chloropropane	ND		5.00	4.77		ug/L		95	65 - 133
1,2,4-Trichlorobenzene	ND		5.00	4.90		ug/L		98	61 - 148
Hexachlorobutadiene	ND		5.00	5.32		ug/L		106	74 - 131

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-156488-3 MS

Matrix: Water

Analysis Batch: 510727

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Naphthalene	ND		5.00	4.59		ug/L		92	63 - 150
1,2,3-Trichlorobenzene	ND		5.00	5.04		ug/L		101	65 - 150
1,3,5-Trimethylbenzene	ND		5.00	4.90		ug/L		98	80 - 122
Surrogate	MS %Recovery	MS Qualifier	Limits						
Toluene-d8 (Surr)	99		80 - 120						
1,2-Dichloroethane-d4 (Surr)	107		80 - 120						
4-Bromofluorobenzene (Surr)	100		80 - 120						
Dibromofluoromethane (Surr)	105		80 - 120						

Lab Sample ID: 580-156488-3 MSD

Matrix: Water

Analysis Batch: 510727

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	ND	F1	5.00	7.53	F1	ug/L		151	20 - 150	3	33
Chloromethane	0.27	J	5.00	7.54		ug/L		145	25 - 150	4	26
Vinyl chloride	ND		5.00	7.19		ug/L		144	31 - 150	4	26
Bromomethane	ND		5.00	6.11		ug/L		122	36 - 150	3	33
Chloroethane	ND		5.00	6.93		ug/L		139	38 - 150	11	28
Trichlorofluoromethane	ND		5.00	7.12		ug/L		142	45 - 148	4	35
Carbon disulfide	ND		5.00	6.60		ug/L		132	63 - 134	6	24
1,1-Dichloroethene	ND	F1	5.00	6.75	F1	ug/L		135	70 - 129	8	23
Acetone	ND		25.0	29.2		ug/L		117	44 - 150	1	33
Methylene Chloride	ND		5.00	ND		ug/L		NC	77 - 125	NC	18
Methyl tert-butyl ether	ND		5.00	5.06		ug/L		101	72 - 120	6	18
trans-1,2-Dichloroethene	ND	F1	5.00	6.43	F1	ug/L		129	75 - 120	8	21
1,1-Dichloroethane	ND		5.00	5.86		ug/L		117	80 - 120	7	15
2-Butanone (MEK)	ND		25.0	26.1		ug/L		104	65 - 137	9	34
2,2-Dichloropropane	ND		5.00	5.96		ug/L		119	66 - 126	7	22
cis-1,2-Dichloroethene	ND		5.00	5.98		ug/L		120	76 - 120	7	20
Chlorobromomethane	ND	F1	5.00	6.38	F1	ug/L		128	78 - 120	8	13
Chloroform	ND		5.00	6.32		ug/L		126	78 - 127	6	14
1,1,1-Trichloroethane	ND		5.00	5.77		ug/L		115	74 - 130	7	19
Carbon tetrachloride	ND		5.00	5.31		ug/L		106	72 - 129	8	19
1,1-Dichloropropene	ND		5.00	6.02		ug/L		120	74 - 120	8	14
Benzene	ND	F1	5.00	6.22	F1	ug/L		124	80 - 122	6	14
1,2-Dichloroethane	ND		5.00	5.93		ug/L		119	69 - 126	7	11
Trichloroethene	ND		5.00	5.36		ug/L		107	80 - 125	7	13
1,2-Dichloropropane	ND		5.00	5.53		ug/L		111	80 - 120	7	14
4-Methyl-2-pentanone (MIBK)	ND		25.0	26.1		ug/L		104	59 - 141	8	22
Dibromomethane	ND	F1	5.00	6.10	F1	ug/L		122	80 - 120	6	11
Dichlorobromomethane	ND		5.00	5.42		ug/L		108	75 - 124	7	13
cis-1,3-Dichloropropene	ND		5.00	4.81		ug/L		96	77 - 120	8	35
Toluene	0.74	J	5.00	6.76		ug/L		120	80 - 120	7	13
trans-1,3-Dichloropropene	ND		5.00	4.94		ug/L		99	76 - 122	8	20
1,1,2-Trichloroethane	ND		5.00	5.49		ug/L		110	80 - 121	6	14
Tetrachloroethene	ND		5.00	5.56		ug/L		111	76 - 125	7	13

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-156488-3 MSD

Matrix: Water

Analysis Batch: 510727

Client Sample ID: PMW-09b-121025

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichloropropane	ND		5.00	5.17		ug/L		103	79 - 120	8	19
Chlorodibromomethane	ND		5.00	5.31		ug/L		106	73 - 125	7	13
Ethylene Dibromide	ND		5.00	5.19		ug/L		104	79 - 126	5	12
Chlorobenzene	2.6		5.00	8.46		ug/L		116	80 - 120	6	10
1,1,1,2-Tetrachloroethane	ND		5.00	5.32		ug/L		106	79 - 120	8	16
Ethylbenzene	0.16	J	5.00	6.03		ug/L		117	80 - 120	7	14
m-Xylene & p-Xylene	ND	F1	5.00	6.11	F1	ug/L		122	80 - 120	6	14
o-Xylene	ND	F1	5.00	6.11	F1	ug/L		122	80 - 120	7	16
Styrene	ND		5.00	5.43		ug/L		109	76 - 122	9	16
Bromoform	ND		5.00	5.29		ug/L		106	56 - 139	6	21
Isopropylbenzene	ND		5.00	5.38		ug/L		108	80 - 123	7	19
Bromobenzene	ND		5.00	5.20		ug/L		104	80 - 120	8	24
1,1,2,2-Tetrachloroethane	ND		5.00	5.40		ug/L		108	74 - 124	8	25
1,2,3-Trichloropropane	ND		5.00	5.32		ug/L		106	76 - 124	8	26
N-Propylbenzene	ND		5.00	5.82		ug/L		116	80 - 122	8	22
2-Chlorotoluene	ND		5.00	5.27		ug/L		105	80 - 120	8	20
4-Chlorotoluene	ND		5.00	5.26		ug/L		105	73 - 129	7	29
tert-Butylbenzene	ND		5.00	5.10		ug/L		102	75 - 123	1	21
1,2,4-Trimethylbenzene	ND		5.00	5.33		ug/L		107	80 - 120	8	16
sec-Butylbenzene	ND		5.00	5.44		ug/L		109	78 - 122	8	15
4-Isopropyltoluene	ND		5.00	5.30		ug/L		106	77 - 126	8	20
1,3-Dichlorobenzene	ND		5.00	5.53		ug/L		111	77 - 127	8	35
1,4-Dichlorobenzene	ND		5.00	5.65		ug/L		113	80 - 120	8	17
n-Butylbenzene	ND		5.00	5.17		ug/L		103	57 - 133	7	14
1,2-Dichlorobenzene	ND		5.00	5.73		ug/L		115	80 - 120	8	15
1,2-Dibromo-3-Chloropropane	ND		5.00	5.16		ug/L		103	65 - 133	8	25
1,2,4-Trichlorobenzene	ND		5.00	5.27		ug/L		105	61 - 148	7	27
Hexachlorobutadiene	ND		5.00	5.84		ug/L		117	74 - 131	9	22
Naphthalene	ND		5.00	4.97		ug/L		99	63 - 150	8	33
1,2,3-Trichlorobenzene	ND		5.00	5.43		ug/L		109	65 - 150	7	33
1,3,5-Trimethylbenzene	ND		5.00	5.28		ug/L		106	80 - 122	7	21

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	108		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120

Lab Sample ID: MB 580-510796/7

Matrix: Water

Analysis Batch: 510796

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.22	ug/L			12/18/25 12:55	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120					12/18/25 12:55	1
1,2-Dichloroethane-d4 (Surr)	98		80 - 120					12/18/25 12:55	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-510796/7

Matrix: Water

Analysis Batch: 510796

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 12:55	1
Dibromofluoromethane (Surr)	95		80 - 120		12/18/25 12:55	1

Lab Sample ID: LCS 580-510796/4

Matrix: Water

Analysis Batch: 510796

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzene	5.00	4.70		ug/L		94	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	103		80 - 120
1,2-Dichloroethane-d4 (Surr)	97		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	98		80 - 120

Lab Sample ID: LCSD 580-510796/5

Matrix: Water

Analysis Batch: 510796

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	5.00	4.62		ug/L		92	80 - 120	2	10

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

GC/MS VOA

Analysis Batch: 510727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-1	TB-121025	Total/NA	Water	8260D	
580-156488-2	PMW-18b-121025	Total/NA	Water	8260D	
580-156488-3	PMW-09b-121025	Total/NA	Water	8260D	
580-156488-4	PMW-09G-121025	Total/NA	Water	8260D	
580-156488-5	PMW-06b2-121025	Total/NA	Water	8260D	
580-156488-6	PMW-06b-121025	Total/NA	Water	8260D	
580-156488-7	PMW-05b2-121025	Total/NA	Water	8260D	
580-156488-8	PMW-05b-121125	Total/NA	Water	8260D	
580-156488-9	Dup-02-121125	Total/NA	Water	8260D	
580-156488-10	PMW-04b-121125	Total/NA	Water	8260D	
MB 580-510727/10	Method Blank	Total/NA	Water	8260D	
LCS 580-510727/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510727/6	Lab Control Sample Dup	Total/NA	Water	8260D	
580-156488-3 MS	PMW-09b-121025	Total/NA	Water	8260D	
580-156488-3 MSD	PMW-09b-121025	Total/NA	Water	8260D	

Analysis Batch: 510796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156488-6 - DL	PMW-06b-121025	Total/NA	Water	8260D	
580-156488-7 - DL	PMW-05b2-121025	Total/NA	Water	8260D	
580-156488-8 - DL	PMW-05b-121125	Total/NA	Water	8260D	
580-156488-9 - DL	Dup-02-121125	Total/NA	Water	8260D	
580-156488-10 - DL	PMW-04b-121125	Total/NA	Water	8260D	
MB 580-510796/7	Method Blank	Total/NA	Water	8260D	
LCS 580-510796/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510796/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: TB-121025

Lab Sample ID: 580-156488-1

Date Collected: 12/10/25 06:00

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 17:32

Client Sample ID: PMW-18b-121025

Lab Sample ID: 580-156488-2

Date Collected: 12/10/25 06:41

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 18:54

Client Sample ID: PMW-09b-121025

Lab Sample ID: 580-156488-3

Date Collected: 12/10/25 08:31

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 17:52

Client Sample ID: PMW-09G-121025

Lab Sample ID: 580-156488-4

Date Collected: 12/10/25 10:46

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 19:15

Client Sample ID: PMW-06b2-121025

Lab Sample ID: 580-156488-5

Date Collected: 12/10/25 12:03

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 19:36

Client Sample ID: PMW-06b-121025

Lab Sample ID: 580-156488-6

Date Collected: 12/10/25 12:56

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 19:56
Total/NA	Analysis	8260D	DL	100	510796	AA	EET SEA	12/18/25 13:58

Client Sample ID: PMW-05b2-121025

Lab Sample ID: 580-156488-7

Date Collected: 12/10/25 14:25

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 20:17
Total/NA	Analysis	8260D	DL	100	510796	AA	EET SEA	12/18/25 14:21

Eurofins Seattle

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Client Sample ID: PMW-05b-121125

Lab Sample ID: 580-156488-8

Date Collected: 12/11/25 06:39

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 20:38
Total/NA	Analysis	8260D	DL	100	510796	AA	EET SEA	12/18/25 14:44

Client Sample ID: Dup-02-121125

Lab Sample ID: 580-156488-9

Date Collected: 12/11/25 06:40

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 20:59
Total/NA	Analysis	8260D	DL	100	510796	AA	EET SEA	12/18/25 15:08

Client Sample ID: PMW-04b-121125

Lab Sample ID: 580-156488-10

Date Collected: 12/11/25 08:19

Matrix: Water

Date Received: 12/12/25 10:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510727	AA	EET SEA	12/17/25 21:19
Total/NA	Analysis	8260D	DL	1000	510796	AA	EET SEA	12/18/25 15:31

Laboratory References:

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4167	07-07-26

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Sample Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156488-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-156488-1	TB-121025	Water	12/10/25 06:00	12/12/25 10:55	Oregon
580-156488-2	PMW-18b-121025	Water	12/10/25 06:41	12/12/25 10:55	Oregon
580-156488-3	PMW-09b-121025	Water	12/10/25 08:31	12/12/25 10:55	Oregon
580-156488-4	PMW-09G-121025	Water	12/10/25 10:46	12/12/25 10:55	Oregon
580-156488-5	PMW-06b2-121025	Water	12/10/25 12:03	12/12/25 10:55	Oregon
580-156488-6	PMW-06b-121025	Water	12/10/25 12:56	12/12/25 10:55	Oregon
580-156488-7	PMW-05b2-121025	Water	12/10/25 14:25	12/12/25 10:55	Oregon
580-156488-8	PMW-05b-121125	Water	12/11/25 06:39	12/12/25 10:55	Oregon
580-156488-9	Dup-02-121125	Water	12/11/25 06:40	12/12/25 10:55	Oregon
580-156488-10	PMW-04b-121125	Water	12/11/25 08:19	12/12/25 10:55	Oregon

5765 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

Environment Test, Inc.
TestAmerica

Client Information		Sampler: Scott Terranova	Lab Pk. Marshall, Tony	Carrier Tracking No(s):	
Client Contact: Avery Soplatia		Phone:	E-Mail: antonette.marshall@etl.enrofin.com		
Company: ERM-West		Analysis Requested			
Address: 1060 SW 6th Avenue Suite 1650		Due Date Requested:			
City: Portland		TAT Requested (day/s): Standard			
State, Zip: OR 97204		* 72 hr on VOCs			
Phone:		PO #: PN 0773710.507			
Email: AVERY.SOPLATIA@ERM.COM		WO #:			
Project Name: Arkema - December 2025 Groundwater Event		Project #: 073710.507			
Site:		SSOW#:			
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Inoculate, Swab, Strich, Aali)
TB-121025		12/10/25	0600	G	Water
PMW-106b-121025			0641		Water
PMW-096-121025			0831		Water
PMW-096-121025			1046		Water
PMW-066a-121025			1203		Water
PMW-056b2-121025			1256		Water
PMW-056b-121025			1425		Water
PMW-056b-121125		12/11/25	0639	G	Water
Dyp-02-121125			0640		Water
PMW-046b-121125			0819		Water
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)			
☐ Non-Hazard ☐ Flammable ☐ Silica Inhalant ☐ Poison B ☐ Unknown ☐ Radiological		☐ Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months			
Deliverable Requested: I, II, III, IV, Other (Specify)		Special Instructions/OC Requirements: please run at lowest dilution possible for ND.			
Empty Kit Relinquished by:		Date/Time:	Time:		
Relinquished by:		Date/Time:	Received By:		
Relinquished by:		Date/Time:	Received By:		
Relinquished by:		Date/Time:	Received By:		
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	

5755 8th Street East
Tacoma, WA 98424
Phone (253) 822-2310 Fax (253) 822-5047

Chain of Custody Record

Client Information		Sampler: Scott Terranova		Lab PM: Marshall, Tony		Carrier Tracking No(s):	
Client Contact: Avery Sopela		Phone:		E-Mail: antoinette.marshall@eurofins.com		Page: 1 of 1	
Company: ERM-West		Due Date Requested:		Analysis Requested		Job #:	
Address: 1050 SW 6th Avenue Suite 1650		TAT Requested (days): 5		Preservation Codes:		COC No:	
City: Portland		State, Zip: OR 97204		Matrix (Water, Soil, Sediment, Biotissue, AAM)		Job #:	
Phone:		PO #:		Field Filtered Sample (Yes or No)		Special Instructions/Note:	
Email: avery.sopela@erm.com		PN 0773710.507		Perform MS/MSD (Yes or No)		MS/MSD	
Project Name: Arkema - December 2025 Groundwater Event		Project #: 0773710.507		8260C regular level standard VOA list-Seattle		Total Number of containers:	
Site:		SSOW#:		8260C_LL - Standard VOA list-Seattle		Special Instructions/Note:	
Sample Identification		Sample Date		300.0_28D-Chloride-Seattle		Other:	
TB-121025		12/10/25		314 Perchlorate		A - HCL	
PMW-106-121025		0600		8081B- Pesticides, standard list		B - NaOH	
PMW-096-121025		0641		8081B Pesticides, standard list - Field Filtered		C - Zn Acetate	
PMW-096-121025		0831				D - Nitric Acid	
PMW-0662-121025		1046				E - NaHSO4	
PMW-0562-121025		1202				F - MeOH	
PMW-0562-121025		1256				G - Anchor	
PMW-0562-121025		1425				H - Ascorbic Acid	
PMW-0562-121025		0639				I - Ice	
Dye-02-121025		0640				J - DI Water	
PMW-046-121025		0819				K - EDTA	
						L - EDA	
						M - Hexane	
						N - None	
						O - AsNaO2	
						P - Na2O2S	
						Q - Na2SO3	
						R - Na2S2O3	
						S - H2SO4	
						T - TSP Dodecylhydrate	
						U - Acetone	
						V - MCAA	
						W - pH 4-5	
						Z - other (specify)	
Possible Hazard Identification		Sample Type (C=Comp, G=grab)		Sample Type (C=Comp, G=grab)		Sample Type (C=Comp, G=grab)	
☐ Non-Hazard ☐ Flammable ☐ Silica/Lignin ☐ Poison B ☐ Unknown ☐ Radiological		Preservation Code:		Field Filtered Sample (Yes or No)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Deliverable Requested: I, II, III, IV, Other (specify)		Matrix (Water, Soil, Sediment, Biotissue, AAM)		Perform MS/MSD (Yes or No)		☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Empty Kit Relinquished by:		Date:		Time:		Special Instructions/AC Requirements: please run at lowest dilution possible for ND.	
Relinquished by: [Signature]		Date/Time: 12/10/25 0950		Company: M-E		Date/Time: 12/12/25 0950	
Relinquished by: [Signature]		Date/Time: 12/12/25 1055		Company: M-E		Date/Time: 12/12/25 1055	
Relinquished by: [Signature]		Date/Time: 12/12/25 1425		Company: ERM		Date/Time: 12/13/25 0940	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooling Temperature (4-8 and Other Remarks):		Date/Time: 12/13/25 0940	
				O-371.3 Pk Se R		Company: ERM	
				12/11 4:24.8		Vec: 01/16/2019	



5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record

Client Information		Sampler: Scott Terranova Phone:		Lab PM: Marshall, Tony E-Mail: antoinette.marshall@eurofins.com		Carrier Tracking No(s):		COC No:	
Company: ERM-West		Address: 1050 SW 6th Avenue Suite 1650 City: Portland State, Zip: OR, 97204 Phone:		Due Date Requested:		Analysis Requested		Job #: 1041	
Project Name: Arkema - December 2025 Groundwater Event		Project #: 0773710.507		SSOW#:		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)		Preservation Codes:	
Email: avery.sopale@erm.com		PO #: PN 0773710.507		WO #:		MS/MSD		Other: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ascorbic Acid H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Water, Sediment, Soil, Benthic, Aq)	
TB-121025		12/10/25		0600		G		Water	
PMW-186-121025				0641				Water	
PMW-096-121025				0831				Water	
PMW-096-121025				1046				Water	
PMW-0662-121025				1203				Water	
PMW-0562-121025				1425				Water	
PMW-056-121125		12/11/25		0639		G		Water	
DHP-02-121125				0640				Water	
PMW-046-121125				0819				Water	
Possible Hazard Identification		☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months		Special Instructions/Note:	
Deliverable Requested: I, II, III, IV, Other (specify)									
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Special Instructions/Note:	
Relinquished by: <i>AK</i>		12/02/25		0950		Erm		Received by: <i>AK</i>	
Relinquished by: <i>AK</i>		12/12/25		1055		N.E.		Received by: <i>AK</i>	
Relinquished by: <i>AK</i>		12/12/25		1425		Erm		Received by: <i>AK</i>	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Conflict Temperature(s) and Other Remarks:		0.7/1.3 PK Seals			



1R11 4.7/4.8

ORIGIN ID: HIOA (503) 906-9200
JASON O'CONNELL
EUROFINS - PORTLAND
9725 SW COMMERCE CIR
SUITE A2
WILSONVILLE, OR 97070
UNITED STATES US

SHIP DATE: 12DEC25
ACTWGT: 39.20 LB
CAD: 5112144/NET4535

BILL SENDER



580-156488 Waybill

TO **SAMPLE RECEIVING**
EUROFINS-CALSCIENCE
2841 DOW AVENUE
SUITE 100
TUSTIN CA 92780

580-156488 Waybill

(714) 895-5494
INV:
PO:

REF:

DEPT:



FedEx
Express



SATURDAY 1:30P
PRIORITY OVERNIGHT

TRK#
0201 8870 3082 2632

X0 DTHA

92780

CA-US SNA



Custody Seal

DATE

SIGNATURE

Environment 1
TestAmerica

eurolins

2696321

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156488-2

Login Number: 156488

List Source: Eurofins Seattle

List Number: 1

Creator: O'Connell, Jason I

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Seattle



ANALYTICAL REPORT

PREPARED FOR

Attn: Avery Soplata
ERM-West
1050 SW 6th Avenue
Suite 1650
Portland, Oregon 97204
Generated 12/18/2025 1:04:52 PM

JOB DESCRIPTION

Arkema - Dec 2025 Groundwater Event

JOB NUMBER

580-156495-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Generated
12/18/2025 1:04:52 PM

Authorized for release by
Antoinette Marshall, Project Manager I
Antoinette.Marshall@et.eurofinsus.com
(253)922-2310



Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	15
QC Association	25
Chronicle	27
Certification Summary	28
Sample Summary	29
Chain of Custody	30
Receipt Checklists	34

Case Narrative

Client: ERM-West
Project: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Job ID: 580-156495-1

Eurofins Seattle

Job Narrative 580-156495-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/12/2025 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-510546 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects above the RL for the affected analytes; therefore, the data have been reported. The associated samples are: RB-01-121125 (580-156495-2), TB-01-121125 (580-156495-3), PA-27d-121125 (580-156495-4) and (CCVIS 580-510546/3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Pesticides

Method 8081B: The method blank for preparation batch 580-510479 and analytical batch 580-510754 contained 4,4'-DDT above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8081B: The following samples required a copper clean-up (Cu_Powder_00002), via EPA Method 3660B, to reduce matrix interferences: FILTB-01-121025 (580-156495-1), RB-01-121125 (580-156495-2), (LCS 580-510479/2-A), (LCS 580-510479/4-A), (LCS 580-510479/6-A), (LCS 580-510479/8-A), (LCSD 580-510479/3-A), (LCSD 580-510479/5-A), (LCSD 580-510479/7-A), (LCSD 580-510479/9-A) and (MB 580-510479/1-A).

Method 8081B: The following analyte(s) recovered outside control limits for the LCS/LCSD associated with preparation batch 580-510479 and analytical batch 580-510754: delta-BHC. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8081B - Dissolved: The method blank for preparation batch 580-510479 and analytical batch 580-510754 contained 4,4'-DDT above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8081B - Dissolved: The following samples required a copper clean-up (Cu_Powder_00002), via EPA Method 3660B, to reduce matrix interferences: FILTB-01-121025 (580-156495-1), RB-01-121125 (580-156495-2), (LCS 580-510479/2-A), (LCS 580-510479/4-A), (LCS 580-510479/6-A), (LCS 580-510479/8-A), (LCSD 580-510479/3-A), (LCSD 580-510479/5-A), (LCSD 580-510479/7-A), (LCSD 580-510479/9-A) and (MB 580-510479/1-A).

Method 8081B - Dissolved: The following analyte(s) recovered outside control limits for the LCS/LCSD associated with preparation batch 580-510479 and analytical batch 580-510754: delta-BHC. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Seattle

Case Narrative

Client: ERM-West
Project: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Job ID: 580-156495-1 (Continued)

Eurofins Seattle

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

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Eurofins Seattle

Definitions/Glossary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: FILTB-01-121025

Lab Sample ID: 580-156495-1

Date Collected: 12/10/25 06:10

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8081B - Organochlorine Pesticides (GC) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0039	ug/L		12/15/25 09:44	12/17/25 20:00	1
gamma-BHC (Lindane)	ND		0.020	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
beta-BHC	ND		0.020	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
delta-BHC	ND	*	0.015	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
Heptachlor	ND		0.015	0.0039	ug/L		12/15/25 09:44	12/17/25 20:00	1
Aldrin	ND		0.023	0.0068	ug/L		12/15/25 09:44	12/17/25 20:00	1
Heptachlor epoxide	ND		0.020	0.0029	ug/L		12/15/25 09:44	12/17/25 20:00	1
trans-Chlordane	ND		0.020	0.0029	ug/L		12/15/25 09:44	12/17/25 20:00	1
cis-Chlordane	ND		0.026	0.0078	ug/L		12/15/25 09:44	12/17/25 20:00	1
Endosulfan I	ND		0.020	0.0029	ug/L		12/15/25 09:44	12/17/25 20:00	1
4,4'-DDE	ND		0.0098	0.0029	ug/L		12/15/25 09:44	12/17/25 20:00	1
Dieldrin	ND		0.018	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
Endrin	ND		0.012	0.0029	ug/L		12/15/25 09:44	12/17/25 20:00	1
4,4'-DDD	ND		0.015	0.0059	ug/L		12/15/25 09:44	12/17/25 20:00	1
Endosulfan II	ND		0.023	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
4,4'-DDT	ND		0.020	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
Endrin aldehyde	ND		0.059	0.033	ug/L		12/15/25 09:44	12/17/25 20:00	1
Endosulfan sulfate	ND		0.020	0.0029	ug/L		12/15/25 09:44	12/17/25 20:00	1
Methoxychlor	ND		0.098	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
Endrin ketone	ND		0.020	0.0068	ug/L		12/15/25 09:44	12/17/25 20:00	1
Toxaphene	ND		2.0	0.45	ug/L		12/15/25 09:44	12/17/25 20:00	1
Chlordane (technical)	ND		0.20	0.061	ug/L		12/15/25 09:44	12/17/25 20:00	1
2,4'-DDD	ND		0.029	0.0088	ug/L		12/15/25 09:44	12/17/25 20:00	1
2,4'-DDE	ND		0.029	0.0049	ug/L		12/15/25 09:44	12/17/25 20:00	1
2,4'-DDT	ND		0.029	0.0088	ug/L		12/15/25 09:44	12/17/25 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		42 - 120	12/15/25 09:44	12/17/25 20:00	1
DCB Decachlorobiphenyl	70		50 - 120	12/15/25 09:44	12/17/25 20:00	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: RB-01-121125

Lab Sample ID: 580-156495-2

Date Collected: 12/11/25 05:45

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/16/25 03:30	1
Chloromethane	ND		1.0	0.23	ug/L			12/16/25 03:30	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/16/25 03:30	1
Bromomethane	ND		1.0	0.35	ug/L			12/16/25 03:30	1
Chloroethane	ND		1.0	0.34	ug/L			12/16/25 03:30	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/16/25 03:30	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/16/25 03:30	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/16/25 03:30	1
Acetone	ND		25	11	ug/L			12/16/25 03:30	1
Methylene Chloride	ND		15	6.8	ug/L			12/16/25 03:30	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/16/25 03:30	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/16/25 03:30	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/16/25 03:30	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/16/25 03:30	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/16/25 03:30	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/16/25 03:30	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/16/25 03:30	1
Chloroform	ND		1.0	0.11	ug/L			12/16/25 03:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/16/25 03:30	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/16/25 03:30	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/16/25 03:30	1
Benzene	ND		1.0	0.47	ug/L			12/16/25 03:30	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/16/25 03:30	1
Trichloroethene	ND		1.0	0.27	ug/L			12/16/25 03:30	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/16/25 03:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/16/25 03:30	1
Dibromomethane	ND		1.0	0.28	ug/L			12/16/25 03:30	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/16/25 03:30	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/16/25 03:30	1
Toluene	ND		1.0	0.21	ug/L			12/16/25 03:30	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/16/25 03:30	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/16/25 03:30	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/16/25 03:30	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/16/25 03:30	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/16/25 03:30	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/16/25 03:30	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/16/25 03:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/16/25 03:30	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/16/25 03:30	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/16/25 03:30	1
o-Xylene	ND		1.0	0.22	ug/L			12/16/25 03:30	1
Styrene	ND		1.0	0.41	ug/L			12/16/25 03:30	1
Bromoform	ND		1.0	0.46	ug/L			12/16/25 03:30	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/16/25 03:30	1
Bromobenzene	ND		1.0	0.18	ug/L			12/16/25 03:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/16/25 03:30	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/16/25 03:30	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/16/25 03:30	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/16/25 03:30	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: RB-01-121125

Lab Sample ID: 580-156495-2

Date Collected: 12/11/25 05:45

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/16/25 03:30	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/16/25 03:30	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/16/25 03:30	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/16/25 03:30	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/16/25 03:30	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 03:30	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/16/25 03:30	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/16/25 03:30	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 03:30	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/16/25 03:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/16/25 03:30	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/16/25 03:30	1
Naphthalene	ND		3.0	1.4	ug/L			12/16/25 03:30	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/16/25 03:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/16/25 03:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/16/25 03:30	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/16/25 03:30	1
4-Bromofluorobenzene (Surr)	95		80 - 120		12/16/25 03:30	1
Dibromofluoromethane (Surr)	96		80 - 120		12/16/25 03:30	1

Method: SW846 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		0.014	0.0057	ug/L		12/15/25 09:44	12/17/25 20:19	1
4,4'-DDE	ND		0.0096	0.0029	ug/L		12/15/25 09:44	12/17/25 20:19	1
4,4'-DDT	ND		0.019	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
Aldrin	ND		0.023	0.0067	ug/L		12/15/25 09:44	12/17/25 20:19	1
alpha-BHC	ND		0.017	0.0038	ug/L		12/15/25 09:44	12/17/25 20:19	1
cis-Chlordane	ND		0.026	0.0077	ug/L		12/15/25 09:44	12/17/25 20:19	1
beta-BHC	ND		0.020	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
Chlordane (technical)	ND		0.19	0.059	ug/L		12/15/25 09:44	12/17/25 20:19	1
delta-BHC	ND	*-	0.014	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
Dieldrin	ND		0.017	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
Endosulfan I	ND		0.019	0.0029	ug/L		12/15/25 09:44	12/17/25 20:19	1
Endosulfan II	ND		0.023	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
Endosulfan sulfate	ND		0.019	0.0029	ug/L		12/15/25 09:44	12/17/25 20:19	1
Endrin	ND		0.011	0.0029	ug/L		12/15/25 09:44	12/17/25 20:19	1
Endrin aldehyde	ND		0.057	0.033	ug/L		12/15/25 09:44	12/17/25 20:19	1
Endrin ketone	ND		0.019	0.0067	ug/L		12/15/25 09:44	12/17/25 20:19	1
gamma-BHC (Lindane)	ND		0.019	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
trans-Chlordane	ND		0.019	0.0029	ug/L		12/15/25 09:44	12/17/25 20:19	1
Heptachlor	ND		0.014	0.0038	ug/L		12/15/25 09:44	12/17/25 20:19	1
Heptachlor epoxide	ND		0.019	0.0029	ug/L		12/15/25 09:44	12/17/25 20:19	1
Methoxychlor	ND		0.096	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
Toxaphene	ND		1.9	0.44	ug/L		12/15/25 09:44	12/17/25 20:19	1
2,4'-DDD	ND		0.029	0.0086	ug/L		12/15/25 09:44	12/17/25 20:19	1
2,4'-DDE	ND		0.029	0.0048	ug/L		12/15/25 09:44	12/17/25 20:19	1
2,4'-DDT	ND		0.029	0.0086	ug/L		12/15/25 09:44	12/17/25 20:19	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: RB-01-121125

Lab Sample ID: 580-156495-2

Date Collected: 12/11/25 05:45

Matrix: Water

Date Received: 12/12/25 10:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	64		50 - 120	12/15/25 09:44	12/17/25 20:19	1
Tetrachloro-m-xylene	73		42 - 120	12/15/25 09:44	12/17/25 20:19	1

Method: EPA 314.0 - Perchlorate (IC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L	-		12/16/25 22:55	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	0.44	J	1.5	0.43	mg/L	-		12/15/25 23:39	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: TB-01-121125

Lab Sample ID: 580-156495-3

Date Collected: 12/11/25 05:30

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/16/25 03:53	1
Chloromethane	ND		1.0	0.23	ug/L			12/16/25 03:53	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/16/25 03:53	1
Bromomethane	ND		1.0	0.35	ug/L			12/16/25 03:53	1
Chloroethane	ND		1.0	0.34	ug/L			12/16/25 03:53	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/16/25 03:53	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/16/25 03:53	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/16/25 03:53	1
Acetone	ND		25	11	ug/L			12/16/25 03:53	1
Methylene Chloride	ND		15	6.8	ug/L			12/16/25 03:53	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/16/25 03:53	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/16/25 03:53	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/16/25 03:53	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/16/25 03:53	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/16/25 03:53	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/16/25 03:53	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/16/25 03:53	1
Chloroform	ND		1.0	0.11	ug/L			12/16/25 03:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/16/25 03:53	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/16/25 03:53	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/16/25 03:53	1
Benzene	ND		1.0	0.47	ug/L			12/16/25 03:53	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/16/25 03:53	1
Trichloroethene	ND		1.0	0.27	ug/L			12/16/25 03:53	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/16/25 03:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/16/25 03:53	1
Dibromomethane	ND		1.0	0.28	ug/L			12/16/25 03:53	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/16/25 03:53	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/16/25 03:53	1
Toluene	ND		1.0	0.21	ug/L			12/16/25 03:53	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/16/25 03:53	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/16/25 03:53	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/16/25 03:53	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/16/25 03:53	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/16/25 03:53	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/16/25 03:53	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/16/25 03:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/16/25 03:53	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/16/25 03:53	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/16/25 03:53	1
o-Xylene	ND		1.0	0.22	ug/L			12/16/25 03:53	1
Styrene	ND		1.0	0.41	ug/L			12/16/25 03:53	1
Bromoform	ND		1.0	0.46	ug/L			12/16/25 03:53	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/16/25 03:53	1
Bromobenzene	ND		1.0	0.18	ug/L			12/16/25 03:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/16/25 03:53	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/16/25 03:53	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/16/25 03:53	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/16/25 03:53	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: TB-01-121125

Lab Sample ID: 580-156495-3

Date Collected: 12/11/25 05:30

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/16/25 03:53	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/16/25 03:53	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/16/25 03:53	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/16/25 03:53	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/16/25 03:53	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 03:53	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/16/25 03:53	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/16/25 03:53	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 03:53	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/16/25 03:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/16/25 03:53	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/16/25 03:53	1
Naphthalene	ND		3.0	1.4	ug/L			12/16/25 03:53	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/16/25 03:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/16/25 03:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/16/25 03:53	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/16/25 03:53	1
4-Bromofluorobenzene (Surr)	95		80 - 120		12/16/25 03:53	1
Dibromofluoromethane (Surr)	96		80 - 120		12/16/25 03:53	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: PA-27d-121125

Lab Sample ID: 580-156495-4

Date Collected: 12/11/25 09:29

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/16/25 07:00	1
Chloromethane	ND		1.0	0.23	ug/L			12/16/25 07:00	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/16/25 07:00	1
Bromomethane	ND		1.0	0.35	ug/L			12/16/25 07:00	1
Chloroethane	ND		1.0	0.34	ug/L			12/16/25 07:00	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/16/25 07:00	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/16/25 07:00	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/16/25 07:00	1
Acetone	ND		25	11	ug/L			12/16/25 07:00	1
Methylene Chloride	ND		15	6.8	ug/L			12/16/25 07:00	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/16/25 07:00	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/16/25 07:00	1
1,1-Dichloroethane	0.40	J	1.0	0.22	ug/L			12/16/25 07:00	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/16/25 07:00	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/16/25 07:00	1
cis-1,2-Dichloroethene	0.73	J	1.0	0.17	ug/L			12/16/25 07:00	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/16/25 07:00	1
Chloroform	ND		1.0	0.11	ug/L			12/16/25 07:00	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/16/25 07:00	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/16/25 07:00	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/16/25 07:00	1
Benzene	ND		1.0	0.47	ug/L			12/16/25 07:00	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/16/25 07:00	1
Trichloroethene	ND		1.0	0.27	ug/L			12/16/25 07:00	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/16/25 07:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/16/25 07:00	1
Dibromomethane	ND		1.0	0.28	ug/L			12/16/25 07:00	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/16/25 07:00	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/16/25 07:00	1
Toluene	ND		1.0	0.21	ug/L			12/16/25 07:00	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/16/25 07:00	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/16/25 07:00	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/16/25 07:00	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/16/25 07:00	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/16/25 07:00	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/16/25 07:00	1
Chlorobenzene	0.43	J	1.0	0.22	ug/L			12/16/25 07:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/16/25 07:00	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/16/25 07:00	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/16/25 07:00	1
o-Xylene	ND		1.0	0.22	ug/L			12/16/25 07:00	1
Styrene	ND		1.0	0.41	ug/L			12/16/25 07:00	1
Bromoform	ND		1.0	0.46	ug/L			12/16/25 07:00	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/16/25 07:00	1
Bromobenzene	ND		1.0	0.18	ug/L			12/16/25 07:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/16/25 07:00	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/16/25 07:00	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/16/25 07:00	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/16/25 07:00	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: PA-27d-121125

Lab Sample ID: 580-156495-4

Date Collected: 12/11/25 09:29

Matrix: Water

Date Received: 12/12/25 10:55

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/16/25 07:00	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/16/25 07:00	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/16/25 07:00	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/16/25 07:00	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/16/25 07:00	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 07:00	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/16/25 07:00	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/16/25 07:00	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 07:00	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/16/25 07:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/16/25 07:00	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/16/25 07:00	1
Naphthalene	ND		3.0	1.4	ug/L			12/16/25 07:00	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/16/25 07:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/16/25 07:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/16/25 07:00	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		12/16/25 07:00	1
4-Bromofluorobenzene (Surr)	96		80 - 120		12/16/25 07:00	1
Dibromofluoromethane (Surr)	96		80 - 120		12/16/25 07:00	1

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/16/25 23:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	4600		75	22	mg/L			12/17/25 13:46	50

QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-510546/10

Matrix: Water

Analysis Batch: 510546

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/16/25 02:20	1
Chloromethane	ND		1.0	0.23	ug/L			12/16/25 02:20	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/16/25 02:20	1
Bromomethane	ND		1.0	0.35	ug/L			12/16/25 02:20	1
Chloroethane	ND		1.0	0.34	ug/L			12/16/25 02:20	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/16/25 02:20	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/16/25 02:20	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/16/25 02:20	1
Acetone	ND		25	11	ug/L			12/16/25 02:20	1
Methylene Chloride	ND		15	6.8	ug/L			12/16/25 02:20	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/16/25 02:20	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/16/25 02:20	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/16/25 02:20	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/16/25 02:20	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/16/25 02:20	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/16/25 02:20	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/16/25 02:20	1
Chloroform	ND		1.0	0.11	ug/L			12/16/25 02:20	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/16/25 02:20	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/16/25 02:20	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/16/25 02:20	1
Benzene	ND		1.0	0.47	ug/L			12/16/25 02:20	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/16/25 02:20	1
Trichloroethene	ND		1.0	0.27	ug/L			12/16/25 02:20	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/16/25 02:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/16/25 02:20	1
Dibromomethane	ND		1.0	0.28	ug/L			12/16/25 02:20	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/16/25 02:20	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/16/25 02:20	1
Toluene	ND		1.0	0.21	ug/L			12/16/25 02:20	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/16/25 02:20	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/16/25 02:20	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/16/25 02:20	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/16/25 02:20	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/16/25 02:20	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/16/25 02:20	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/16/25 02:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/16/25 02:20	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/16/25 02:20	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/16/25 02:20	1
o-Xylene	ND		1.0	0.22	ug/L			12/16/25 02:20	1
Styrene	ND		1.0	0.41	ug/L			12/16/25 02:20	1
Bromoform	ND		1.0	0.46	ug/L			12/16/25 02:20	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/16/25 02:20	1
Bromobenzene	ND		1.0	0.18	ug/L			12/16/25 02:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/16/25 02:20	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/16/25 02:20	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/16/25 02:20	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-510546/10

Matrix: Water

Analysis Batch: 510546

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/16/25 02:20	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/16/25 02:20	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/16/25 02:20	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/16/25 02:20	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/16/25 02:20	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/16/25 02:20	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 02:20	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/16/25 02:20	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/16/25 02:20	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/16/25 02:20	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/16/25 02:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/16/25 02:20	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/16/25 02:20	1
Naphthalene	ND		3.0	1.4	ug/L			12/16/25 02:20	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/16/25 02:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/16/25 02:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/16/25 02:20	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/16/25 02:20	1
4-Bromofluorobenzene (Surr)	95		80 - 120		12/16/25 02:20	1
Dibromofluoromethane (Surr)	95		80 - 120		12/16/25 02:20	1

Lab Sample ID: LCS 580-510546/5

Matrix: Water

Analysis Batch: 510546

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	3.70		ug/L		74	20 - 150
Chloromethane	5.00	5.29		ug/L		106	25 - 150
Vinyl chloride	5.00	5.02		ug/L		100	31 - 150
Bromomethane	5.00	4.85		ug/L		97	36 - 150
Chloroethane	5.00	5.14		ug/L		103	38 - 150
Trichlorofluoromethane	5.00	4.60		ug/L		92	45 - 148
Carbon disulfide	5.00	4.29		ug/L		86	63 - 134
1,1-Dichloroethene	5.00	4.75		ug/L		95	70 - 129
Acetone	25.0	27.2		ug/L		109	44 - 150
Methylene Chloride	5.00	ND		ug/L		112	77 - 125
Methyl tert-butyl ether	5.00	4.51		ug/L		90	72 - 120
trans-1,2-Dichloroethene	5.00	4.33		ug/L		87	75 - 120
1,1-Dichloroethane	5.00	4.72		ug/L		94	80 - 120
2-Butanone (MEK)	25.0	25.0		ug/L		100	65 - 137
2,2-Dichloropropane	5.00	4.04		ug/L		81	66 - 126
cis-1,2-Dichloroethene	5.00	4.51		ug/L		90	76 - 120
Chlorobromomethane	5.00	5.08		ug/L		102	78 - 120
Chloroform	5.00	5.00		ug/L		100	78 - 127
1,1,1-Trichloroethane	5.00	4.55		ug/L		91	74 - 130
Carbon tetrachloride	5.00	4.54		ug/L		91	72 - 129

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510546/5

Matrix: Water

Analysis Batch: 510546

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	5.00	4.97		ug/L		99	74 - 120
Benzene	5.00	4.85		ug/L		97	80 - 122
1,2-Dichloroethane	5.00	4.53		ug/L		91	69 - 126
Trichloroethene	5.00	4.82		ug/L		96	80 - 125
1,2-Dichloropropane	5.00	5.04		ug/L		101	80 - 120
4-Methyl-2-pentanone (MIBK)	25.0	24.3		ug/L		97	59 - 141
Dibromomethane	5.00	4.93		ug/L		99	80 - 120
Dichlorobromomethane	5.00	4.46		ug/L		89	75 - 124
cis-1,3-Dichloropropene	5.00	4.77		ug/L		95	77 - 120
Toluene	5.00	4.58		ug/L		92	80 - 120
trans-1,3-Dichloropropene	5.00	4.97		ug/L		99	76 - 122
1,1,2-Trichloroethane	5.00	5.00		ug/L		100	80 - 121
Tetrachloroethene	5.00	4.67		ug/L		93	76 - 125
1,3-Dichloropropane	5.00	5.16		ug/L		103	79 - 120
Chlorodibromomethane	5.00	4.54		ug/L		91	73 - 125
Ethylene Dibromide	5.00	5.20		ug/L		104	79 - 126
Chlorobenzene	5.00	4.86		ug/L		97	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.53		ug/L		91	79 - 120
Ethylbenzene	5.00	4.92		ug/L		98	80 - 120
m-Xylene & p-Xylene	5.00	4.85		ug/L		97	80 - 120
o-Xylene	5.00	5.09		ug/L		102	80 - 120
Styrene	5.00	4.56		ug/L		91	76 - 122
Bromoform	5.00	4.29		ug/L		86	56 - 139
Isopropylbenzene	5.00	5.44		ug/L		109	80 - 123
Bromobenzene	5.00	4.79		ug/L		96	80 - 120
1,1,2,2-Tetrachloroethane	5.00	5.00		ug/L		100	74 - 124
1,2,3-Trichloropropane	5.00	5.17		ug/L		103	76 - 124
N-Propylbenzene	5.00	5.19		ug/L		104	80 - 122
2-Chlorotoluene	5.00	5.02		ug/L		100	80 - 120
4-Chlorotoluene	5.00	4.91		ug/L		98	73 - 129
tert-Butylbenzene	5.00	4.91		ug/L		98	75 - 123
1,2,4-Trimethylbenzene	5.00	4.98		ug/L		100	80 - 120
sec-Butylbenzene	5.00	4.88		ug/L		98	78 - 122
4-Isopropyltoluene	5.00	4.65		ug/L		93	77 - 126
1,3-Dichlorobenzene	5.00	5.14		ug/L		103	77 - 127
1,4-Dichlorobenzene	5.00	5.10		ug/L		102	80 - 120
n-Butylbenzene	5.00	4.45		ug/L		89	57 - 133
1,2-Dichlorobenzene	5.00	5.05		ug/L		101	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.18		ug/L		84	65 - 133
1,2,4-Trichlorobenzene	5.00	4.49		ug/L		90	61 - 148
Hexachlorobutadiene	5.00	4.60		ug/L		92	74 - 131
Naphthalene	5.00	4.40		ug/L		88	63 - 150
1,2,3-Trichlorobenzene	5.00	4.51		ug/L		90	65 - 150
1,3,5-Trimethylbenzene	5.00	4.84		ug/L		97	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510546/5

Matrix: Water

Analysis Batch: 510546

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Lab Sample ID: LCSD 580-510546/6

Matrix: Water

Analysis Batch: 510546

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	3.70		ug/L		74	20 - 150	0	33
Chloromethane	5.00	5.57		ug/L		111	25 - 150	5	26
Vinyl chloride	5.00	5.30		ug/L		106	31 - 150	5	26
Bromomethane	5.00	5.02		ug/L		100	36 - 150	3	33
Chloroethane	5.00	5.48		ug/L		110	38 - 150	6	28
Trichlorofluoromethane	5.00	4.30		ug/L		86	45 - 148	7	35
Carbon disulfide	5.00	4.51		ug/L		90	63 - 134	5	24
1,1-Dichloroethene	5.00	4.83		ug/L		97	70 - 129	2	23
Acetone	25.0	31.3		ug/L		125	44 - 150	14	33
Methylene Chloride	5.00	ND		ug/L		110	77 - 125	1	18
Methyl tert-butyl ether	5.00	4.55		ug/L		91	72 - 120	1	18
trans-1,2-Dichloroethene	5.00	4.53		ug/L		91	75 - 120	4	21
1,1-Dichloroethane	5.00	4.89		ug/L		98	80 - 120	4	15
2-Butanone (MEK)	25.0	27.0		ug/L		108	65 - 137	8	34
2,2-Dichloropropane	5.00	3.99		ug/L		80	66 - 126	1	22
cis-1,2-Dichloroethene	5.00	4.38		ug/L		88	76 - 120	3	20
Chlorobromomethane	5.00	4.92		ug/L		98	78 - 120	3	13
Chloroform	5.00	4.95		ug/L		99	78 - 127	1	14
1,1,1-Trichloroethane	5.00	4.55		ug/L		91	74 - 130	0	19
Carbon tetrachloride	5.00	4.44		ug/L		89	72 - 129	2	19
1,1-Dichloropropene	5.00	4.71		ug/L		94	74 - 120	5	14
Benzene	5.00	4.82		ug/L		96	80 - 122	1	14
1,2-Dichloroethane	5.00	4.63		ug/L		93	69 - 126	2	11
Trichloroethene	5.00	4.70		ug/L		94	80 - 125	3	13
1,2-Dichloropropane	5.00	5.16		ug/L		103	80 - 120	2	14
4-Methyl-2-pentanone (MIBK)	25.0	24.2		ug/L		97	59 - 141	0	22
Dibromomethane	5.00	4.95		ug/L		99	80 - 120	1	11
Dichlorobromomethane	5.00	4.47		ug/L		89	75 - 124	0	13
cis-1,3-Dichloropropene	5.00	4.81		ug/L		96	77 - 120	1	35
Toluene	5.00	4.52		ug/L		90	80 - 120	1	13
trans-1,3-Dichloropropene	5.00	5.11		ug/L		102	76 - 122	3	20
1,1,2-Trichloroethane	5.00	4.88		ug/L		98	80 - 121	3	14
Tetrachloroethene	5.00	4.60		ug/L		92	76 - 125	1	13
1,3-Dichloropropane	5.00	5.09		ug/L		102	79 - 120	1	19
Chlorodibromomethane	5.00	4.54		ug/L		91	73 - 125	0	13
Ethylene Dibromide	5.00	5.26		ug/L		105	79 - 126	1	12
Chlorobenzene	5.00	4.92		ug/L		98	80 - 120	1	10
1,1,1,2-Tetrachloroethane	5.00	4.49		ug/L		90	79 - 120	1	16
Ethylbenzene	5.00	4.91		ug/L		98	80 - 120	0	14
m-Xylene & p-Xylene	5.00	4.78		ug/L		96	80 - 120	1	14

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-510546/6

Matrix: Water

Analysis Batch: 510546

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
o-Xylene	5.00	4.95		ug/L		99	80 - 120	3	16
Styrene	5.00	4.56		ug/L		91	76 - 122	0	16
Bromoform	5.00	4.26		ug/L		85	56 - 139	1	21
Isopropylbenzene	5.00	5.48		ug/L		110	80 - 123	1	19
Bromobenzene	5.00	4.75		ug/L		95	80 - 120	1	24
1,1,2,2-Tetrachloroethane	5.00	4.94		ug/L		99	74 - 124	1	25
1,2,3-Trichloropropane	5.00	5.23		ug/L		105	76 - 124	1	26
N-Propylbenzene	5.00	5.09		ug/L		102	80 - 122	2	22
2-Chlorotoluene	5.00	4.97		ug/L		99	80 - 120	1	20
4-Chlorotoluene	5.00	4.79		ug/L		96	73 - 129	3	29
tert-Butylbenzene	5.00	4.80		ug/L		96	75 - 123	2	21
1,2,4-Trimethylbenzene	5.00	4.83		ug/L		97	80 - 120	3	16
sec-Butylbenzene	5.00	4.81		ug/L		96	78 - 122	1	15
4-Isopropyltoluene	5.00	4.59		ug/L		92	77 - 126	1	20
1,3-Dichlorobenzene	5.00	5.17		ug/L		103	77 - 127	1	35
1,4-Dichlorobenzene	5.00	4.99		ug/L		100	80 - 120	2	17
n-Butylbenzene	5.00	4.43		ug/L		89	57 - 133	1	14
1,2-Dichlorobenzene	5.00	4.96		ug/L		99	80 - 120	2	15
1,2-Dibromo-3-Chloropropane	5.00	4.23		ug/L		85	65 - 133	1	25
1,2,4-Trichlorobenzene	5.00	4.22		ug/L		84	61 - 148	6	27
Hexachlorobutadiene	5.00	4.49		ug/L		90	74 - 131	2	22
Naphthalene	5.00	4.23		ug/L		85	63 - 150	4	33
1,2,3-Trichlorobenzene	5.00	4.37		ug/L		87	65 - 150	3	33
1,3,5-Trimethylbenzene	5.00	4.77		ug/L		95	80 - 122	1	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	102		80 - 120
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: MB 580-510479/1-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 510479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-BHC	ND		0.018	0.0040	ug/L		12/15/25 09:44	12/17/25 17:02	1
beta-BHC	ND		0.021	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1
Aldrin	ND		0.024	0.0070	ug/L		12/15/25 09:44	12/17/25 17:02	1
delta-BHC	ND		0.015	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1
cis-Chlordane	ND		0.027	0.0080	ug/L		12/15/25 09:44	12/17/25 17:02	1
Endosulfan I	ND		0.020	0.0030	ug/L		12/15/25 09:44	12/17/25 17:02	1
4,4'-DDE	ND		0.010	0.0030	ug/L		12/15/25 09:44	12/17/25 17:02	1
Dieldrin	ND		0.018	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1
Endrin	ND		0.012	0.0030	ug/L		12/15/25 09:44	12/17/25 17:02	1
4,4'-DDD	ND		0.015	0.0060	ug/L		12/15/25 09:44	12/17/25 17:02	1
Endosulfan II	ND		0.024	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: MB 580-510479/1-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 510479

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDT	0.0118	J	0.020	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1
gamma-BHC (Lindane)	ND		0.020	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1
Endrin aldehyde	ND		0.060	0.034	ug/L		12/15/25 09:44	12/17/25 17:02	1
trans-Chlordane	ND		0.020	0.0030	ug/L		12/15/25 09:44	12/17/25 17:02	1
Endosulfan sulfate	ND		0.020	0.0030	ug/L		12/15/25 09:44	12/17/25 17:02	1
Heptachlor	ND		0.015	0.0040	ug/L		12/15/25 09:44	12/17/25 17:02	1
Heptachlor epoxide	ND		0.020	0.0030	ug/L		12/15/25 09:44	12/17/25 17:02	1
Endrin ketone	ND		0.020	0.0070	ug/L		12/15/25 09:44	12/17/25 17:02	1
Methoxychlor	ND		0.10	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1
Chlordane (technical)	ND		0.20	0.062	ug/L		12/15/25 09:44	12/17/25 17:02	1
Toxaphene	ND		2.0	0.46	ug/L		12/15/25 09:44	12/17/25 17:02	1
2,4'-DDD	ND		0.030	0.0090	ug/L		12/15/25 09:44	12/17/25 17:02	1
2,4'-DDE	ND		0.030	0.0050	ug/L		12/15/25 09:44	12/17/25 17:02	1
2,4'-DDT	ND		0.030	0.0090	ug/L		12/15/25 09:44	12/17/25 17:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	84		50 - 120	12/15/25 09:44	12/17/25 17:02	1
Tetrachloro-m-xylene	80		42 - 120	12/15/25 09:44	12/17/25 17:02	1

Lab Sample ID: LCS 580-510479/2-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
alpha-BHC	0.200	0.143		ug/L		71	54 - 120
beta-BHC	0.200	0.165		ug/L		83	54 - 120
Aldrin	0.200	0.164		ug/L		82	25 - 124
delta-BHC	0.200	0.0355	*-	ug/L		18	51 - 120
cis-Chlordane	0.200	0.161		ug/L		81	48 - 120
Endosulfan I	0.200	0.184		ug/L		92	45 - 123
4,4'-DDE	0.200	0.165		ug/L		82	47 - 120
Dieldrin	0.200	0.172		ug/L		86	48 - 122
Endrin	0.200	0.181		ug/L		91	48 - 120
4,4'-DDD	0.200	0.155		ug/L		78	53 - 120
Endosulfan II	0.200	0.166		ug/L		83	24 - 120
4,4'-DDT	0.200	0.153		ug/L		76	39 - 122
gamma-BHC (Lindane)	0.200	0.152		ug/L		76	55 - 120
Endrin aldehyde	0.200	0.195		ug/L		97	26 - 139
trans-Chlordane	0.200	0.167		ug/L		84	48 - 120
Endosulfan sulfate	0.200	0.132		ug/L		66	56 - 120
Heptachlor	0.200	0.169		ug/L		85	35 - 120
Heptachlor epoxide	0.200	0.164		ug/L		82	49 - 120
Endrin ketone	0.200	0.165		ug/L		83	51 - 120
Methoxychlor	0.200	0.177		ug/L		89	44 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl	79		50 - 120
Tetrachloro-m-xylene	79		42 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8081B - Organochlorine Pesticides (GC)

Lab Sample ID: LCS 580-510479/4-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toxaphene	5.00	4.47		ug/L		89	50 - 150
Surrogate	%Recovery	LCS Qualifier	Limits				
DCB Decachlorobiphenyl	68		50 - 120				
Tetrachloro-m-xylene	73		42 - 120				

Lab Sample ID: LCS 580-510479/6-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlordane (technical)	1.00	0.686		ug/L		69	39 - 120
Surrogate	%Recovery	LCS Qualifier	Limits				
DCB Decachlorobiphenyl	80		50 - 120				
Tetrachloro-m-xylene	74		42 - 120				

Lab Sample ID: LCS 580-510479/8-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4'-DDD	0.200	0.152		ug/L		76	50 - 120
2,4'-DDE	0.200	0.157		ug/L		78	50 - 120
2,4'-DDT	0.200	0.158		ug/L		79	50 - 120
Surrogate	%Recovery	LCS Qualifier	Limits				
DCB Decachlorobiphenyl	76		50 - 120				
Tetrachloro-m-xylene	72		42 - 120				

Lab Sample ID: LCSD 580-510479/3-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
alpha-BHC	0.200	0.141		ug/L		70	54 - 120	1	23
beta-BHC	0.200	0.162		ug/L		81	54 - 120	2	19
Aldrin	0.200	0.163		ug/L		82	25 - 124	1	35
delta-BHC	0.200	0.0354	*-	ug/L		18	51 - 120	0	23
cis-Chlordane	0.200	0.161		ug/L		81	48 - 120	0	27
Endosulfan I	0.200	0.182		ug/L		91	45 - 123	1	26
4,4'-DDE	0.200	0.167		ug/L		83	47 - 120	1	25
Dieldrin	0.200	0.174		ug/L		87	48 - 122	1	23
Endrin	0.200	0.183		ug/L		91	48 - 120	1	24
4,4'-DDD	0.200	0.157		ug/L		78	53 - 120	1	19
Endosulfan II	0.200	0.170		ug/L		85	24 - 120	2	26
4,4'-DDT	0.200	0.153		ug/L		77	39 - 122	1	20
gamma-BHC (Lindane)	0.200	0.151		ug/L		75	55 - 120	1	21

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: LCSD 580-510479/3-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Endrin aldehyde	0.200	0.200		ug/L		100	26 - 139	3	35
trans-Chlordane	0.200	0.167		ug/L		84	48 - 120	0	28
Endosulfan sulfate	0.200	0.135		ug/L		68	56 - 120	3	21
Heptachlor	0.200	0.168		ug/L		84	35 - 120	1	26
Heptachlor epoxide	0.200	0.170		ug/L		85	49 - 120	3	24
Endrin ketone	0.200	0.166		ug/L		83	51 - 120	0	25
Methoxychlor	0.200	0.187		ug/L		93	44 - 129	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	78		50 - 120
Tetrachloro-m-xylene	77		42 - 120

Lab Sample ID: LCSD 580-510479/5-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toxaphene	5.00	4.95		ug/L		99	50 - 150	10	15

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	72		50 - 120
Tetrachloro-m-xylene	78		42 - 120

Lab Sample ID: LCSD 580-510479/7-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlordane (technical)	1.00	0.672		ug/L		67	39 - 120	2	28

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	78		50 - 120
Tetrachloro-m-xylene	74		42 - 120

Lab Sample ID: LCSD 580-510479/9-A

Matrix: Water

Analysis Batch: 510754

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 510479

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4'-DDD	0.200	0.165		ug/L		83	50 - 120	9	24
2,4'-DDE	0.200	0.170		ug/L		85	50 - 120	8	27
2,4'-DDT	0.200	0.173		ug/L		86	50 - 120	9	26

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl	77		50 - 120
Tetrachloro-m-xylene	80		42 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 570-670917/7
Matrix: Water
Analysis Batch: 670917

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/16/25 14:07	1

Lab Sample ID: LCS 570-670917/8
Matrix: Water
Analysis Batch: 670917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	24.5		ug/L		98	85 - 115

Lab Sample ID: LCSD 570-670917/9
Matrix: Water
Analysis Batch: 670917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	24.1		ug/L		96	85 - 115	2	15

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-510682/4
Matrix: Water
Analysis Batch: 510682

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/15/25 16:59	1

Lab Sample ID: LCS 580-510682/5
Matrix: Water
Analysis Batch: 510682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.4		mg/L		101	90 - 110

Lab Sample ID: LCSD 580-510682/6
Matrix: Water
Analysis Batch: 510682

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	50.3		mg/L		101	90 - 110	0	15

Lab Sample ID: MB 580-510774/4
Matrix: Water
Analysis Batch: 510774

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/17/25 11:45	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 580-510774/5

Matrix: Water

Analysis Batch: 510774

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.4		mg/L		103	90 - 110

Lab Sample ID: LCSD 580-510774/6

Matrix: Water

Analysis Batch: 510774

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	50.0	51.3		mg/L		103	90 - 110	0	15

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

GC/MS VOA

Analysis Batch: 510546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156495-2	RB-01-121125	Total/NA	Water	8260D	
580-156495-3	TB-01-121125	Total/NA	Water	8260D	
580-156495-4	PA-27d-121125	Total/NA	Water	8260D	
MB 580-510546/10	Method Blank	Total/NA	Water	8260D	
LCS 580-510546/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510546/6	Lab Control Sample Dup	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 510479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156495-1	FILTB-01-121025	Dissolved	Water	3510C	
580-156495-2	RB-01-121125	Total/NA	Water	3510C	
MB 580-510479/1-A	Method Blank	Total/NA	Water	3510C	
LCS 580-510479/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-510479/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-510479/6-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 580-510479/8-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 580-510479/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-510479/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-510479/7-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 580-510479/9-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 510754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156495-1	FILTB-01-121025	Dissolved	Water	8081B	510479
580-156495-2	RB-01-121125	Total/NA	Water	8081B	510479
MB 580-510479/1-A	Method Blank	Total/NA	Water	8081B	510479
LCS 580-510479/2-A	Lab Control Sample	Total/NA	Water	8081B	510479
LCS 580-510479/4-A	Lab Control Sample	Total/NA	Water	8081B	510479
LCS 580-510479/6-A	Lab Control Sample	Total/NA	Water	8081B	510479
LCS 580-510479/8-A	Lab Control Sample	Total/NA	Water	8081B	510479
LCSD 580-510479/3-A	Lab Control Sample Dup	Total/NA	Water	8081B	510479
LCSD 580-510479/5-A	Lab Control Sample Dup	Total/NA	Water	8081B	510479
LCSD 580-510479/7-A	Lab Control Sample Dup	Total/NA	Water	8081B	510479
LCSD 580-510479/9-A	Lab Control Sample Dup	Total/NA	Water	8081B	510479

HPLC/IC

Analysis Batch: 670917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156495-2	RB-01-121125	Total/NA	Water	314.0	
580-156495-4	PA-27d-121125	Total/NA	Water	314.0	
MB 570-670917/7	Method Blank	Total/NA	Water	314.0	
LCS 570-670917/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-670917/9	Lab Control Sample Dup	Total/NA	Water	314.0	

General Chemistry

Analysis Batch: 510682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156495-2	RB-01-121125	Total/NA	Water	300.0	

Eurofins Seattle

QC Association Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

General Chemistry (Continued)

Analysis Batch: 510682 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 580-510682/4	Method Blank	Total/NA	Water	300.0	
LCS 580-510682/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-510682/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 510774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156495-4	PA-27d-121125	Total/NA	Water	300.0	
MB 580-510774/4	Method Blank	Total/NA	Water	300.0	
LCS 580-510774/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-510774/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Client Sample ID: FILTB-01-121025

Date Collected: 12/10/25 06:10

Date Received: 12/12/25 10:55

Lab Sample ID: 580-156495-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3510C			510479	LW	EET SEA	12/15/25 09:44
Dissolved	Analysis	8081B		1	510754	K1K	EET SEA	12/17/25 20:00

Client Sample ID: RB-01-121125

Date Collected: 12/11/25 05:45

Date Received: 12/12/25 10:55

Lab Sample ID: 580-156495-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510546	AA	EET SEA	12/16/25 03:30
Total/NA	Prep	3510C			510479	LW	EET SEA	12/15/25 09:44
Total/NA	Analysis	8081B		1	510754	K1K	EET SEA	12/17/25 20:19
Total/NA	Analysis	314.0		1	670917	M5Z3	EET CAL 4	12/16/25 22:55
Total/NA	Analysis	300.0		1	510682	MLT	EET SEA	12/15/25 23:39

Client Sample ID: TB-01-121125

Date Collected: 12/11/25 05:30

Date Received: 12/12/25 10:55

Lab Sample ID: 580-156495-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510546	AA	EET SEA	12/16/25 03:53

Client Sample ID: PA-27d-121125

Date Collected: 12/11/25 09:29

Date Received: 12/12/25 10:55

Lab Sample ID: 580-156495-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510546	AA	EET SEA	12/16/25 07:00
Total/NA	Analysis	314.0		1	670917	M5Z3	EET CAL 4	12/16/25 23:29
Total/NA	Analysis	300.0		50	510774	MLT	EET SEA	12/17/25 13:46

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4167	07-07-26

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4175	02-02-26

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Sample Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156495-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-156495-1	FILTB-01-121025	Water	12/10/25 06:10	12/12/25 10:55	Oregon
580-156495-2	RB-01-121125	Water	12/11/25 05:45	12/12/25 10:55	Oregon
580-156495-3	TB-01-121125	Water	12/11/25 05:30	12/12/25 10:55	Oregon
580-156495-4	PA-27d-121125	Water	12/11/25 09:29	12/12/25 10:55	Oregon

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**Environment Testing
TestAmerica**

12/18/2025

Chain of Custody Record

Phone (253) 922-2310 Fax (253) 922-5047

[illegible]

[illegible]

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156495-1

Login Number: 156495

List Source: Eurofins Seattle

List Number: 1

Creator: O'Connell, Jason I

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156495-1

Login Number: 156495

List Number: 2

Creator: Szymborski, Jessica

List Source: Eurofins Calscience

List Creation: 12/15/25 04:18 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1/1.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

PREPARED FOR

Attn: Avery Soplata
ERM-West
1050 SW 6th Avenue
Suite 1650
Portland, Oregon 97204
Generated 12/26/2025 12:08:59 PM

JOB DESCRIPTION

Arkema - Dec 2025 Groundwater Event

JOB NUMBER

580-156557-1

Eurofins Seattle

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northwest, LLC Project Manager.

Authorization



Authorized for release by
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Table of Contents

Cover Page	1
Table of Contents	3
Case Narrative	4
Definitions	6
Client Sample Results	7
QC Sample Results	39
QC Association	57
Chronicle	60
Certification Summary	64
Sample Summary	65
Chain of Custody	66
Receipt Checklists	72



Case Narrative

Client: ERM-West
Project: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Job ID: 580-156557-1

Eurofins Seattle

Job Narrative 580-156557-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 12/16/2025 12:15 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C.

GC/MS VOA

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-510763 recovered above the upper control limit for Dichlorodifluoromethane, Chloromethane and Chlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: TB-121225 (580-156557-1), PA-03-121225 (580-156557-2), PA-10i-121225 (580-156557-3), PA-04-121225 (580-156557-4), PA-18d-121225 (580-156557-5), RB-02-121225 (580-156557-6), PA-32i-121225 (580-156557-7), PA-31-121225 (580-156557-8), PA-44i-121525 (580-156557-9), PA-08-121525 (580-156557-10), PA-25d-121525 (580-156557-11), PA-15i-121525 (580-156557-12), PA-09-121525 (580-156557-14), MWA-56d-121525 (580-156557-15), MWA-58d-121525 (580-156557-16) and (CCVIS 580-510763/3).

Method 8260D: The continuing calibration verification (CCV) associated with batch 580-510763 recovered outside acceptance criteria, low biased, for 2,2-Dichloropropane, Carbon tetrachloride, Tetrachloroethene and n-Butylbenzene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: Surrogate 1,2-Dichloroethane-d4 (Surr) and Dibromofluoromethane (Surr) recovery for the following sample was outside the upper control limit: MWA-56d-121525 (580-156557-15). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: Surrogate recovery for the following samples were outside the upper control limit: PA-26d-121525 (580-156557-13), PA-09-121525 (580-156557-14) and MWA-58d-121525 (580-156557-16). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: Surrogate recovery for the following sample was outside the upper control limit: MWA-56d-121525 (580-156557-15). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MWA-56d-121525 (580-156557-15). Elevated reporting limits (RLs) are provided.

Method 8260D: 1,2-Dichloroethane-d4 (Surr) was outside of control limits high in the following sample: MWA-56d-121525 (580-156557-15). 1,2-Dichloroethane-d4 (Surr) is not chemically associated with the target analytes. Therefore sample was not reanalyzed.

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 580-510763 recovered above the upper control limit for Dichlorodifluoromethane, Chloromethane and Chlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are: TB-121225 (580-156557-1), PA-03-121225 (580-156557-2), PA-10i-121225 (580-156557-3), PA-04-121225 (580-156557-4), PA-18d-121225 (580-156557-5), RB-02-121225 (580-156557-6), PA-32i-121225 (580-156557-7), PA-31-121225 (580-156557-8), PA-44i-121525 (580-156557-9), PA-08-121525 (580-156557-10), PA-25d-121525 (580-156557-11), PA-15i-121525 (580-156557-12), PA-09-121525 (580-156557-14), MWA-56d-121525 (580-156557-15), MWA-58d-121525 (580-156557-16) and (CCVIS 580-510763/3).

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Case Narrative

Client: ERM-West
Project: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Job ID: 580-156557-1 (Continued)

Eurofins Seattle

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 580-510763 recovered outside acceptance criteria, low biased, for 2,2-Dichloropropane, Carbon tetrachloride, Tetrachloroethene and n-Butylbenzene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D_LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 580-510763 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D_LL: The method blank for analytical batch 580-510763 contained n-Butylbenzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260D_LL: Surrogate recovery for the following samples were outside the upper control limit: PA-26d-121525 (580-156557-13), PA-09-121525 (580-156557-14) and MWA-58d-121525 (580-156557-16). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC

Method 314.0: The following samples were diluted due to the nature of the sample matrix: PA-03-121225 (580-156557-2), PA-10i-121225 (580-156557-3), PA-04-121225 (580-156557-4), PA-18d-121225 (580-156557-5), PA-32i-121225 (580-156557-7), PA-31-121225 (580-156557-8), PA-44i-121225 (580-156557-9), PA-08-121525 (580-156557-10), PA-15i-121525 (580-156557-12) and PA-26d-121525 (580-156557-13). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Seattle

Definitions/Glossary

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: TB-121225

Lab Sample ID: 580-156557-1

Date Collected: 12/12/25 06:45

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 00:05	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 00:05	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 00:05	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 00:05	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 00:05	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 00:05	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 00:05	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 00:05	1
Acetone	ND		10	3.1	ug/L			12/18/25 00:05	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 00:05	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 00:05	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 00:05	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 00:05	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 00:05	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 00:05	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 00:05	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 00:05	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 00:05	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 00:05	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 00:05	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 00:05	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 00:05	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 00:05	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 00:05	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 00:05	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 00:05	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 00:05	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 00:05	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 00:05	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 00:05	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 00:05	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 00:05	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 00:05	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 00:05	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 00:05	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 00:05	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 00:05	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 00:05	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 00:05	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 00:05	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 00:05	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 00:05	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 00:05	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 00:05	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 00:05	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 00:05	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 00:05	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 00:05	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 00:05	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: TB-121225

Lab Sample ID: 580-156557-1

Date Collected: 12/12/25 06:45

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 00:05	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 00:05	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 00:05	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 00:05	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/18/25 00:05	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 00:05	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 00:05	1
n-Butylbenzene	0.43	J B	1.0	0.35	ug/L			12/18/25 00:05	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 00:05	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 00:05	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 00:05	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 00:05	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 00:05	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 00:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 00:05	1
Dibromofluoromethane (Surr)	112		80 - 120		12/18/25 00:05	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/18/25 00:05	1
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		12/18/25 00:05	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/18/25 21:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 21:20	1
Dibromofluoromethane (Surr)	95		80 - 120		12/18/25 21:20	1
4-Bromofluorobenzene (Surr)	93		80 - 120		12/18/25 21:20	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		12/18/25 21:20	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-03-121225

Lab Sample ID: 580-156557-2

Date Collected: 12/12/25 07:34

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 00:46	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 00:46	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 00:46	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 00:46	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 00:46	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 00:46	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 00:46	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 00:46	1
Acetone	ND		10	3.1	ug/L			12/18/25 00:46	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 00:46	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 00:46	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 00:46	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 00:46	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 00:46	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 00:46	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 00:46	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 00:46	1
Chloroform	0.26		0.20	0.030	ug/L			12/18/25 00:46	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 00:46	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 00:46	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 00:46	1
Benzene	0.051	J	0.20	0.030	ug/L			12/18/25 00:46	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 00:46	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 00:46	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 00:46	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 00:46	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 00:46	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 00:46	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 00:46	1
Toluene	0.15	J	0.20	0.050	ug/L			12/18/25 00:46	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 00:46	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 00:46	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 00:46	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 00:46	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 00:46	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 00:46	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 00:46	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 00:46	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 00:46	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 00:46	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 00:46	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 00:46	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 00:46	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 00:46	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 00:46	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 00:46	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 00:46	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 00:46	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 00:46	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-03-121225

Lab Sample ID: 580-156557-2

Date Collected: 12/12/25 07:34

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 00:46	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 00:46	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 00:46	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 00:46	1
4-Isopropyltoluene	0.29	J	0.50	0.25	ug/L			12/18/25 00:46	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 00:46	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 00:46	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 00:46	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 00:46	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 00:46	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 00:46	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 00:46	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 00:46	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 00:46	1
Dibromofluoromethane (Surr)	116		80 - 120		12/18/25 00:46	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/18/25 00:46	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		12/18/25 00:46	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/18/25 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 18:14	1
Dibromofluoromethane (Surr)	95		80 - 120		12/18/25 18:14	1
4-Bromofluorobenzene (Surr)	93		80 - 120		12/18/25 18:14	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/18/25 18:14	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/19/25 18:06	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	4.4		1.5	0.43	mg/L			12/19/25 02:55	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-10i-121225

Lab Sample ID: 580-156557-3

Date Collected: 12/12/25 08:33

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 01:07	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 01:07	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 01:07	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 01:07	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 01:07	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 01:07	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 01:07	1
1,1-Dichloroethene	0.084	J	0.20	0.035	ug/L			12/18/25 01:07	1
Acetone	ND		10	3.1	ug/L			12/18/25 01:07	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 01:07	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 01:07	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 01:07	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 01:07	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 01:07	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 01:07	1
cis-1,2-Dichloroethene	0.16	J	0.20	0.055	ug/L			12/18/25 01:07	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 01:07	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 01:07	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 01:07	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 01:07	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 01:07	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 01:07	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 01:07	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 01:07	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 01:07	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 01:07	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 01:07	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 01:07	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 01:07	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 01:07	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 01:07	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 01:07	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 01:07	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 01:07	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 01:07	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 01:07	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 01:07	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 01:07	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 01:07	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 01:07	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 01:07	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 01:07	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 01:07	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 01:07	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 01:07	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 01:07	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 01:07	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 01:07	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 01:07	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-10i-121225

Lab Sample ID: 580-156557-3

Date Collected: 12/12/25 08:33

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 01:07	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 01:07	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 01:07	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 01:07	1
4-Isopropyltoluene	0.27	J	0.50	0.25	ug/L			12/18/25 01:07	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 01:07	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 01:07	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 01:07	1
1,2-Dichlorobenzene	0.15	J	0.30	0.038	ug/L			12/18/25 01:07	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 01:07	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 01:07	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 01:07	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 01:07	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		80 - 120		12/18/25 01:07	1
Dibromofluoromethane (Surr)	114		80 - 120		12/18/25 01:07	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/18/25 01:07	1
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		12/18/25 01:07	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/18/25 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 18:37	1
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 18:37	1
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 18:37	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/18/25 18:37	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/19/25 18:40	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	12		1.5	0.43	mg/L			12/19/25 03:08	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-04-121225

Lab Sample ID: 580-156557-4

Date Collected: 12/12/25 09:10

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 01:28	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 01:28	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 01:28	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 01:28	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 01:28	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 01:28	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 01:28	1
1,1-Dichloroethene	0.17	J	0.20	0.035	ug/L			12/18/25 01:28	1
Acetone	ND		10	3.1	ug/L			12/18/25 01:28	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 01:28	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 01:28	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 01:28	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 01:28	1
1,1-Dichloroethane	0.22		0.20	0.064	ug/L			12/18/25 01:28	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 01:28	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 01:28	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 01:28	1
Chloroform	0.038	J	0.20	0.030	ug/L			12/18/25 01:28	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 01:28	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 01:28	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 01:28	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 01:28	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 01:28	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 01:28	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 01:28	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 01:28	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 01:28	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 01:28	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 01:28	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 01:28	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 01:28	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 01:28	1
Tetrachloroethene	0.15	J	0.50	0.084	ug/L			12/18/25 01:28	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 01:28	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 01:28	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 01:28	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 01:28	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 01:28	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 01:28	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 01:28	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 01:28	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 01:28	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 01:28	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 01:28	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 01:28	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 01:28	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 01:28	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 01:28	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 01:28	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-04-121225

Lab Sample ID: 580-156557-4

Date Collected: 12/12/25 09:10

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 01:28	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 01:28	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 01:28	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 01:28	1
4-Isopropyltoluene	0.27	J	0.50	0.25	ug/L			12/18/25 01:28	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 01:28	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 01:28	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 01:28	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 01:28	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 01:28	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 01:28	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 01:28	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 01:28	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/18/25 01:28	1
Dibromofluoromethane (Surr)	118		80 - 120		12/18/25 01:28	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/18/25 01:28	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		12/18/25 01:28	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/18/25 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 19:01	1
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 19:01	1
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 19:01	1
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		12/18/25 19:01	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/19/25 19:13	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	5.8		1.5	0.43	mg/L			12/19/25 03:21	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-18d-121225

Lab Sample ID: 580-156557-5

Date Collected: 12/12/25 09:54

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/18/25 03:11	1
Chloromethane	ND		1.0	0.23	ug/L			12/18/25 03:11	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/18/25 03:11	1
Bromomethane	ND		1.0	0.35	ug/L			12/18/25 03:11	1
Chloroethane	ND		1.0	0.34	ug/L			12/18/25 03:11	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/18/25 03:11	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/18/25 03:11	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/18/25 03:11	1
Acetone	ND		25	11	ug/L			12/18/25 03:11	1
Methylene Chloride	ND		15	6.8	ug/L			12/18/25 03:11	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/18/25 03:11	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/18/25 03:11	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/18/25 03:11	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/18/25 03:11	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/18/25 03:11	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/18/25 03:11	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/18/25 03:11	1
Chloroform	ND		1.0	0.11	ug/L			12/18/25 03:11	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/18/25 03:11	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/18/25 03:11	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/18/25 03:11	1
Benzene	ND		1.0	0.47	ug/L			12/18/25 03:11	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/18/25 03:11	1
Trichloroethene	ND		1.0	0.27	ug/L			12/18/25 03:11	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/18/25 03:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/18/25 03:11	1
Dibromomethane	ND		1.0	0.28	ug/L			12/18/25 03:11	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/18/25 03:11	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/18/25 03:11	1
Toluene	ND		1.0	0.21	ug/L			12/18/25 03:11	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/18/25 03:11	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/18/25 03:11	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/18/25 03:11	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/18/25 03:11	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/18/25 03:11	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/18/25 03:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/18/25 03:11	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/18/25 03:11	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/18/25 03:11	1
o-Xylene	ND		1.0	0.22	ug/L			12/18/25 03:11	1
Styrene	ND		1.0	0.41	ug/L			12/18/25 03:11	1
Bromoform	ND		1.0	0.46	ug/L			12/18/25 03:11	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/18/25 03:11	1
Bromobenzene	ND		1.0	0.18	ug/L			12/18/25 03:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/18/25 03:11	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/18/25 03:11	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/18/25 03:11	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/18/25 03:11	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/18/25 03:11	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-18d-121225

Lab Sample ID: 580-156557-5

Date Collected: 12/12/25 09:54

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/18/25 03:11	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/18/25 03:11	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/18/25 03:11	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/18/25 03:11	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/18/25 03:11	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/18/25 03:11	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/18/25 03:11	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/18/25 03:11	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/18/25 03:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/18/25 03:11	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/18/25 03:11	1
Naphthalene	ND		3.0	1.4	ug/L			12/18/25 03:11	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/18/25 03:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/18/25 03:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 03:11	1
1,2-Dichloroethane-d4 (Surr)	113		80 - 120		12/18/25 03:11	1
4-Bromofluorobenzene (Surr)	103		80 - 120		12/18/25 03:11	1
Dibromofluoromethane (Surr)	119		80 - 120		12/18/25 03:11	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.22	ug/L			12/18/25 19:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 19:24	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/18/25 19:24	1
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 19:24	1
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 19:24	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/19/25 19:47	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	60		1.5	0.43	mg/L			12/19/25 03:34	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: RB-02-121225

Lab Sample ID: 580-156557-6

Date Collected: 12/12/25 10:15

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 01:48	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 01:48	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 01:48	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 01:48	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 01:48	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 01:48	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 01:48	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 01:48	1
Acetone	ND		10	3.1	ug/L			12/18/25 01:48	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 01:48	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 01:48	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 01:48	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 01:48	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 01:48	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 01:48	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 01:48	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 01:48	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 01:48	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 01:48	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 01:48	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 01:48	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 01:48	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 01:48	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 01:48	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 01:48	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 01:48	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 01:48	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 01:48	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 01:48	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 01:48	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 01:48	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 01:48	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 01:48	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 01:48	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 01:48	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 01:48	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 01:48	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 01:48	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 01:48	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 01:48	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 01:48	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 01:48	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 01:48	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 01:48	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 01:48	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 01:48	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 01:48	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 01:48	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 01:48	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: RB-02-121225

Lab Sample ID: 580-156557-6

Date Collected: 12/12/25 10:15

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 01:48	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 01:48	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 01:48	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 01:48	1
4-Isopropyltoluene	0.28	J	0.50	0.25	ug/L			12/18/25 01:48	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 01:48	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 01:48	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 01:48	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 01:48	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 01:48	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 01:48	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 01:48	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 01:48	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 01:48	1
Dibromofluoromethane (Surr)	117		80 - 120		12/18/25 01:48	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/18/25 01:48	1
1,2-Dichloroethane-d4 (Surr)	109		80 - 120		12/18/25 01:48	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/18/25 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 19:47	1
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 19:47	1
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 19:47	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		12/18/25 19:47	1

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/19/25 20:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	ND		1.5	0.43	mg/L			12/19/25 03:47	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-32i-121225

Lab Sample ID: 580-156557-7

Date Collected: 12/12/25 11:04

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND	F1	0.40	0.13	ug/L			12/18/25 02:09	1
Chloromethane	ND	F1	0.50	0.14	ug/L			12/18/25 02:09	1
Vinyl chloride	ND	F1	0.10	0.040	ug/L			12/18/25 02:09	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 02:09	1
Chloroethane	ND	F1	0.50	0.24	ug/L			12/18/25 02:09	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 02:09	1
Trichlorofluoromethane	ND	F1	0.50	0.12	ug/L			12/18/25 02:09	1
1,1-Dichloroethene	ND	F1	0.20	0.035	ug/L			12/18/25 02:09	1
Acetone	3.6	J	10	3.1	ug/L			12/18/25 02:09	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 02:09	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 02:09	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 02:09	1
trans-1,2-Dichloroethene	ND	F1	0.20	0.033	ug/L			12/18/25 02:09	1
1,1-Dichloroethane	ND	F1	0.20	0.064	ug/L			12/18/25 02:09	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 02:09	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 02:09	1
Chlorobromomethane	ND	F1	0.20	0.050	ug/L			12/18/25 02:09	1
Chloroform	ND	F1	0.20	0.030	ug/L			12/18/25 02:09	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 02:09	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 02:09	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 02:09	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 02:09	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 02:09	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 02:09	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 02:09	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 02:09	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 02:09	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 02:09	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 02:09	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 02:09	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 02:09	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 02:09	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 02:09	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 02:09	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 02:09	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 02:09	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 02:09	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 02:09	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 02:09	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 02:09	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 02:09	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 02:09	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 02:09	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 02:09	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 02:09	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 02:09	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 02:09	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 02:09	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 02:09	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-32i-121225

Lab Sample ID: 580-156557-7

Date Collected: 12/12/25 11:04

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 02:09	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 02:09	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 02:09	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 02:09	1
4-Isopropyltoluene	0.27	J	0.50	0.25	ug/L			12/18/25 02:09	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 02:09	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 02:09	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 02:09	1
1,2-Dichlorobenzene	0.052	J	0.30	0.038	ug/L			12/18/25 02:09	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 02:09	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 02:09	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 02:09	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 02:09	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 02:09	1
Dibromofluoromethane (Surr)	116		80 - 120		12/18/25 02:09	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/18/25 02:09	1
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		12/18/25 02:09	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/18/25 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		12/18/25 20:11	1
Dibromofluoromethane (Surr)	96		80 - 120		12/18/25 20:11	1
4-Bromofluorobenzene (Surr)	94		80 - 120		12/18/25 20:11	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		12/18/25 20:11	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		80	17	ug/L			12/19/25 20:54	40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	4.7		1.5	0.43	mg/L			12/19/25 04:00	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-31-121225

Lab Sample ID: 580-156557-8

Date Collected: 12/12/25 12:02

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 02:30	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 02:30	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 02:30	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 02:30	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 02:30	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 02:30	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 02:30	1
1,1-Dichloroethene	0.38		0.20	0.035	ug/L			12/18/25 02:30	1
Acetone	ND		10	3.1	ug/L			12/18/25 02:30	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 02:30	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 02:30	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 02:30	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 02:30	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 02:30	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 02:30	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 02:30	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 02:30	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 02:30	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 02:30	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 02:30	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 02:30	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 02:30	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 02:30	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 02:30	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 02:30	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 02:30	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 02:30	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 02:30	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 02:30	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 02:30	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 02:30	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 02:30	1
Tetrachloroethene	0.085 J		0.50	0.084	ug/L			12/18/25 02:30	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 02:30	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 02:30	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 02:30	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 02:30	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 02:30	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 02:30	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 02:30	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 02:30	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 02:30	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 02:30	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 02:30	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 02:30	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 02:30	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 02:30	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 02:30	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 02:30	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-31-121225

Lab Sample ID: 580-156557-8

Date Collected: 12/12/25 12:02

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 02:30	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 02:30	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 02:30	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 02:30	1
4-Isopropyltoluene	0.27	J	0.50	0.25	ug/L			12/18/25 02:30	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 02:30	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 02:30	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 02:30	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 02:30	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 02:30	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 02:30	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 02:30	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 02:30	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 02:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 02:30	1
Dibromofluoromethane (Surr)	117		80 - 120		12/18/25 02:30	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/18/25 02:30	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		12/18/25 02:30	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/20/25 04:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/20/25 04:37	1
Dibromofluoromethane (Surr)	118		80 - 120		12/20/25 04:37	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/20/25 04:37	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		12/20/25 04:37	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	4.3	ug/L			12/19/25 23:09	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	2.2		1.5	0.43	mg/L			12/19/25 05:43	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-44i-121525

Lab Sample ID: 580-156557-9

Date Collected: 12/15/25 06:08

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 02:51	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 02:51	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 02:51	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 02:51	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 02:51	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 02:51	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 02:51	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 02:51	1
Acetone	ND		10	3.1	ug/L			12/18/25 02:51	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 02:51	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 02:51	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 02:51	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 02:51	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 02:51	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 02:51	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 02:51	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 02:51	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 02:51	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 02:51	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 02:51	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 02:51	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 02:51	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 02:51	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 02:51	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 02:51	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 02:51	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 02:51	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 02:51	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 02:51	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 02:51	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 02:51	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 02:51	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 02:51	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 02:51	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 02:51	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 02:51	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 02:51	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 02:51	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 02:51	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 02:51	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 02:51	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 02:51	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 02:51	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 02:51	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 02:51	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 02:51	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 02:51	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 02:51	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 02:51	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-44i-121525

Lab Sample ID: 580-156557-9

Date Collected: 12/15/25 06:08

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 02:51	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 02:51	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 02:51	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 02:51	1
4-Isopropyltoluene	0.27	J	0.50	0.25	ug/L			12/18/25 02:51	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 02:51	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 02:51	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 02:51	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 02:51	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 02:51	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 02:51	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 02:51	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 02:51	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 02:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 02:51	1
Dibromofluoromethane (Surr)	116		80 - 120		12/18/25 02:51	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/18/25 02:51	1
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		12/18/25 02:51	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/20/25 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/20/25 04:16	1
Dibromofluoromethane (Surr)	118		80 - 120		12/20/25 04:16	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/20/25 04:16	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		12/20/25 04:16	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	4.3	ug/L			12/19/25 23:43	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	2.5		1.5	0.43	mg/L			12/19/25 05:56	1

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-08-121525

Lab Sample ID: 580-156557-10

Date Collected: 12/15/25 06:53

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 03:32	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 03:32	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 03:32	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 03:32	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 03:32	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 03:32	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 03:32	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 03:32	1
Acetone	ND		10	3.1	ug/L			12/18/25 03:32	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 03:32	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 03:32	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 03:32	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 03:32	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 03:32	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 03:32	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 03:32	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 03:32	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 03:32	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 03:32	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 03:32	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 03:32	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 03:32	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 03:32	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 03:32	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 03:32	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 03:32	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 03:32	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 03:32	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 03:32	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 03:32	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 03:32	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 03:32	1
Tetrachloroethene	0.10	J	0.50	0.084	ug/L			12/18/25 03:32	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 03:32	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 03:32	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 03:32	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 03:32	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 03:32	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 03:32	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 03:32	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 03:32	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 03:32	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 03:32	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 03:32	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 03:32	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 03:32	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 03:32	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 03:32	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 03:32	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-08-121525

Lab Sample ID: 580-156557-10

Date Collected: 12/15/25 06:53

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 03:32	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 03:32	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 03:32	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 03:32	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/18/25 03:32	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 03:32	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 03:32	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 03:32	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 03:32	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 03:32	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 03:32	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 03:32	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 03:32	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/18/25 03:32	1
Dibromofluoromethane (Surr)	117		80 - 120		12/18/25 03:32	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/18/25 03:32	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		12/18/25 03:32	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.060	J	0.20	0.060	ug/L			12/20/25 02:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/20/25 02:32	1
Dibromofluoromethane (Surr)	120		80 - 120		12/20/25 02:32	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/20/25 02:32	1
1,2-Dichloroethane-d4 (Surr)	109		80 - 120		12/20/25 02:32	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	4.3	ug/L			12/20/25 00:17	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	38		1.5	0.43	mg/L			12/19/25 06:09	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-25d-121525

Lab Sample ID: 580-156557-11

Date Collected: 12/15/25 08:06

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 03:53	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 03:53	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 03:53	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 03:53	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 03:53	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 03:53	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 03:53	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 03:53	1
Acetone	ND		10	3.1	ug/L			12/18/25 03:53	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 03:53	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 03:53	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 03:53	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 03:53	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 03:53	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 03:53	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 03:53	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 03:53	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 03:53	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 03:53	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 03:53	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 03:53	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 03:53	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 03:53	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 03:53	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 03:53	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 03:53	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 03:53	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 03:53	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 03:53	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 03:53	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 03:53	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 03:53	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 03:53	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 03:53	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 03:53	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 03:53	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 03:53	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 03:53	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 03:53	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 03:53	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 03:53	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 03:53	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 03:53	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 03:53	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 03:53	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 03:53	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 03:53	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 03:53	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 03:53	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-25d-121525

Lab Sample ID: 580-156557-11

Date Collected: 12/15/25 08:06

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 03:53	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 03:53	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 03:53	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 03:53	1
4-Isopropyltoluene	0.27	J	0.50	0.25	ug/L			12/18/25 03:53	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 03:53	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 03:53	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 03:53	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 03:53	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 03:53	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 03:53	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 03:53	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 03:53	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 03:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		12/18/25 03:53	1
Dibromofluoromethane (Surr)	117		80 - 120		12/18/25 03:53	1
4-Bromofluorobenzene (Surr)	103		80 - 120		12/18/25 03:53	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		12/18/25 03:53	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/20/25 02:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/20/25 02:53	1
Dibromofluoromethane (Surr)	113		80 - 120		12/20/25 02:53	1
4-Bromofluorobenzene (Surr)	99		80 - 120		12/20/25 02:53	1
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		12/20/25 02:53	1

Method: EPA 314.0 - Perchlorate (IC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/20/25 00:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	11		1.5	0.43	mg/L			12/19/25 06:22	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-15i-121525

Lab Sample ID: 580-156557-12

Date Collected: 12/15/25 09:09

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 04:13	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 04:13	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 04:13	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 04:13	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 04:13	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 04:13	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 04:13	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 04:13	1
Acetone	ND		10	3.1	ug/L			12/18/25 04:13	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 04:13	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 04:13	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 04:13	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 04:13	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 04:13	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 04:13	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 04:13	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 04:13	1
Chloroform	ND		0.20	0.030	ug/L			12/18/25 04:13	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 04:13	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 04:13	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 04:13	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 04:13	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 04:13	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 04:13	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 04:13	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 04:13	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 04:13	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 04:13	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 04:13	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 04:13	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 04:13	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 04:13	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/18/25 04:13	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 04:13	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 04:13	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 04:13	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 04:13	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 04:13	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 04:13	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 04:13	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 04:13	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 04:13	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 04:13	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 04:13	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 04:13	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 04:13	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 04:13	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 04:13	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 04:13	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-15i-121525

Lab Sample ID: 580-156557-12

Date Collected: 12/15/25 09:09

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 04:13	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 04:13	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 04:13	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 04:13	1
4-Isopropyltoluene	0.27	J	0.50	0.25	ug/L			12/18/25 04:13	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 04:13	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 04:13	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 04:13	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 04:13	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 04:13	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 04:13	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 04:13	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 04:13	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 04:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/18/25 04:13	1
Dibromofluoromethane (Surr)	118		80 - 120		12/18/25 04:13	1
4-Bromofluorobenzene (Surr)	103		80 - 120		12/18/25 04:13	1
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		12/18/25 04:13	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.20	0.060	ug/L			12/20/25 03:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/20/25 03:14	1
Dibromofluoromethane (Surr)	118		80 - 120		12/20/25 03:14	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/20/25 03:14	1
1,2-Dichloroethane-d4 (Surr)	112		80 - 120		12/20/25 03:14	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	4.3	ug/L			12/20/25 01:24	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	14		1.5	0.43	mg/L			12/19/25 06:35	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-26d-121525

Lab Sample ID: 580-156557-13

Date Collected: 12/15/25 10:33

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/20/25 03:55	1
Chloromethane	ND		0.50	0.14	ug/L			12/20/25 03:55	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/20/25 03:55	1
Bromomethane	ND		0.50	0.13	ug/L			12/20/25 03:55	1
Chloroethane	ND		0.50	0.24	ug/L			12/20/25 03:55	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/20/25 03:55	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/20/25 03:55	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/20/25 03:55	1
Acetone	ND		10	3.1	ug/L			12/20/25 03:55	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/20/25 03:55	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/20/25 03:55	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/20/25 03:55	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/20/25 03:55	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/20/25 03:55	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/20/25 03:55	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/20/25 03:55	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/20/25 03:55	1
Chloroform	ND		0.20	0.030	ug/L			12/20/25 03:55	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/20/25 03:55	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/20/25 03:55	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/20/25 03:55	1
Benzene	ND		0.20	0.030	ug/L			12/20/25 03:55	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/20/25 03:55	1
Trichloroethene	ND		0.20	0.066	ug/L			12/20/25 03:55	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/20/25 03:55	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/20/25 03:55	1
Dibromomethane	ND		0.20	0.062	ug/L			12/20/25 03:55	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/20/25 03:55	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/20/25 03:55	1
Toluene	ND		0.20	0.050	ug/L			12/20/25 03:55	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/20/25 03:55	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/20/25 03:55	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/20/25 03:55	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/20/25 03:55	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/20/25 03:55	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/20/25 03:55	1
Chlorobenzene	ND		0.20	0.060	ug/L			12/20/25 03:55	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/20/25 03:55	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/20/25 03:55	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/20/25 03:55	1
o-Xylene	ND		0.50	0.23	ug/L			12/20/25 03:55	1
Styrene	ND		1.0	0.33	ug/L			12/20/25 03:55	1
Bromoform	ND		0.50	0.16	ug/L			12/20/25 03:55	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/20/25 03:55	1
Bromobenzene	ND		0.20	0.038	ug/L			12/20/25 03:55	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/20/25 03:55	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/20/25 03:55	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/20/25 03:55	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/20/25 03:55	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-26d-121525

Lab Sample ID: 580-156557-13

Date Collected: 12/15/25 10:33

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/20/25 03:55	1
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/20/25 03:55	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/20/25 03:55	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/20/25 03:55	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/20/25 03:55	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/20/25 03:55	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/20/25 03:55	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/20/25 03:55	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/20/25 03:55	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/20/25 03:55	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/20/25 03:55	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/20/25 03:55	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/20/25 03:55	1
Naphthalene	ND		1.5	0.52	ug/L			12/20/25 03:55	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/20/25 03:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/20/25 03:55	1
Dibromofluoromethane (Surr)	123	S1+	80 - 120		12/20/25 03:55	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/20/25 03:55	1
1,2-Dichloroethane-d4 (Surr)	111		80 - 120		12/20/25 03:55	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		20	4.3	ug/L			12/20/25 01:58	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	18		1.5	0.43	mg/L			12/19/25 06:48	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: PA-09-121525

Lab Sample ID: 580-156557-14

Date Collected: 12/15/25 11:12

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/18/25 04:34	1
Chloromethane	ND		0.50	0.14	ug/L			12/18/25 04:34	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/18/25 04:34	1
Bromomethane	ND		0.50	0.13	ug/L			12/18/25 04:34	1
Chloroethane	ND		0.50	0.24	ug/L			12/18/25 04:34	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/18/25 04:34	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/18/25 04:34	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/18/25 04:34	1
Acetone	ND		10	3.1	ug/L			12/18/25 04:34	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/18/25 04:34	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/18/25 04:34	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/18/25 04:34	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/18/25 04:34	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/18/25 04:34	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/18/25 04:34	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/18/25 04:34	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/18/25 04:34	1
Chloroform	0.088	J	0.20	0.030	ug/L			12/18/25 04:34	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/18/25 04:34	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/18/25 04:34	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/18/25 04:34	1
Benzene	ND		0.20	0.030	ug/L			12/18/25 04:34	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/18/25 04:34	1
Trichloroethene	ND		0.20	0.066	ug/L			12/18/25 04:34	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/18/25 04:34	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/18/25 04:34	1
Dibromomethane	ND		0.20	0.062	ug/L			12/18/25 04:34	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/18/25 04:34	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/18/25 04:34	1
Toluene	ND		0.20	0.050	ug/L			12/18/25 04:34	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/18/25 04:34	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/18/25 04:34	1
Tetrachloroethene	0.25	J	0.50	0.084	ug/L			12/18/25 04:34	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/18/25 04:34	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/18/25 04:34	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/18/25 04:34	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/18/25 04:34	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/18/25 04:34	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/18/25 04:34	1
o-Xylene	ND		0.50	0.23	ug/L			12/18/25 04:34	1
Styrene	ND		1.0	0.33	ug/L			12/18/25 04:34	1
Bromoform	ND		0.50	0.16	ug/L			12/18/25 04:34	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/18/25 04:34	1
Bromobenzene	ND		0.20	0.038	ug/L			12/18/25 04:34	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/18/25 04:34	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/18/25 04:34	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/18/25 04:34	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/18/25 04:34	1
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/18/25 04:34	1

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Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-09-121525

Lab Sample ID: 580-156557-14

Date Collected: 12/15/25 11:12

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/18/25 04:34	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/18/25 04:34	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/18/25 04:34	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/18/25 04:34	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/18/25 04:34	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 04:34	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/18/25 04:34	1
n-Butylbenzene	ND		1.0	0.35	ug/L			12/18/25 04:34	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/18/25 04:34	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/18/25 04:34	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/18/25 04:34	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/18/25 04:34	1
Naphthalene	ND		1.5	0.52	ug/L			12/18/25 04:34	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/18/25 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/18/25 04:34	1
Dibromofluoromethane (Surr)	119		80 - 120		12/18/25 04:34	1
4-Bromofluorobenzene (Surr)	102		80 - 120		12/18/25 04:34	1
1,2-Dichloroethane-d4 (Surr)	115		80 - 120		12/18/25 04:34	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.061	J	0.20	0.060	ug/L			12/20/25 03:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		12/20/25 03:35	1
Dibromofluoromethane (Surr)	121	S1+	80 - 120		12/20/25 03:35	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/20/25 03:35	1
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		12/20/25 03:35	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	68		20	4.3	ug/L			12/20/25 02:31	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	12		1.5	0.43	mg/L			12/19/25 07:27	1

Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: MWA-56d-121525

Lab Sample ID: 580-156557-15

Date Collected: 12/15/25 12:28

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/18/25 04:55	1
Chloromethane	ND		1.0	0.23	ug/L			12/18/25 04:55	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/18/25 04:55	1
Bromomethane	ND		1.0	0.35	ug/L			12/18/25 04:55	1
Chloroethane	ND		1.0	0.34	ug/L			12/18/25 04:55	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/18/25 04:55	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/18/25 04:55	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/18/25 04:55	1
Acetone	ND		25	11	ug/L			12/18/25 04:55	1
Methylene Chloride	ND		15	6.8	ug/L			12/18/25 04:55	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/18/25 04:55	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/18/25 04:55	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/18/25 04:55	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/18/25 04:55	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/18/25 04:55	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/18/25 04:55	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/18/25 04:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/18/25 04:55	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/18/25 04:55	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/18/25 04:55	1
Benzene	ND		1.0	0.47	ug/L			12/18/25 04:55	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/18/25 04:55	1
Trichloroethene	ND		1.0	0.27	ug/L			12/18/25 04:55	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/18/25 04:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/18/25 04:55	1
Dibromomethane	ND		1.0	0.28	ug/L			12/18/25 04:55	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/18/25 04:55	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/18/25 04:55	1
Toluene	ND		1.0	0.21	ug/L			12/18/25 04:55	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/18/25 04:55	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/18/25 04:55	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/18/25 04:55	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/18/25 04:55	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/18/25 04:55	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/18/25 04:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/18/25 04:55	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/18/25 04:55	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/18/25 04:55	1
o-Xylene	ND		1.0	0.22	ug/L			12/18/25 04:55	1
Styrene	ND		1.0	0.41	ug/L			12/18/25 04:55	1
Bromoform	ND		1.0	0.46	ug/L			12/18/25 04:55	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/18/25 04:55	1
Bromobenzene	ND		1.0	0.18	ug/L			12/18/25 04:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/18/25 04:55	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/18/25 04:55	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/18/25 04:55	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/18/25 04:55	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/18/25 04:55	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/18/25 04:55	1

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Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: MWA-56d-121525

Lab Sample ID: 580-156557-15

Date Collected: 12/15/25 12:28

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/18/25 04:55	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/18/25 04:55	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/18/25 04:55	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/18/25 04:55	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/18/25 04:55	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/18/25 04:55	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/18/25 04:55	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/18/25 04:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/18/25 04:55	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/18/25 04:55	1
Naphthalene	ND		3.0	1.4	ug/L			12/18/25 04:55	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/18/25 04:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/18/25 04:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		12/18/25 04:55	1
1,2-Dichloroethane-d4 (Surr)	126	S1+	80 - 120		12/18/25 04:55	1
4-Bromofluorobenzene (Surr)	103		80 - 120		12/18/25 04:55	1
Dibromofluoromethane (Surr)	125	S1+	80 - 120		12/18/25 04:55	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	100		10	1.1	ug/L			12/24/25 06:29	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		12/24/25 06:29	10
1,2-Dichloroethane-d4 (Surr)	123	S1+	80 - 120		12/24/25 06:29	10
4-Bromofluorobenzene (Surr)	104		80 - 120		12/24/25 06:29	10
Dibromofluoromethane (Surr)	109		80 - 120		12/24/25 06:29	10

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.22	ug/L			12/22/25 20:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		80 - 120		12/22/25 20:42	1
1,2-Dichloroethane-d4 (Surr)	118		80 - 120		12/22/25 20:42	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/22/25 20:42	1
Dibromofluoromethane (Surr)	123	S1+	80 - 120		12/22/25 20:42	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	13000		800	170	ug/L			12/22/25 15:39	400

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	130000		3800	1100	mg/L			12/19/25 14:46	2500

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Client Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Client Sample ID: MWA-58d-121525

Lab Sample ID: 580-156557-16

Date Collected: 12/15/25 13:28

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/18/25 00:26	1
Chloromethane	ND		1.0	0.23	ug/L			12/18/25 00:26	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/18/25 00:26	1
Bromomethane	ND		1.0	0.35	ug/L			12/18/25 00:26	1
Chloroethane	ND		1.0	0.34	ug/L			12/18/25 00:26	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/18/25 00:26	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/18/25 00:26	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/18/25 00:26	1
Acetone	ND		25	11	ug/L			12/18/25 00:26	1
Methylene Chloride	ND		15	6.8	ug/L			12/18/25 00:26	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/18/25 00:26	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/18/25 00:26	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/18/25 00:26	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/18/25 00:26	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/18/25 00:26	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/18/25 00:26	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/18/25 00:26	1
Chloroform	79		1.0	0.11	ug/L			12/18/25 00:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/18/25 00:26	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/18/25 00:26	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/18/25 00:26	1
Benzene	ND		1.0	0.47	ug/L			12/18/25 00:26	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/18/25 00:26	1
Trichloroethene	ND		1.0	0.27	ug/L			12/18/25 00:26	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/18/25 00:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/18/25 00:26	1
Dibromomethane	ND		1.0	0.28	ug/L			12/18/25 00:26	1
Dichlorobromomethane	0.54 J		1.0	0.18	ug/L			12/18/25 00:26	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/18/25 00:26	1
Toluene	ND		1.0	0.21	ug/L			12/18/25 00:26	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/18/25 00:26	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/18/25 00:26	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/18/25 00:26	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/18/25 00:26	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/18/25 00:26	1
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/18/25 00:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/18/25 00:26	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/18/25 00:26	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/18/25 00:26	1
o-Xylene	ND		1.0	0.22	ug/L			12/18/25 00:26	1
Styrene	ND		1.0	0.41	ug/L			12/18/25 00:26	1
Bromoform	ND		1.0	0.46	ug/L			12/18/25 00:26	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/18/25 00:26	1
Bromobenzene	ND		1.0	0.18	ug/L			12/18/25 00:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/18/25 00:26	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/18/25 00:26	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/18/25 00:26	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/18/25 00:26	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/18/25 00:26	1

Eurofins Seattle

Client Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: MWA-58d-121525

Lab Sample ID: 580-156557-16

Date Collected: 12/15/25 13:28

Matrix: Water

Date Received: 12/16/25 12:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/18/25 00:26	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/18/25 00:26	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/18/25 00:26	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/18/25 00:26	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/18/25 00:26	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/18/25 00:26	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/18/25 00:26	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/18/25 00:26	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/18/25 00:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/18/25 00:26	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/18/25 00:26	1
Naphthalene	ND		3.0	1.4	ug/L			12/18/25 00:26	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/18/25 00:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/18/25 00:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120		12/18/25 00:26	1
1,2-Dichloroethane-d4 (Surr)	114		80 - 120		12/18/25 00:26	1
4-Bromofluorobenzene (Surr)	105		80 - 120		12/18/25 00:26	1
Dibromofluoromethane (Surr)	115		80 - 120		12/18/25 00:26	1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.22	ug/L			12/20/25 02:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		12/20/25 02:12	1
1,2-Dichloroethane-d4 (Surr)	124	S1+	80 - 120		12/20/25 02:12	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/20/25 02:12	1
Dibromofluoromethane (Surr)	125	S1+	80 - 120		12/20/25 02:12	1

Method: EPA 314.0 - Perchlorate (IC) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	55000		4000	860	ug/L			12/22/25 16:30	2000

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride (EPA 300.0)	180000		3800	1100	mg/L			12/19/25 14:59	2500

QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-510763/7

Matrix: Water

Analysis Batch: 510763

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		0.40	0.13	ug/L			12/17/25 23:44	1
Chloromethane	ND		0.50	0.14	ug/L			12/17/25 23:44	1
Vinyl chloride	ND		0.10	0.040	ug/L			12/17/25 23:44	1
Bromomethane	ND		0.50	0.13	ug/L			12/17/25 23:44	1
Chloroethane	ND		0.50	0.24	ug/L			12/17/25 23:44	1
Carbon disulfide	ND		0.40	0.20	ug/L			12/17/25 23:44	1
Trichlorofluoromethane	ND		0.50	0.12	ug/L			12/17/25 23:44	1
1,1-Dichloroethene	ND		0.20	0.035	ug/L			12/17/25 23:44	1
Acetone	ND		10	3.1	ug/L			12/17/25 23:44	1
Methylene Chloride	ND		5.0	1.2	ug/L			12/17/25 23:44	1
Methyl tert-butyl ether	ND		0.30	0.070	ug/L			12/17/25 23:44	1
2-Butanone (MEK)	ND		10	2.5	ug/L			12/17/25 23:44	1
trans-1,2-Dichloroethene	ND		0.20	0.033	ug/L			12/17/25 23:44	1
1,1-Dichloroethane	ND		0.20	0.064	ug/L			12/17/25 23:44	1
2,2-Dichloropropane	ND		0.50	0.060	ug/L			12/17/25 23:44	1
cis-1,2-Dichloroethene	ND		0.20	0.055	ug/L			12/17/25 23:44	1
Chlorobromomethane	ND		0.20	0.050	ug/L			12/17/25 23:44	1
Chloroform	ND		0.20	0.030	ug/L			12/17/25 23:44	1
1,1,1-Trichloroethane	ND		0.20	0.025	ug/L			12/17/25 23:44	1
Carbon tetrachloride	ND		0.20	0.025	ug/L			12/17/25 23:44	1
1,1-Dichloropropene	ND		0.20	0.084	ug/L			12/17/25 23:44	1
Benzene	ND		0.20	0.030	ug/L			12/17/25 23:44	1
1,2-Dichloroethane	ND		0.25	0.12	ug/L			12/17/25 23:44	1
Trichloroethene	ND		0.20	0.066	ug/L			12/17/25 23:44	1
1,2-Dichloropropane	ND		0.20	0.060	ug/L			12/17/25 23:44	1
4-Methyl-2-pentanone (MIBK)	ND		10	2.7	ug/L			12/17/25 23:44	1
Dibromomethane	ND		0.20	0.062	ug/L			12/17/25 23:44	1
Dichlorobromomethane	ND		0.20	0.060	ug/L			12/17/25 23:44	1
cis-1,3-Dichloropropene	ND		0.20	0.090	ug/L			12/17/25 23:44	1
Toluene	ND		0.20	0.050	ug/L			12/17/25 23:44	1
trans-1,3-Dichloropropene	ND		0.20	0.092	ug/L			12/17/25 23:44	1
1,1,2-Trichloroethane	ND		0.20	0.070	ug/L			12/17/25 23:44	1
Tetrachloroethene	ND		0.50	0.084	ug/L			12/17/25 23:44	1
1,3-Dichloropropane	ND		0.20	0.056	ug/L			12/17/25 23:44	1
Chlorodibromomethane	ND		0.20	0.055	ug/L			12/17/25 23:44	1
Ethylene Dibromide	ND		0.15	0.067	ug/L			12/17/25 23:44	1
1,1,1,2-Tetrachloroethane	ND		0.30	0.11	ug/L			12/17/25 23:44	1
Ethylbenzene	ND		0.20	0.082	ug/L			12/17/25 23:44	1
m-Xylene & p-Xylene	ND		0.50	0.12	ug/L			12/17/25 23:44	1
o-Xylene	ND		0.50	0.23	ug/L			12/17/25 23:44	1
Styrene	ND		1.0	0.33	ug/L			12/17/25 23:44	1
Bromoform	ND		0.50	0.16	ug/L			12/17/25 23:44	1
Isopropylbenzene	ND		1.0	0.27	ug/L			12/17/25 23:44	1
Bromobenzene	ND		0.20	0.038	ug/L			12/17/25 23:44	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.056	ug/L			12/17/25 23:44	1
1,2,3-Trichloropropane	ND		0.20	0.050	ug/L			12/17/25 23:44	1
N-Propylbenzene	ND		0.30	0.091	ug/L			12/17/25 23:44	1
2-Chlorotoluene	ND		0.50	0.12	ug/L			12/17/25 23:44	1

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-510763/7

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 510763

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	ND		0.30	0.12	ug/L			12/17/25 23:44	1
1,3,5-Trimethylbenzene	ND		0.50	0.19	ug/L			12/17/25 23:44	1
tert-Butylbenzene	ND		0.50	0.26	ug/L			12/17/25 23:44	1
1,2,4-Trimethylbenzene	ND		0.55	0.23	ug/L			12/17/25 23:44	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			12/17/25 23:44	1
4-Isopropyltoluene	ND		0.50	0.25	ug/L			12/17/25 23:44	1
1,3-Dichlorobenzene	ND		0.30	0.050	ug/L			12/17/25 23:44	1
1,4-Dichlorobenzene	ND		0.30	0.050	ug/L			12/17/25 23:44	1
n-Butylbenzene	0.455	J	1.0	0.35	ug/L			12/17/25 23:44	1
1,2-Dichlorobenzene	ND		0.30	0.038	ug/L			12/17/25 23:44	1
1,2-Dibromo-3-Chloropropane	ND		2.0	0.48	ug/L			12/17/25 23:44	1
1,2,4-Trichlorobenzene	ND		1.5	0.36	ug/L			12/17/25 23:44	1
Hexachlorobutadiene	ND		0.50	0.16	ug/L			12/17/25 23:44	1
Naphthalene	ND		1.5	0.52	ug/L			12/17/25 23:44	1
1,2,3-Trichlorobenzene	ND		1.5	0.47	ug/L			12/17/25 23:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/17/25 23:44	1
Dibromofluoromethane (Surr)	113		80 - 120		12/17/25 23:44	1
4-Bromofluorobenzene (Surr)	101		80 - 120		12/17/25 23:44	1
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		12/17/25 23:44	1

Lab Sample ID: LCS 580-510763/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 510763

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	4.98		ug/L		100	20 - 150
Chloromethane	5.00	5.77		ug/L		115	32 - 150
Vinyl chloride	5.00	5.78		ug/L		116	41 - 150
Bromomethane	5.00	6.95		ug/L		139	51 - 148
Chloroethane	5.00	5.93		ug/L		119	54 - 140
Carbon disulfide	5.00	5.75		ug/L		115	54 - 142
Trichlorofluoromethane	5.00	5.86		ug/L		117	60 - 132
1,1-Dichloroethene	5.00	5.88		ug/L		118	60 - 129
Acetone	25.0	29.7		ug/L		119	49 - 150
Methylene Chloride	5.00	5.92		ug/L		118	40 - 142
Methyl tert-butyl ether	5.00	4.51		ug/L		90	61 - 131
2-Butanone (MEK)	25.0	23.7		ug/L		95	37 - 150
trans-1,2-Dichloroethene	5.00	5.50		ug/L		110	69 - 121
1,1-Dichloroethane	5.00	5.17		ug/L		103	74 - 120
2,2-Dichloropropane	5.00	4.51		ug/L		90	55 - 140
cis-1,2-Dichloroethene	5.00	5.24		ug/L		105	72 - 120
Chlorobromomethane	5.00	5.68		ug/L		114	79 - 121
Chloroform	5.00	5.58		ug/L		112	75 - 120
1,1,1-Trichloroethane	5.00	4.81		ug/L		96	70 - 121
Carbon tetrachloride	5.00	4.28		ug/L		86	66 - 130
1,1-Dichloropropene	5.00	4.95		ug/L		99	72 - 125

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510763/4

Matrix: Water

Analysis Batch: 510763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	5.00	5.06		ug/L		101	80 - 120
1,2-Dichloroethane	5.00	5.14		ug/L		103	74 - 127
Trichloroethene	5.00	4.91		ug/L		98	72 - 120
1,2-Dichloropropane	5.00	4.84		ug/L		97	69 - 130
4-Methyl-2-pentanone (MIBK)	25.0	24.3		ug/L		97	63 - 137
Dibromomethane	5.00	5.48		ug/L		110	65 - 141
Dichlorobromomethane	5.00	4.64		ug/L		93	74 - 131
cis-1,3-Dichloropropene	5.00	4.20		ug/L		84	77 - 131
Toluene	5.00	5.29		ug/L		106	80 - 126
trans-1,3-Dichloropropene	5.00	4.57		ug/L		91	71 - 138
1,1,2-Trichloroethane	5.00	4.78		ug/L		96	73 - 127
Tetrachloroethene	5.00	4.82		ug/L		96	75 - 124
1,3-Dichloropropane	5.00	4.52		ug/L		90	69 - 138
Chlorodibromomethane	5.00	4.72		ug/L		94	62 - 141
Ethylene Dibromide	5.00	4.66		ug/L		93	61 - 143
1,1,1,2-Tetrachloroethane	5.00	4.75		ug/L		95	69 - 127
Ethylbenzene	5.00	5.28		ug/L		106	80 - 124
m-Xylene & p-Xylene	5.00	5.27		ug/L		105	75 - 124
o-Xylene	5.00	5.38		ug/L		108	71 - 124
Styrene	5.00	4.81		ug/L		96	74 - 127
Bromoform	5.00	4.81		ug/L		96	48 - 127
Isopropylbenzene	5.00	5.20		ug/L		104	71 - 123
Bromobenzene	5.00	4.96		ug/L		99	74 - 130
1,1,2,2-Tetrachloroethane	5.00	4.71		ug/L		94	67 - 136
1,2,3-Trichloropropane	5.00	5.06		ug/L		101	67 - 135
N-Propylbenzene	5.00	5.30		ug/L		106	72 - 126
2-Chlorotoluene	5.00	4.91		ug/L		98	73 - 120
4-Chlorotoluene	5.00	4.91		ug/L		98	75 - 124
1,3,5-Trimethylbenzene	5.00	4.79		ug/L		96	75 - 123
tert-Butylbenzene	5.00	4.65		ug/L		93	70 - 129
1,2,4-Trimethylbenzene	5.00	4.78		ug/L		96	71 - 127
sec-Butylbenzene	5.00	4.87		ug/L		97	75 - 126
4-Isopropyltoluene	5.00	4.62		ug/L		92	78 - 125
1,3-Dichlorobenzene	5.00	5.20		ug/L		104	72 - 125
1,4-Dichlorobenzene	5.00	5.36		ug/L		107	71 - 129
n-Butylbenzene	5.00	4.32		ug/L		86	69 - 127
1,2-Dichlorobenzene	5.00	5.36		ug/L		107	72 - 129
1,2-Dibromo-3-Chloropropane	5.00	4.87		ug/L		97	55 - 135
1,2,4-Trichlorobenzene	5.00	5.17		ug/L		103	60 - 130
Hexachlorobutadiene	5.00	5.49		ug/L		110	63 - 130
Naphthalene	5.00	4.58		ug/L		92	54 - 137
1,2,3-Trichlorobenzene	5.00	5.34		ug/L		107	60 - 136

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
1,2-Dichloroethane-d4 (Surr)	106		80 - 120

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-510763/5

Matrix: Water

Analysis Batch: 510763

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	4.91		ug/L		98	20 - 150	2	30
Chloromethane	5.00	5.53		ug/L		111	32 - 150	4	33
Vinyl chloride	5.00	5.61		ug/L		112	41 - 150	3	32
Bromomethane	5.00	6.67		ug/L		133	51 - 148	4	35
Chloroethane	5.00	5.94		ug/L		119	54 - 140	0	33
Carbon disulfide	5.00	5.59		ug/L		112	54 - 142	3	34
Trichlorofluoromethane	5.00	5.69		ug/L		114	60 - 132	3	32
1,1-Dichloroethene	5.00	5.74		ug/L		115	60 - 129	2	29
Acetone	25.0	29.8		ug/L		119	49 - 150	0	24
Methylene Chloride	5.00	5.88		ug/L		118	40 - 142	1	25
Methyl tert-butyl ether	5.00	4.54		ug/L		91	61 - 131	1	27
2-Butanone (MEK)	25.0	23.7		ug/L		95	37 - 150	0	35
trans-1,2-Dichloroethene	5.00	5.39		ug/L		108	69 - 121	2	27
1,1-Dichloroethane	5.00	5.12		ug/L		102	74 - 120	1	26
2,2-Dichloropropane	5.00	4.45		ug/L		89	55 - 140	1	31
cis-1,2-Dichloroethene	5.00	5.03		ug/L		101	72 - 120	4	22
Chlorobromomethane	5.00	5.68		ug/L		114	79 - 121	0	20
Chloroform	5.00	5.49		ug/L		110	75 - 120	2	21
1,1,1-Trichloroethane	5.00	4.65		ug/L		93	70 - 121	3	24
Carbon tetrachloride	5.00	4.24		ug/L		85	66 - 130	1	24
1,1-Dichloropropene	5.00	4.89		ug/L		98	72 - 125	1	23
Benzene	5.00	5.01		ug/L		100	80 - 120	1	22
1,2-Dichloroethane	5.00	5.08		ug/L		102	74 - 127	1	21
Trichloroethene	5.00	4.69		ug/L		94	72 - 120	5	22
1,2-Dichloropropane	5.00	4.76		ug/L		95	69 - 130	2	22
4-Methyl-2-pentanone (MIBK)	25.0	23.6		ug/L		94	63 - 137	3	26
Dibromomethane	5.00	5.44		ug/L		109	65 - 141	1	22
Dichlorobromomethane	5.00	4.68		ug/L		94	74 - 131	1	21
cis-1,3-Dichloropropene	5.00	4.09		ug/L		82	77 - 131	3	24
Toluene	5.00	5.17		ug/L		103	80 - 126	2	20
trans-1,3-Dichloropropene	5.00	4.41		ug/L		88	71 - 138	3	26
1,1,2-Trichloroethane	5.00	4.77		ug/L		95	73 - 127	0	22
Tetrachloroethene	5.00	4.58		ug/L		92	75 - 124	5	20
1,3-Dichloropropane	5.00	4.47		ug/L		89	69 - 138	1	19
Chlorodibromomethane	5.00	4.63		ug/L		93	62 - 141	2	22
Ethylene Dibromide	5.00	4.54		ug/L		91	61 - 143	2	22
1,1,1,2-Tetrachloroethane	5.00	4.59		ug/L		92	69 - 127	3	22
Ethylbenzene	5.00	5.12		ug/L		102	80 - 124	3	22
m-Xylene & p-Xylene	5.00	5.13		ug/L		103	75 - 124	3	22
o-Xylene	5.00	5.23		ug/L		105	71 - 124	3	23
Styrene	5.00	4.72		ug/L		94	74 - 127	2	22
Bromoform	5.00	4.71		ug/L		94	48 - 127	2	23
Isopropylbenzene	5.00	5.06		ug/L		101	71 - 123	3	23
Bromobenzene	5.00	4.73		ug/L		95	74 - 130	5	23
1,1,2,2-Tetrachloroethane	5.00	4.65		ug/L		93	67 - 136	1	24
1,2,3-Trichloropropane	5.00	4.86		ug/L		97	67 - 135	4	25
N-Propylbenzene	5.00	5.02		ug/L		100	72 - 126	5	20
2-Chlorotoluene	5.00	4.66		ug/L		93	73 - 120	5	22

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-510763/5

Matrix: Water

Analysis Batch: 510763

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chlorotoluene	5.00	4.68		ug/L		94	75 - 124	5	23
1,3,5-Trimethylbenzene	5.00	4.51		ug/L		90	75 - 123	6	23
tert-Butylbenzene	5.00	4.45		ug/L		89	70 - 129	4	24
1,2,4-Trimethylbenzene	5.00	4.56		ug/L		91	71 - 127	5	23
sec-Butylbenzene	5.00	4.62		ug/L		92	75 - 126	5	23
4-Isopropyltoluene	5.00	4.43		ug/L		89	78 - 125	4	24
1,3-Dichlorobenzene	5.00	4.93		ug/L		99	72 - 125	5	22
1,4-Dichlorobenzene	5.00	5.11		ug/L		102	71 - 129	5	22
n-Butylbenzene	5.00	4.15		ug/L		83	69 - 127	4	24
1,2-Dichlorobenzene	5.00	5.11		ug/L		102	72 - 129	5	22
1,2-Dibromo-3-Chloropropane	5.00	4.61		ug/L		92	55 - 135	6	29
1,2,4-Trichlorobenzene	5.00	4.86		ug/L		97	60 - 130	6	26
Hexachlorobutadiene	5.00	5.15		ug/L		103	63 - 130	6	26
Naphthalene	5.00	4.33		ug/L		87	54 - 137	6	28
1,2,3-Trichlorobenzene	5.00	5.02		ug/L		100	60 - 136	6	28

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	107		80 - 120

Lab Sample ID: 580-156557-7 MS

Matrix: Water

Analysis Batch: 510763

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	ND	F1	5.00	7.63	F1	ug/L		153	20 - 150
Chloromethane	ND	F1	5.00	7.46	F1	ug/L		149	32 - 150
Vinyl chloride	ND	F1	5.00	7.61	F1	ug/L		152	41 - 150
Bromomethane	ND		5.00	6.69		ug/L		134	51 - 148
Chloroethane	ND	F1	5.00	7.62	F1	ug/L		152	54 - 140
Carbon disulfide	ND		5.00	6.74		ug/L		135	54 - 142
Trichlorofluoromethane	ND	F1	5.00	7.59	F1	ug/L		152	60 - 132
1,1-Dichloroethene	ND	F1	5.00	7.10	F1	ug/L		142	60 - 129
Acetone	3.6	J	25.0	32.2		ug/L		114	49 - 150
Methylene Chloride	ND		5.00	5.86		ug/L		117	40 - 142
Methyl tert-butyl ether	ND		5.00	4.68		ug/L		94	61 - 131
2-Butanone (MEK)	ND		25.0	21.3		ug/L		85	37 - 150
trans-1,2-Dichloroethene	ND	F1	5.00	6.25	F1	ug/L		125	69 - 121
1,1-Dichloroethane	ND	F1	5.00	6.00		ug/L		120	74 - 120
2,2-Dichloropropane	ND		5.00	4.40		ug/L		88	55 - 140
cis-1,2-Dichloroethene	ND		5.00	5.64		ug/L		113	72 - 120
Chlorobromomethane	ND	F1	5.00	6.60	F1	ug/L		132	79 - 121
Chloroform	ND	F1	5.00	6.45	F1	ug/L		129	75 - 120
1,1,1-Trichloroethane	ND		5.00	5.45		ug/L		109	70 - 121
Carbon tetrachloride	ND		5.00	5.06		ug/L		101	66 - 130
1,1-Dichloropropene	ND		5.00	5.50		ug/L		110	72 - 125

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-156557-7 MS

Matrix: Water

Analysis Batch: 510763

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		5.00	5.67		ug/L		113	80 - 120
1,2-Dichloroethane	ND		5.00	5.72		ug/L		114	74 - 127
Trichloroethene	ND		5.00	5.06		ug/L		101	72 - 120
1,2-Dichloropropane	ND		5.00	5.22		ug/L		104	69 - 130
4-Methyl-2-pentanone (MIBK)	ND		25.0	23.3		ug/L		93	63 - 137
Dibromomethane	ND		5.00	6.11		ug/L		122	65 - 141
Dichlorobromomethane	ND		5.00	5.03		ug/L		101	74 - 131
cis-1,3-Dichloropropene	ND		5.00	4.13		ug/L		83	77 - 131
Toluene	ND		5.00	5.62		ug/L		112	80 - 126
trans-1,3-Dichloropropene	ND		5.00	4.29		ug/L		86	71 - 138
1,1,2-Trichloroethane	ND		5.00	4.92		ug/L		98	73 - 127
Tetrachloroethene	ND		5.00	4.93		ug/L		99	75 - 124
1,3-Dichloropropane	ND		5.00	4.65		ug/L		93	69 - 138
Chlorodibromomethane	ND		5.00	4.87		ug/L		97	62 - 141
Ethylene Dibromide	ND		5.00	4.75		ug/L		95	61 - 143
1,1,1,2-Tetrachloroethane	ND		5.00	4.99		ug/L		100	69 - 127
Ethylbenzene	ND		5.00	5.54		ug/L		111	80 - 124
m-Xylene & p-Xylene	ND		5.00	5.57		ug/L		111	75 - 124
o-Xylene	ND		5.00	5.67		ug/L		113	71 - 124
Styrene	ND		5.00	4.86		ug/L		97	74 - 127
Bromoform	ND		5.00	4.95		ug/L		99	48 - 127
Isopropylbenzene	ND		5.00	4.90		ug/L		98	71 - 123
Bromobenzene	ND		5.00	4.82		ug/L		96	74 - 130
1,1,2,2-Tetrachloroethane	ND		5.00	4.84		ug/L		97	67 - 136
1,2,3-Trichloropropane	ND		5.00	4.72		ug/L		94	67 - 135
N-Propylbenzene	ND		5.00	5.14		ug/L		103	72 - 126
2-Chlorotoluene	ND		5.00	4.78		ug/L		96	73 - 120
4-Chlorotoluene	ND		5.00	4.86		ug/L		97	75 - 124
1,3,5-Trimethylbenzene	ND		5.00	4.51		ug/L		90	75 - 123
tert-Butylbenzene	ND		5.00	4.62		ug/L		92	70 - 129
1,2,4-Trimethylbenzene	ND		5.00	4.54		ug/L		91	71 - 127
sec-Butylbenzene	ND		5.00	4.66		ug/L		93	75 - 126
4-Isopropyltoluene	0.27	J	5.00	4.67		ug/L		88	78 - 125
1,3-Dichlorobenzene	ND		5.00	5.04		ug/L		101	72 - 125
1,4-Dichlorobenzene	ND		5.00	5.08		ug/L		102	71 - 129
n-Butylbenzene	ND		5.00	4.00		ug/L		80	69 - 127
1,2-Dichlorobenzene	0.052	J	5.00	5.23		ug/L		104	72 - 129
1,2-Dibromo-3-Chloropropane	ND		5.00	4.59		ug/L		92	55 - 135
1,2,4-Trichlorobenzene	ND		5.00	4.44		ug/L		89	60 - 130
Hexachlorobutadiene	ND		5.00	4.50		ug/L		90	63 - 130
Naphthalene	ND		5.00	4.16		ug/L		83	54 - 137
1,2,3-Trichlorobenzene	ND		5.00	4.79		ug/L		96	60 - 136
Surrogate	MS %Recovery	MS Qualifier	Limits						
Toluene-d8 (Surr)	98		80 - 120						
Dibromofluoromethane (Surr)	110		80 - 120						
4-Bromofluorobenzene (Surr)	101		80 - 120						
1,2-Dichloroethane-d4 (Surr)	109		80 - 120						

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-156557-7 MSD

Client Sample ID: PA-32i-121225

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 510763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	ND	F1	5.00	7.53	F1	ug/L		151	20 - 150	1	30
Chloromethane	ND	F1	5.00	7.67	F1	ug/L		153	32 - 150	3	33
Vinyl chloride	ND	F1	5.00	7.62	F1	ug/L		152	41 - 150	0	32
Bromomethane	ND		5.00	7.10		ug/L		142	51 - 148	6	35
Chloroethane	ND	F1	5.00	7.51	F1	ug/L		150	54 - 140	1	33
Carbon disulfide	ND		5.00	6.81		ug/L		136	54 - 142	1	34
Trichlorofluoromethane	ND	F1	5.00	7.49	F1	ug/L		150	60 - 132	1	32
1,1-Dichloroethene	ND	F1	5.00	7.16	F1	ug/L		143	60 - 129	1	29
Acetone	3.6	J	25.0	30.9		ug/L		109	49 - 150	4	24
Methylene Chloride	ND		5.00	5.74		ug/L		115	40 - 142	2	25
Methyl tert-butyl ether	ND		5.00	4.88		ug/L		98	61 - 131	4	27
2-Butanone (MEK)	ND		25.0	22.1		ug/L		89	37 - 150	4	35
trans-1,2-Dichloroethene	ND	F1	5.00	6.43	F1	ug/L		129	69 - 121	3	27
1,1-Dichloroethane	ND	F1	5.00	6.06	F1	ug/L		121	74 - 120	1	26
2,2-Dichloropropane	ND		5.00	4.49		ug/L		90	55 - 140	2	31
cis-1,2-Dichloroethene	ND		5.00	5.78		ug/L		116	72 - 120	3	22
Chlorobromomethane	ND	F1	5.00	6.58	F1	ug/L		132	79 - 121	0	20
Chloroform	ND	F1	5.00	6.40	F1	ug/L		128	75 - 120	1	21
1,1,1-Trichloroethane	ND		5.00	5.61		ug/L		112	70 - 121	3	24
Carbon tetrachloride	ND		5.00	5.21		ug/L		104	66 - 130	3	24
1,1-Dichloropropene	ND		5.00	5.63		ug/L		113	72 - 125	2	23
Benzene	ND		5.00	5.76		ug/L		115	80 - 120	2	22
1,2-Dichloroethane	ND		5.00	5.73		ug/L		115	74 - 127	0	21
Trichloroethene	ND		5.00	5.34		ug/L		107	72 - 120	5	22
1,2-Dichloropropane	ND		5.00	5.35		ug/L		107	69 - 130	3	22
4-Methyl-2-pentanone (MIBK)	ND		25.0	24.7		ug/L		99	63 - 137	6	26
Dibromomethane	ND		5.00	6.27		ug/L		125	65 - 141	3	22
Dichlorobromomethane	ND		5.00	5.24		ug/L		105	74 - 131	4	21
cis-1,3-Dichloropropene	ND		5.00	4.38		ug/L		88	77 - 131	6	24
Toluene	ND		5.00	5.85		ug/L		117	80 - 126	4	20
trans-1,3-Dichloropropene	ND		5.00	4.56		ug/L		91	71 - 138	6	26
1,1,2-Trichloroethane	ND		5.00	5.07		ug/L		101	73 - 127	3	22
Tetrachloroethene	ND		5.00	5.22		ug/L		104	75 - 124	6	20
1,3-Dichloropropane	ND		5.00	4.90		ug/L		98	69 - 138	5	19
Chlorodibromomethane	ND		5.00	5.11		ug/L		102	62 - 141	5	22
Ethylene Dibromide	ND		5.00	4.90		ug/L		98	61 - 143	3	22
1,1,1,2-Tetrachloroethane	ND		5.00	5.21		ug/L		104	69 - 127	4	22
Ethylbenzene	ND		5.00	5.76		ug/L		115	80 - 124	4	22
m-Xylene & p-Xylene	ND		5.00	5.81		ug/L		116	75 - 124	4	22
o-Xylene	ND		5.00	5.83		ug/L		117	71 - 124	3	23
Styrene	ND		5.00	5.12		ug/L		102	74 - 127	5	22
Bromoform	ND		5.00	5.17		ug/L		103	48 - 127	4	23
Isopropylbenzene	ND		5.00	5.17		ug/L		103	71 - 123	5	23
Bromobenzene	ND		5.00	5.07		ug/L		101	74 - 130	5	23
1,1,2,2-Tetrachloroethane	ND		5.00	5.12		ug/L		102	67 - 136	6	24
1,2,3-Trichloropropane	ND		5.00	5.12		ug/L		102	67 - 135	8	25
N-Propylbenzene	ND		5.00	5.50		ug/L		110	72 - 126	7	20
2-Chlorotoluene	ND		5.00	5.21		ug/L		104	73 - 120	9	22

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 580-156557-7 MSD

Client Sample ID: PA-32i-121225

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 510763

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chlorotoluene	ND		5.00	5.21		ug/L		104	75 - 124	7	23
1,3,5-Trimethylbenzene	ND		5.00	4.81		ug/L		96	75 - 123	7	23
tert-Butylbenzene	ND		5.00	5.00		ug/L		100	70 - 129	8	24
1,2,4-Trimethylbenzene	ND		5.00	4.88		ug/L		98	71 - 127	7	23
sec-Butylbenzene	ND		5.00	5.04		ug/L		101	75 - 126	8	23
4-Isopropyltoluene	0.27	J	5.00	5.03		ug/L		95	78 - 125	7	24
1,3-Dichlorobenzene	ND		5.00	5.40		ug/L		108	72 - 125	7	22
1,4-Dichlorobenzene	ND		5.00	5.43		ug/L		109	71 - 129	7	22
n-Butylbenzene	ND		5.00	4.44		ug/L		89	69 - 127	10	24
1,2-Dichlorobenzene	0.052	J	5.00	5.65		ug/L		112	72 - 129	8	22
1,2-Dibromo-3-Chloropropane	ND		5.00	4.83		ug/L		97	55 - 135	5	29
1,2,4-Trichlorobenzene	ND		5.00	4.88		ug/L		98	60 - 130	10	26
Hexachlorobutadiene	ND		5.00	4.93		ug/L		99	63 - 130	9	26
Naphthalene	ND		5.00	4.58		ug/L		92	54 - 137	10	28
1,2,3-Trichlorobenzene	ND		5.00	5.23		ug/L		105	60 - 136	9	28

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	109		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
1,2-Dichloroethane-d4 (Surr)	107		80 - 120

Lab Sample ID: MB 580-510796/7

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 510796

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chlorobenzene	ND		0.20	0.060	ug/L			12/18/25 12:55	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
Toluene-d8 (Surr)	102		80 - 120					12/18/25 12:55	1
Dibromofluoromethane (Surr)	95		80 - 120					12/18/25 12:55	1
4-Bromofluorobenzene (Surr)	94		80 - 120					12/18/25 12:55	1
1,2-Dichloroethane-d4 (Surr)	98		80 - 120					12/18/25 12:55	1

Lab Sample ID: LCS 580-510796/4

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 510796

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits			
Chlorobenzene			5.00	4.70		ug/L		94	74 - 123		
Surrogate	LCS	LCS	Limits								
	%Recovery	Qualifier									
	Toluene-d8 (Surr)	103		80 - 120							
	Dibromofluoromethane (Surr)	98		80 - 120							
	4-Bromofluorobenzene (Surr)	97		80 - 120							
	1,2-Dichloroethane-d4 (Surr)	97		80 - 120							

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-510796/5

Matrix: Water

Analysis Batch: 510796

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	5.00	4.62		ug/L		92	74 - 123	2	21
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Toluene-d8 (Surr)	102		80 - 120						
Dibromofluoromethane (Surr)	99		80 - 120						
4-Bromofluorobenzene (Surr)	97		80 - 120						
1,2-Dichloroethane-d4 (Surr)	98		80 - 120						

Lab Sample ID: MB 580-510984/10

Matrix: Water

Analysis Batch: 510984

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	ND		1.0	0.33	ug/L			12/20/25 01:30	1
Chloromethane	ND		1.0	0.23	ug/L			12/20/25 01:30	1
Vinyl chloride	ND		1.0	0.29	ug/L			12/20/25 01:30	1
Bromomethane	ND		1.0	0.35	ug/L			12/20/25 01:30	1
Chloroethane	ND		1.0	0.34	ug/L			12/20/25 01:30	1
Trichlorofluoromethane	ND		1.0	0.21	ug/L			12/20/25 01:30	1
Carbon disulfide	ND		1.0	0.69	ug/L			12/20/25 01:30	1
1,1-Dichloroethene	ND		1.0	0.23	ug/L			12/20/25 01:30	1
Acetone	ND		25	11	ug/L			12/20/25 01:30	1
Methylene Chloride	ND		15	6.8	ug/L			12/20/25 01:30	1
Methyl tert-butyl ether	ND		1.0	0.15	ug/L			12/20/25 01:30	1
trans-1,2-Dichloroethene	ND		1.0	0.18	ug/L			12/20/25 01:30	1
1,1-Dichloroethane	ND		1.0	0.22	ug/L			12/20/25 01:30	1
2-Butanone (MEK)	ND		15	3.1	ug/L			12/20/25 01:30	1
2,2-Dichloropropane	ND		1.0	0.36	ug/L			12/20/25 01:30	1
cis-1,2-Dichloroethene	ND		1.0	0.17	ug/L			12/20/25 01:30	1
Chlorobromomethane	ND		1.0	0.21	ug/L			12/20/25 01:30	1
Chloroform	ND		1.0	0.11	ug/L			12/20/25 01:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			12/20/25 01:30	1
Carbon tetrachloride	ND		1.0	0.22	ug/L			12/20/25 01:30	1
1,1-Dichloropropene	ND		1.0	0.18	ug/L			12/20/25 01:30	1
Benzene	ND		1.0	0.47	ug/L			12/20/25 01:30	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			12/20/25 01:30	1
Trichloroethene	ND		1.0	0.27	ug/L			12/20/25 01:30	1
1,2-Dichloropropane	ND		1.0	0.23	ug/L			12/20/25 01:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.4	ug/L			12/20/25 01:30	1
Dibromomethane	ND		1.0	0.28	ug/L			12/20/25 01:30	1
Dichlorobromomethane	ND		1.0	0.18	ug/L			12/20/25 01:30	1
cis-1,3-Dichloropropene	ND		1.0	0.28	ug/L			12/20/25 01:30	1
Toluene	ND		1.0	0.21	ug/L			12/20/25 01:30	1
trans-1,3-Dichloropropene	ND		1.0	0.46	ug/L			12/20/25 01:30	1
1,1,2-Trichloroethane	ND		1.0	0.16	ug/L			12/20/25 01:30	1
Tetrachloroethene	ND		1.0	0.43	ug/L			12/20/25 01:30	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			12/20/25 01:30	1
Chlorodibromomethane	ND		1.0	0.46	ug/L			12/20/25 01:30	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-510984/10

Matrix: Water

Analysis Batch: 510984

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide	ND		1.0	0.18	ug/L			12/20/25 01:30	1
Chlorobenzene	ND		1.0	0.22	ug/L			12/20/25 01:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			12/20/25 01:30	1
Ethylbenzene	ND		1.0	0.16	ug/L			12/20/25 01:30	1
m-Xylene & p-Xylene	ND		2.0	0.27	ug/L			12/20/25 01:30	1
o-Xylene	ND		1.0	0.22	ug/L			12/20/25 01:30	1
Styrene	ND		1.0	0.41	ug/L			12/20/25 01:30	1
Bromoform	ND		1.0	0.46	ug/L			12/20/25 01:30	1
Isopropylbenzene	ND		1.0	0.45	ug/L			12/20/25 01:30	1
Bromobenzene	ND		1.0	0.18	ug/L			12/20/25 01:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.18	ug/L			12/20/25 01:30	1
1,2,3-Trichloropropane	ND		1.0	0.24	ug/L			12/20/25 01:30	1
N-Propylbenzene	ND		1.0	0.26	ug/L			12/20/25 01:30	1
2-Chlorotoluene	ND		1.0	0.27	ug/L			12/20/25 01:30	1
4-Chlorotoluene	ND		1.0	0.21	ug/L			12/20/25 01:30	1
tert-Butylbenzene	ND		2.0	0.34	ug/L			12/20/25 01:30	1
1,2,4-Trimethylbenzene	ND		3.0	0.57	ug/L			12/20/25 01:30	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			12/20/25 01:30	1
4-Isopropyltoluene	ND		1.0	0.69	ug/L			12/20/25 01:30	1
1,3-Dichlorobenzene	ND		1.0	0.19	ug/L			12/20/25 01:30	1
1,4-Dichlorobenzene	ND		1.0	0.18	ug/L			12/20/25 01:30	1
n-Butylbenzene	ND		1.0	0.61	ug/L			12/20/25 01:30	1
1,2-Dichlorobenzene	ND		1.0	0.19	ug/L			12/20/25 01:30	1
1,2-Dibromo-3-Chloropropane	ND		3.0	0.91	ug/L			12/20/25 01:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.67	ug/L			12/20/25 01:30	1
Hexachlorobutadiene	ND		3.0	0.67	ug/L			12/20/25 01:30	1
Naphthalene	ND		3.0	1.4	ug/L			12/20/25 01:30	1
1,2,3-Trichlorobenzene	ND		4.0	0.83	ug/L			12/20/25 01:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.58	ug/L			12/20/25 01:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		12/20/25 01:30	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		12/20/25 01:30	1
4-Bromofluorobenzene (Surr)	100		80 - 120		12/20/25 01:30	1
Dibromofluoromethane (Surr)	113		80 - 120		12/20/25 01:30	1

Lab Sample ID: LCS 580-510984/5

Matrix: Water

Analysis Batch: 510984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	5.00	5.14		ug/L		103	20 - 150
Chloromethane	5.00	6.43		ug/L		129	25 - 150
Vinyl chloride	5.00	5.91		ug/L		118	31 - 150
Bromomethane	5.00	6.87		ug/L		137	36 - 150
Chloroethane	5.00	6.08		ug/L		122	38 - 150
Trichlorofluoromethane	5.00	5.61		ug/L		112	45 - 148
Carbon disulfide	5.00	5.48		ug/L		110	63 - 134

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510984/5

Matrix: Water

Analysis Batch: 510984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	5.00	5.54		ug/L		111	70 - 129
Acetone	25.0	32.4		ug/L		130	44 - 150
Methylene Chloride	5.00	ND		ug/L		109	77 - 125
Methyl tert-butyl ether	5.00	4.56		ug/L		91	72 - 120
trans-1,2-Dichloroethene	5.00	5.12		ug/L		102	75 - 120
1,1-Dichloroethane	5.00	5.12		ug/L		102	80 - 120
2-Butanone (MEK)	25.0	24.3		ug/L		97	65 - 137
2,2-Dichloropropane	5.00	4.08		ug/L		82	66 - 126
cis-1,2-Dichloroethene	5.00	5.05		ug/L		101	76 - 120
Chlorobromomethane	5.00	5.98		ug/L		120	78 - 120
Chloroform	5.00	5.25		ug/L		105	78 - 127
1,1,1-Trichloroethane	5.00	4.23		ug/L		85	74 - 130
Carbon tetrachloride	5.00	3.84		ug/L		77	72 - 129
1,1-Dichloropropene	5.00	4.33		ug/L		87	74 - 120
Benzene	5.00	4.84		ug/L		97	80 - 122
1,2-Dichloroethane	5.00	4.99		ug/L		100	69 - 126
Trichloroethene	5.00	4.66		ug/L		93	80 - 125
1,2-Dichloropropane	5.00	4.75		ug/L		95	80 - 120
4-Methyl-2-pentanone (MIBK)	25.0	23.8		ug/L		95	59 - 141
Dibromomethane	5.00	5.62		ug/L		112	80 - 120
Dichlorobromomethane	5.00	4.38		ug/L		88	75 - 124
cis-1,3-Dichloropropene	5.00	4.06		ug/L		81	77 - 120
Toluene	5.00	5.18		ug/L		104	80 - 120
trans-1,3-Dichloropropene	5.00	4.46		ug/L		89	76 - 122
1,1,2-Trichloroethane	5.00	4.50		ug/L		90	80 - 121
Tetrachloroethene	5.00	4.41		ug/L		88	76 - 125
1,3-Dichloropropane	5.00	4.38		ug/L		88	79 - 120
Chlorodibromomethane	5.00	4.69		ug/L		94	73 - 125
Ethylene Dibromide	5.00	4.36		ug/L		87	79 - 126
Chlorobenzene	5.00	5.16		ug/L		103	80 - 120
1,1,1,2-Tetrachloroethane	5.00	4.60		ug/L		92	79 - 120
Ethylbenzene	5.00	5.05		ug/L		101	80 - 120
m-Xylene & p-Xylene	5.00	5.31		ug/L		106	80 - 120
o-Xylene	5.00	5.28		ug/L		106	80 - 120
Styrene	5.00	4.77		ug/L		95	76 - 122
Bromoform	5.00	4.89		ug/L		98	56 - 139
Isopropylbenzene	5.00	4.89		ug/L		98	80 - 123
Bromobenzene	5.00	4.94		ug/L		99	80 - 120
1,1,2,2-Tetrachloroethane	5.00	4.52		ug/L		90	74 - 124
1,2,3-Trichloropropane	5.00	4.92		ug/L		98	76 - 124
N-Propylbenzene	5.00	4.86		ug/L		97	80 - 122
2-Chlorotoluene	5.00	4.81		ug/L		96	80 - 120
4-Chlorotoluene	5.00	4.81		ug/L		96	73 - 129
tert-Butylbenzene	5.00	4.63		ug/L		93	75 - 123
1,2,4-Trimethylbenzene	5.00	4.59		ug/L		92	80 - 120
sec-Butylbenzene	5.00	4.34		ug/L		87	78 - 122
4-Isopropyltoluene	5.00	4.46		ug/L		89	77 - 126
1,3-Dichlorobenzene	5.00	4.93		ug/L		99	77 - 127
1,4-Dichlorobenzene	5.00	5.04		ug/L		101	80 - 120

Eurofins Seattle

QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-510984/5

Matrix: Water

Analysis Batch: 510984

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
n-Butylbenzene	5.00	4.07		ug/L		81	57 - 133
1,2-Dichlorobenzene	5.00	5.11		ug/L		102	80 - 120
1,2-Dibromo-3-Chloropropane	5.00	4.64		ug/L		93	65 - 133
1,2,4-Trichlorobenzene	5.00	5.13		ug/L		103	61 - 148
Hexachlorobutadiene	5.00	4.48		ug/L		90	74 - 131
Naphthalene	5.00	4.88		ug/L		98	63 - 150
1,2,3-Trichlorobenzene	5.00	5.34		ug/L		107	65 - 150
1,3,5-Trimethylbenzene	5.00	4.50		ug/L		90	80 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	108		80 - 120

Lab Sample ID: LCSD 580-510984/6

Matrix: Water

Analysis Batch: 510984

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	5.00	4.95		ug/L		99	20 - 150	4	33
Chloromethane	5.00	6.18		ug/L		124	25 - 150	4	26
Vinyl chloride	5.00	5.74		ug/L		115	31 - 150	3	26
Bromomethane	5.00	6.80		ug/L		136	36 - 150	1	33
Chloroethane	5.00	5.85		ug/L		117	38 - 150	4	28
Trichlorofluoromethane	5.00	5.44		ug/L		109	45 - 148	3	35
Carbon disulfide	5.00	5.29		ug/L		106	63 - 134	4	24
1,1-Dichloroethene	5.00	5.41		ug/L		108	70 - 129	2	23
Acetone	25.0	30.3		ug/L		121	44 - 150	7	33
Methylene Chloride	5.00	ND		ug/L		104	77 - 125	4	18
Methyl tert-butyl ether	5.00	4.41		ug/L		88	72 - 120	3	18
trans-1,2-Dichloroethene	5.00	5.13		ug/L		103	75 - 120	0	21
1,1-Dichloroethane	5.00	5.00		ug/L		100	80 - 120	2	15
2-Butanone (MEK)	25.0	23.5		ug/L		94	65 - 137	3	34
2,2-Dichloropropane	5.00	3.95		ug/L		79	66 - 126	3	22
cis-1,2-Dichloroethene	5.00	4.94		ug/L		99	76 - 120	2	20
Chlorobromomethane	5.00	5.74		ug/L		115	78 - 120	4	13
Chloroform	5.00	5.16		ug/L		103	78 - 127	2	14
1,1,1-Trichloroethane	5.00	4.16		ug/L		83	74 - 130	2	19
Carbon tetrachloride	5.00	3.83		ug/L		77	72 - 129	0	19
1,1-Dichloropropene	5.00	4.31		ug/L		86	74 - 120	1	14
Benzene	5.00	4.76		ug/L		95	80 - 122	2	14
1,2-Dichloroethane	5.00	4.82		ug/L		96	69 - 126	4	11
Trichloroethene	5.00	4.63		ug/L		93	80 - 125	1	13
1,2-Dichloropropane	5.00	4.66		ug/L		93	80 - 120	2	14
4-Methyl-2-pentanone (MIBK)	25.0	23.0		ug/L		92	59 - 141	4	22
Dibromomethane	5.00	5.51		ug/L		110	80 - 120	2	11
Dichlorobromomethane	5.00	4.39		ug/L		88	75 - 124	0	13

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 580-510984/6

Matrix: Water

Analysis Batch: 510984

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5.00	3.96		ug/L		79	77 - 120	2	35
Toluene	5.00	4.89		ug/L		98	80 - 120	6	13
trans-1,3-Dichloropropene	5.00	4.31		ug/L		86	76 - 122	3	20
1,1,2-Trichloroethane	5.00	4.44		ug/L		89	80 - 121	1	14
Tetrachloroethene	5.00	4.31		ug/L		86	76 - 125	2	13
1,3-Dichloropropane	5.00	4.32		ug/L		86	79 - 120	1	19
Chlorodibromomethane	5.00	4.64		ug/L		93	73 - 125	1	13
Ethylene Dibromide	5.00	4.25		ug/L		85	79 - 126	2	12
Chlorobenzene	5.00	5.04		ug/L		101	80 - 120	2	10
1,1,1,2-Tetrachloroethane	5.00	4.51		ug/L		90	79 - 120	2	16
Ethylbenzene	5.00	4.82		ug/L		96	80 - 120	5	14
m-Xylene & p-Xylene	5.00	4.87		ug/L		97	80 - 120	9	14
o-Xylene	5.00	5.04		ug/L		101	80 - 120	5	16
Styrene	5.00	4.61		ug/L		92	76 - 122	4	16
Bromoform	5.00	4.75		ug/L		95	56 - 139	3	21
Isopropylbenzene	5.00	4.71		ug/L		94	80 - 123	4	19
Bromobenzene	5.00	4.61		ug/L		92	80 - 120	7	24
1,1,2,2-Tetrachloroethane	5.00	4.48		ug/L		90	74 - 124	1	25
1,2,3-Trichloropropane	5.00	4.64		ug/L		93	76 - 124	6	26
N-Propylbenzene	5.00	4.61		ug/L		92	80 - 122	5	22
2-Chlorotoluene	5.00	4.64		ug/L		93	80 - 120	4	20
4-Chlorotoluene	5.00	4.62		ug/L		92	73 - 129	4	29
tert-Butylbenzene	5.00	4.42		ug/L		88	75 - 123	5	21
1,2,4-Trimethylbenzene	5.00	4.22		ug/L		84	80 - 120	8	16
sec-Butylbenzene	5.00	4.18		ug/L		84	78 - 122	4	15
4-Isopropyltoluene	5.00	4.32		ug/L		86	77 - 126	3	20
1,3-Dichlorobenzene	5.00	4.72		ug/L		94	77 - 127	4	35
1,4-Dichlorobenzene	5.00	4.88		ug/L		98	80 - 120	3	17
n-Butylbenzene	5.00	3.88		ug/L		78	57 - 133	5	14
1,2-Dichlorobenzene	5.00	4.93		ug/L		99	80 - 120	4	15
1,2-Dibromo-3-Chloropropane	5.00	4.48		ug/L		90	65 - 133	4	25
1,2,4-Trichlorobenzene	5.00	4.92		ug/L		98	61 - 148	4	27
Hexachlorobutadiene	5.00	4.39		ug/L		88	74 - 131	2	22
Naphthalene	5.00	4.55		ug/L		91	63 - 150	7	33
1,2,3-Trichlorobenzene	5.00	5.14		ug/L		103	65 - 150	4	33
1,3,5-Trimethylbenzene	5.00	4.22		ug/L		84	80 - 122	6	21

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	100		80 - 120
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	107		80 - 120

QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 580-511049/7

Matrix: Water

Analysis Batch: 511049

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.22	ug/L			12/22/25 12:30	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		80 - 120					12/22/25 12:30	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 120					12/22/25 12:30	1
4-Bromofluorobenzene (Surr)	102		80 - 120					12/22/25 12:30	1
Dibromofluoromethane (Surr)	108		80 - 120					12/22/25 12:30	1

Lab Sample ID: LCS 580-511049/4

Matrix: Water

Analysis Batch: 511049

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chlorobenzene	5.00	5.10		ug/L		102	80 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
Toluene-d8 (Surr)	99		80 - 120				
1,2-Dichloroethane-d4 (Surr)	103		80 - 120				
4-Bromofluorobenzene (Surr)	99		80 - 120				
Dibromofluoromethane (Surr)	105		80 - 120				

Lab Sample ID: LCSD 580-511049/5

Matrix: Water

Analysis Batch: 511049

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene	5.00	4.90		ug/L		98	80 - 120	4	10
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
Toluene-d8 (Surr)	97		80 - 120						
1,2-Dichloroethane-d4 (Surr)	103		80 - 120						
4-Bromofluorobenzene (Surr)	98		80 - 120						
Dibromofluoromethane (Surr)	104		80 - 120						

Lab Sample ID: MB 580-511173/7

Matrix: Water

Analysis Batch: 511173

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.11	ug/L			12/24/25 00:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120					12/24/25 00:16	1
1,2-Dichloroethane-d4 (Surr)	118		80 - 120					12/24/25 00:16	1
4-Bromofluorobenzene (Surr)	106		80 - 120					12/24/25 00:16	1
Dibromofluoromethane (Surr)	105		80 - 120					12/24/25 00:16	1

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QC Sample Results

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 580-511173/4

Matrix: Water

Analysis Batch: 511173

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloroform			5.00	5.05		ug/L		101	78 - 127		
Surrogate	LCS	LCS									
	%Recovery	Qualifier	Limits								
	Toluene-d8 (Surr)	100	80 - 120								
	1,2-Dichloroethane-d4 (Surr)	117	80 - 120								
	4-Bromofluorobenzene (Surr)	108	80 - 120								
Dibromofluoromethane (Surr)	111	80 - 120									

Lab Sample ID: LCSD 580-511173/5

Matrix: Water

Analysis Batch: 511173

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloroform			5.00	5.35		ug/L	-	107	78 - 127	6	14

Method: 8260D - Volatile Organic Compounds by GC/MS - RA

Lab Sample ID: 580-156557-7 MS

Matrix: Water

Analysis Batch: 510796

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier							
Chlorobenzene - RA	ND		5.00	5.22		ug/L		104	74 - 123			
Surrogate	MS	MS										
	%Recovery	Qualifier	Limits									
Toluene-d8 (Surr) - RA	102		80 - 120									
Dibromofluoromethane (Surr) - RA	100		80 - 120									
4-Bromofluorobenzene (Surr) - RA	97		80 - 120									
1,2-Dichloroethane-d4 (Surr) - RA	100		80 - 120									

Lab Sample ID: 580-156557-7 MSD

Matrix: Water

Analysis Batch: 510796

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chlorobenzene - RA	ND		5.00	5.47		ug/L		109	74 - 123	5	21
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Toluene-d8 (Surr) - RA	102		80 - 120								

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 8260D - Volatile Organic Compounds by GC/MS - RA (Continued)

Lab Sample ID: 580-156557-7 MSD

Client Sample ID: PA-32i-121225

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 510796

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Dibromofluoromethane (Surr) - RA	98		80 - 120
4-Bromofluorobenzene (Surr) - RA	96		80 - 120
1,2-Dichloroethane-d4 (Surr) - RA	101		80 - 120

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 570-672840/7

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 672840

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/19/25 13:30	1

Lab Sample ID: LCS 570-672840/8

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 672840

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	24.6		ug/L		98	85 - 115

Lab Sample ID: LCSD 570-672840/9

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 672840

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	24.1		ug/L		96	85 - 115	2	15

Lab Sample ID: MB 570-673996/7

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 673996

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		2.0	0.43	ug/L			12/22/25 14:49	1

Lab Sample ID: LCS 570-673996/8

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 673996

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate	25.0	25.4		ug/L		102	85 - 115

Lab Sample ID: LCSD 570-673996/9

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 673996

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate	25.0	25.2		ug/L		101	85 - 115	1	15

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 314.0 - Perchlorate (IC) - DL

Lab Sample ID: 580-156557-7 MS

Matrix: Water

Analysis Batch: 672840

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate - DL	ND		1000	1010		ug/L		101	80 - 120

Lab Sample ID: 580-156557-7 MSD

Matrix: Water

Analysis Batch: 672840

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate - DL	ND		1000	1050		ug/L		105	80 - 120	4	15

Lab Sample ID: 580-156557-15 MS

Matrix: Water

Analysis Batch: 673996

Client Sample ID: MWA-56d-121525

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perchlorate - DL	13000		10000	23700		ug/L		109	80 - 120

Lab Sample ID: 580-156557-15 MSD

Matrix: Water

Analysis Batch: 673996

Client Sample ID: MWA-56d-121525

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perchlorate - DL	13000		10000	23700		ug/L		109	80 - 120	0	15

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 580-510978/38

Matrix: Water

Analysis Batch: 510978

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/19/25 08:57	1

Lab Sample ID: MB 580-510978/7

Matrix: Water

Analysis Batch: 510978

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.5	0.43	mg/L			12/19/25 02:17	1

Lab Sample ID: LCS 580-510978/8

Matrix: Water

Analysis Batch: 510978

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	52.2		mg/L		104	90 - 110

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QC Sample Results

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 580-510978/9

Matrix: Water

Analysis Batch: 510978

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			50.0	52.1		mg/L		104	90 - 110	0	15

Lab Sample ID: 580-156557-7 MS

Matrix: Water

Analysis Batch: 510978

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	4.7		50.0	56.5		mg/L		104	90 - 110		

Lab Sample ID: 580-156557-7 MSD

Matrix: Water

Analysis Batch: 510978

Client Sample ID: PA-32i-121225

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4.7		50.0	55.8		mg/L		102	90 - 110	1	15

QC Association Summary

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

GC/MS VOA

Analysis Batch: 510763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-1	TB-121225	Total/NA	Water	8260D	
580-156557-2	PA-03-121225	Total/NA	Water	8260D	
580-156557-3	PA-10i-121225	Total/NA	Water	8260D	
580-156557-4	PA-04-121225	Total/NA	Water	8260D	
580-156557-5	PA-18d-121225	Total/NA	Water	8260D	
580-156557-6	RB-02-121225	Total/NA	Water	8260D	
580-156557-7	PA-32i-121225	Total/NA	Water	8260D	
580-156557-8	PA-31-121225	Total/NA	Water	8260D	
580-156557-9	PA-44i-121525	Total/NA	Water	8260D	
580-156557-10	PA-08-121525	Total/NA	Water	8260D	
580-156557-11	PA-25d-121525	Total/NA	Water	8260D	
580-156557-12	PA-15i-121525	Total/NA	Water	8260D	
580-156557-14	PA-09-121525	Total/NA	Water	8260D	
580-156557-15	MWA-56d-121525	Total/NA	Water	8260D	
580-156557-16	MWA-58d-121525	Total/NA	Water	8260D	
MB 580-510763/7	Method Blank	Total/NA	Water	8260D	
LCS 580-510763/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510763/5	Lab Control Sample Dup	Total/NA	Water	8260D	
580-156557-7 MS	PA-32i-121225	Total/NA	Water	8260D	
580-156557-7 MSD	PA-32i-121225	Total/NA	Water	8260D	

Analysis Batch: 510796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-1 - RA	TB-121225	Total/NA	Water	8260D	
580-156557-2 - RA	PA-03-121225	Total/NA	Water	8260D	
580-156557-3 - RA	PA-10i-121225	Total/NA	Water	8260D	
580-156557-4 - RA	PA-04-121225	Total/NA	Water	8260D	
580-156557-5 - RA	PA-18d-121225	Total/NA	Water	8260D	
580-156557-6 - RA	RB-02-121225	Total/NA	Water	8260D	
580-156557-7 - RA	PA-32i-121225	Total/NA	Water	8260D	
MB 580-510796/7	Method Blank	Total/NA	Water	8260D	
LCS 580-510796/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510796/5	Lab Control Sample Dup	Total/NA	Water	8260D	
580-156557-7 MS - RA	PA-32i-121225	Total/NA	Water	8260D	
580-156557-7 MSD - RA	PA-32i-121225	Total/NA	Water	8260D	

Analysis Batch: 510984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-8 - RA	PA-31-121225	Total/NA	Water	8260D	
580-156557-9 - RA	PA-44i-121525	Total/NA	Water	8260D	
580-156557-10 - RA	PA-08-121525	Total/NA	Water	8260D	
580-156557-11 - RA	PA-25d-121525	Total/NA	Water	8260D	
580-156557-12 - RA	PA-15i-121525	Total/NA	Water	8260D	
580-156557-13	PA-26d-121525	Total/NA	Water	8260D	
580-156557-14 - RA	PA-09-121525	Total/NA	Water	8260D	
580-156557-16 - RA	MWA-58d-121525	Total/NA	Water	8260D	
MB 580-510984/10	Method Blank	Total/NA	Water	8260D	
LCS 580-510984/5	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-510984/6	Lab Control Sample Dup	Total/NA	Water	8260D	

Eurofins Seattle

QC Association Summary

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

GC/MS VOA

Analysis Batch: 511049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-15 - RA	MWA-56d-121525	Total/NA	Water	8260D	
MB 580-511049/7	Method Blank	Total/NA	Water	8260D	
LCS 580-511049/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-511049/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 511173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-15 - DL	MWA-56d-121525	Total/NA	Water	8260D	
MB 580-511173/7	Method Blank	Total/NA	Water	8260D	
LCS 580-511173/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 580-511173/5	Lab Control Sample Dup	Total/NA	Water	8260D	

HPLC/IC

Analysis Batch: 672840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-2 - DL	PA-03-121225	Total/NA	Water	314.0	
580-156557-3 - DL	PA-10i-121225	Total/NA	Water	314.0	
580-156557-4 - DL	PA-04-121225	Total/NA	Water	314.0	
580-156557-5 - DL	PA-18d-121225	Total/NA	Water	314.0	
580-156557-6	RB-02-121225	Total/NA	Water	314.0	
580-156557-7 - DL	PA-32i-121225	Total/NA	Water	314.0	
580-156557-8 - DL	PA-31-121225	Total/NA	Water	314.0	
580-156557-9 - DL	PA-44i-121525	Total/NA	Water	314.0	
580-156557-10 - DL	PA-08-121525	Total/NA	Water	314.0	
580-156557-11	PA-25d-121525	Total/NA	Water	314.0	
580-156557-12 - DL	PA-15i-121525	Total/NA	Water	314.0	
580-156557-13 - DL	PA-26d-121525	Total/NA	Water	314.0	
580-156557-14 - DL	PA-09-121525	Total/NA	Water	314.0	
MB 570-672840/7	Method Blank	Total/NA	Water	314.0	
LCS 570-672840/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-672840/9	Lab Control Sample Dup	Total/NA	Water	314.0	
580-156557-7 MS - DL	PA-32i-121225	Total/NA	Water	314.0	
580-156557-7 MSD - DL	PA-32i-121225	Total/NA	Water	314.0	

Analysis Batch: 673996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-15 - DL	MWA-56d-121525	Total/NA	Water	314.0	
580-156557-16 - DL	MWA-58d-121525	Total/NA	Water	314.0	
MB 570-673996/7	Method Blank	Total/NA	Water	314.0	
LCS 570-673996/8	Lab Control Sample	Total/NA	Water	314.0	
LCSD 570-673996/9	Lab Control Sample Dup	Total/NA	Water	314.0	
580-156557-15 MS - DL	MWA-56d-121525	Total/NA	Water	314.0	
580-156557-15 MSD - DL	MWA-56d-121525	Total/NA	Water	314.0	

General Chemistry

Analysis Batch: 510978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-2	PA-03-121225	Total/NA	Water	300.0	
580-156557-3	PA-10i-121225	Total/NA	Water	300.0	
580-156557-4	PA-04-121225	Total/NA	Water	300.0	

Eurofins Seattle

QC Association Summary

Client: ERM-West

Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

General Chemistry (Continued)

Analysis Batch: 510978 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
580-156557-5	PA-18d-121225	Total/NA	Water	300.0	
580-156557-6	RB-02-121225	Total/NA	Water	300.0	
580-156557-7	PA-32i-121225	Total/NA	Water	300.0	
580-156557-8	PA-31-121225	Total/NA	Water	300.0	
580-156557-9	PA-44i-121525	Total/NA	Water	300.0	
580-156557-10	PA-08-121525	Total/NA	Water	300.0	
580-156557-11	PA-25d-121525	Total/NA	Water	300.0	
580-156557-12	PA-15i-121525	Total/NA	Water	300.0	
580-156557-13	PA-26d-121525	Total/NA	Water	300.0	
580-156557-14	PA-09-121525	Total/NA	Water	300.0	
580-156557-15	MWA-56d-121525	Total/NA	Water	300.0	
580-156557-16	MWA-58d-121525	Total/NA	Water	300.0	
MB 580-510978/38	Method Blank	Total/NA	Water	300.0	
MB 580-510978/7	Method Blank	Total/NA	Water	300.0	
LCS 580-510978/8	Lab Control Sample	Total/NA	Water	300.0	
LCSD 580-510978/9	Lab Control Sample Dup	Total/NA	Water	300.0	
580-156557-7 MS	PA-32i-121225	Total/NA	Water	300.0	
580-156557-7 MSD	PA-32i-121225	Total/NA	Water	300.0	

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: TB-121225

Lab Sample ID: 580-156557-1

Date Collected: 12/12/25 06:45

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 00:05
Total/NA	Analysis	8260D	RA	1	510796	AA	EET SEA	12/18/25 21:20

Client Sample ID: PA-03-121225

Lab Sample ID: 580-156557-2

Date Collected: 12/12/25 07:34

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 00:46
Total/NA	Analysis	8260D	RA	1	510796	AA	EET SEA	12/18/25 18:14
Total/NA	Analysis	314.0	DL	40	672840	M5Z3	EET CAL 4	12/19/25 18:06
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 02:55

Client Sample ID: PA-10i-121225

Lab Sample ID: 580-156557-3

Date Collected: 12/12/25 08:33

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 01:07
Total/NA	Analysis	8260D	RA	1	510796	AA	EET SEA	12/18/25 18:37
Total/NA	Analysis	314.0	DL	40	672840	M5Z3	EET CAL 4	12/19/25 18:40
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 03:08

Client Sample ID: PA-04-121225

Lab Sample ID: 580-156557-4

Date Collected: 12/12/25 09:10

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 01:28
Total/NA	Analysis	8260D	RA	1	510796	AA	EET SEA	12/18/25 19:01
Total/NA	Analysis	314.0	DL	40	672840	M5Z3	EET CAL 4	12/19/25 19:13
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 03:21

Client Sample ID: PA-18d-121225

Lab Sample ID: 580-156557-5

Date Collected: 12/12/25 09:54

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 03:11
Total/NA	Analysis	8260D	RA	1	510796	AA	EET SEA	12/18/25 19:24
Total/NA	Analysis	314.0	DL	40	672840	M5Z3	EET CAL 4	12/19/25 19:47
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 03:34

Eurofins Seattle

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: RB-02-121225

Lab Sample ID: 580-156557-6

Date Collected: 12/12/25 10:15

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 01:48
Total/NA	Analysis	8260D	RA	1	510796	AA	EET SEA	12/18/25 19:47
Total/NA	Analysis	314.0		1	672840	M5Z3	EET CAL 4	12/19/25 20:21
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 03:47

Client Sample ID: PA-32i-121225

Lab Sample ID: 580-156557-7

Date Collected: 12/12/25 11:04

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 02:09
Total/NA	Analysis	8260D	RA	1	510796	AA	EET SEA	12/18/25 20:11
Total/NA	Analysis	314.0	DL	40	672840	M5Z3	EET CAL 4	12/19/25 20:54
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 04:00

Client Sample ID: PA-31-121225

Lab Sample ID: 580-156557-8

Date Collected: 12/12/25 12:02

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 02:30
Total/NA	Analysis	8260D	RA	1	510984	JBT	EET SEA	12/20/25 04:37
Total/NA	Analysis	314.0	DL	10	672840	M5Z3	EET CAL 4	12/19/25 23:09
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 05:43

Client Sample ID: PA-44i-121525

Lab Sample ID: 580-156557-9

Date Collected: 12/15/25 06:08

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 02:51
Total/NA	Analysis	8260D	RA	1	510984	JBT	EET SEA	12/20/25 04:16
Total/NA	Analysis	314.0	DL	10	672840	M5Z3	EET CAL 4	12/19/25 23:43
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 05:56

Client Sample ID: PA-08-121525

Lab Sample ID: 580-156557-10

Date Collected: 12/15/25 06:53

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 03:32
Total/NA	Analysis	8260D	RA	1	510984	JBT	EET SEA	12/20/25 02:32
Total/NA	Analysis	314.0	DL	10	672840	M5Z3	EET CAL 4	12/20/25 00:17
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 06:09

Eurofins Seattle

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: PA-25d-121525

Lab Sample ID: 580-156557-11

Date Collected: 12/15/25 08:06

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 03:53
Total/NA	Analysis	8260D	RA	1	510984	JBT	EET SEA	12/20/25 02:53
Total/NA	Analysis	314.0		1	672840	M5Z3	EET CAL 4	12/20/25 00:50
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 06:22

Client Sample ID: PA-15i-121525

Lab Sample ID: 580-156557-12

Date Collected: 12/15/25 09:09

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 04:13
Total/NA	Analysis	8260D	RA	1	510984	JBT	EET SEA	12/20/25 03:14
Total/NA	Analysis	314.0	DL	10	672840	M5Z3	EET CAL 4	12/20/25 01:24
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 06:35

Client Sample ID: PA-26d-121525

Lab Sample ID: 580-156557-13

Date Collected: 12/15/25 10:33

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510984	JBT	EET SEA	12/20/25 03:55
Total/NA	Analysis	314.0	DL	10	672840	M5Z3	EET CAL 4	12/20/25 01:58
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 06:48

Client Sample ID: PA-09-121525

Lab Sample ID: 580-156557-14

Date Collected: 12/15/25 11:12

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 04:34
Total/NA	Analysis	8260D	RA	1	510984	JBT	EET SEA	12/20/25 03:35
Total/NA	Analysis	314.0	DL	10	672840	M5Z3	EET CAL 4	12/20/25 02:31
Total/NA	Analysis	300.0		1	510978	MLT	EET SEA	12/19/25 07:27

Client Sample ID: MWA-56d-121525

Lab Sample ID: 580-156557-15

Date Collected: 12/15/25 12:28

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 04:55
Total/NA	Analysis	8260D	RA	1	511049	JBT	EET SEA	12/22/25 20:42
Total/NA	Analysis	8260D	DL	10	511173	K1K	EET SEA	12/24/25 06:29
Total/NA	Analysis	314.0	DL	400	673996	M5Z3	EET CAL 4	12/22/25 15:39
Total/NA	Analysis	300.0		2500	510978	MLT	EET SEA	12/19/25 14:46

Eurofins Seattle

Lab Chronicle

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Client Sample ID: MWA-58d-121525

Lab Sample ID: 580-156557-16

Date Collected: 12/15/25 13:28

Matrix: Water

Date Received: 12/16/25 12:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	510763	AA	EET SEA	12/18/25 00:26
Total/NA	Analysis	8260D	RA	1	510984	JBT	EET SEA	12/20/25 02:12
Total/NA	Analysis	314.0	DL	2000	673996	M5Z3	EET CAL 4	12/22/25 16:30
Total/NA	Analysis	300.0		2500	510978	MLT	EET SEA	12/19/25 14:59

Laboratory References:

EET CAL 4 = Eurofins Calscience Tustin, 2841 Dow Avenue, Tustin, CA 92780, TEL (714)895-5494

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: ERM-West
Project/Site: Arkema - Dec 2025 Groundwater Event

Job ID: 580-156557-1

Laboratory: Eurofins Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4167	07-07-26

Laboratory: Eurofins Calscience

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Oregon	NELAP	4175	02-02-26

1
2
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12

Sample Summary

Client: ERM-West

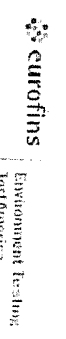
Job ID: 580-156557-1

Project/Site: Arkema - Dec 2025 Groundwater Event

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
580-156557-1	TB-121225	Water	12/12/25 06:45	12/16/25 12:15	Oregon
580-156557-2	PA-03-121225	Water	12/12/25 07:34	12/16/25 12:15	Oregon
580-156557-3	PA-10i-121225	Water	12/12/25 08:33	12/16/25 12:15	Oregon
580-156557-4	PA-04-121225	Water	12/12/25 09:10	12/16/25 12:15	Oregon
580-156557-5	PA-18d-121225	Water	12/12/25 09:54	12/16/25 12:15	Oregon
580-156557-6	RB-02-121225	Water	12/12/25 10:15	12/16/25 12:15	Oregon
580-156557-7	PA-32i-121225	Water	12/12/25 11:04	12/16/25 12:15	Oregon
580-156557-8	PA-31-121225	Water	12/12/25 12:02	12/16/25 12:15	Oregon
580-156557-9	PA-44i-121525	Water	12/15/25 06:08	12/16/25 12:15	Oregon
580-156557-10	PA-08-121525	Water	12/15/25 06:53	12/16/25 12:15	Oregon
580-156557-11	PA-25d-121525	Water	12/15/25 08:06	12/16/25 12:15	Oregon
580-156557-12	PA-15i-121525	Water	12/15/25 09:09	12/16/25 12:15	Oregon
580-156557-13	PA-26d-121525	Water	12/15/25 10:33	12/16/25 12:15	Oregon
580-156557-14	PA-09-121525	Water	12/15/25 11:12	12/16/25 12:15	Oregon
580-156557-15	MWA-56d-121525	Water	12/15/25 12:28	12/16/25 12:15	Oregon
580-156557-16	MWA-58d-121525	Water	12/15/25 13:28	12/16/25 12:15	Oregon

5755 8th Street East
Tacoma, WA 98424
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record



Client Information

Client Contact: **Scott Terranova**
Company: **Avery Sopela**
Address: **1050 SW 6th Avenue Suite 1650**
City: **Portland**
State Zip: **OR, 97204**
Phone: **PN 07/3710.507**
Email: **avery.sopela@erm.com**

Lab Pk.: **Marshall, Tony**
E-Mail: **antonio.marshall@eurofins.com**

Carrier Tracking No(s):

COC No: **1042**
Page: **1 of 2**

Due Date Requested:

TAI Requested (days): **Standard**

PO #: **PN 07/3710.507**
WO #:

Project Name: **Afrika - December 2025 Groundwater Event**
Site: **SSOVM**

Project #: **0773710.507**

SSOVM:

Sample Identification

Sample Date

Sample Time

Sample Type (C=Comp, G=grab)

Preservation Code

Matrix (if water, specify container type)

Field Filtered Sample (Yes or No)

Perform MS/MSD (Yes or No)

8260C regular level standard VOA list-Seattle

8260C_LL - Standard VOA list-Seattle

300.0 28D-Chloride-Seattle

314 Perchlorate

8081B- Pesticides, standard list

8081B Pesticides, standard list - Field Filtered

MS/MSD

Total Number of containers

Special Instructions/Note:

Preservation Codes:

A - HCl
B - NaOH
C - 2N Acetic
D - 1N HCl
E - 1N HNO3
F - 1N H2SO4
G - Ascorbic
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - Ascorbic
P - H2O2
Q - H2SO4
R - H2SO4
S - H2SO4
T - TSP Dodecylhydric
U - TSP Dodecylhydric
V - H2O2
W - pH 4.5
Z - other (specify)

Other:

580-156557 COC

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client

Disposal By Lab

Active For

Months

Special Instructions/AC Requirements: please run at lowest dilution possible for ND.

Empty Kit Relinquished by:

Date:

Relinquished by: **Marshall, Tony**
Date/Time: **12/16/25 1140**
Company: **ERM**

Relinquished by: **Marshall, Tony**
Date/Time: **12/16/25 1215**
Company: **ERM**

Custody Seal Intact: **Yes**
Custody Seal No: **No**

Cooler Temperature(s) °C and Other Remarks:

Method of Shipment:

Date/Time: **12/16/25 1140**
Company: **ERM**

Date/Time: **12/16/25 1215**
Company: **ERM**

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Environment Testing
TestAmerica

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Page: 2 of 2

Preservation Codes:

A-HCL	M
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
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92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

C - Zn Acetate	O
D - Nitric Acid	P

F - MeOH
G - Acrylonitrile

U.

N-EDA
L-EDA
Z-

Other:

1

Special Instructions

V

1

.....

100

Months

or ND.

[illegible][illegible]

1215

33

VCL.

12/26/2025

5755 8th Street East
Tacoma, WA 98424
Phone (253) 822-2310 Fax (253) 822-5047

Chain of Custody Record

Client Information		Sampler: Scott Terranova		Lab P.M.: Marshall, Tony		Carrier Tracking No(s):	
Client Contact: Avery Soplat		Phone:		E-Mail: antoinette.marshall@eurofins.com			
Company: ERM-West		Due Date Requested:		Analysis Requested			
Address: 1050 SW 6th Avenue Suite 1650		City: Portland		State: OR		Zip: 97204	
Phone: 877204		PO #:		PN 0773710.507			
Email: avery.soplat@erm.com		WO #:		0773710.507			
Project Name: Artema - December 2025 Groundwater Event		Project #:		SSOW#:			
Site:		Sample Identification		Sample Date		Sample Time	
TB-120025		12/12/25		0645		G	
PA-03-121225		0734		G		Water	
PA-105-121225		0833		G		Water	
PA-04-121225		0910		G		Water	
PA-18d-121225		0954		G		Water	
RB-02-121225		1015		G		Water	
PA-32d-121225		1104		G		Water	
PA-31-121225		1202		G		Water	
PA-44f-121525		12/15/25		0608		G	
PA-08-121525		0653		G		Water	
PA-25d-121525		0806		G		Water	
Possible Hazard Identification		☐ Non-Hazard		☐ Flammable		☐ Skin Irritant	
Deliverable Requested: I, II, III, IV, Other (specify)		Poison B		Unknown		Radiological	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: [Signature]		12/16/25		1140		Company: ERM	
Relinquished by: [Signature]		12/16/25		1245		Company: M-G	
Relinquished by: [Signature]		12/16/25		1504		Company: ERM	
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Count/Temporarily C and Other Remarks:		0.5/1.1 PPA SC R	

580-156557 COC

12/11 5:4/5.3

Eurofins Seattle

5755 8th Street East
Tacoma, WA 98424
Phone: 253-922-2310

Chain of Custody Record



Loc: 580

156557

Client Information (Sub Contract Lab)		Sampler: N/A		Lab PM: Marshall, Antoinette C		Carrier Tracking No(s): N/A		COC No: 580-152513.1											
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Antoinette.Marshall@et.eurofinsus.com		State of Origin: Oregon		Page: Page 1 of 2											
Company: Eurofins Environment Testing Southwest L				Accreditations Required (See note): NELAP - Oregon				Job #: 580-156557-1											
Address: 2841 Dow Avenue, Suite 100, City: Tustin State, Zip: CA, 92780 Phone: 714-895-5494(Tel) Email: N/A Project Name: Arkema - QX 2025 Groundwater Event Site: N/A		Due Date Requested: 12/26/2025 TAT Requested (days): N/A		Analysis Requested					Preservation Codes:										
		PO #: N/A WO #: N/A Project #: 58016290 SSOW#: N/A							Other: N/A										
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=oil, T=tissue, A=air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		314.0 Perchlorate		Total Number of containers		Special	
						Preservation Code:													
PA-03-121225 (580-156557-2)		12/12/25		07:34 Pacific		G		Water				X							
PA-10i-121225 (580-156557-3)		12/12/25		08:33 Pacific		G		Water				X							
PA-04-121225 (580-156557-4)		12/12/25		09:10 Pacific		G		Water				X				1			
PA-18d-121225 (580-156557-5)		12/12/25		09:54 Pacific		G		Water				X				1			
RB-02-121225 (580-156557-6)		12/12/25		10:15 Pacific		G		Water				X				1			
PA-32i-121225 (580-156557-7)		12/12/25		11:04 Pacific		G		Water				X							
PA-32i-121225 (580-156557-7MS)		12/12/25		11:04 Pacific		G		Water				X							
PA-32i-121225 (580-156557-7MSD)		12/12/25		11:04 Pacific		G		Water				X				1			
PA-31-121225 (580-156557-8)		12/12/25		12:02 Pacific		G		Water				X				1			
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northwest, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northwest, LLC.																			
Possible Hazard Identification										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
Unconfirmed										☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months									
Deliverable Requested: I, II, III, IV, Other (specify)										Primary Deliverable Rank: 2									
Special Instructions/QC Requirements:																			
Empty Kit Relinquished by:										Date: _____ Time: _____ Method of Shipment: _____									
Relinquished by:										Date/Time: 12/16/25 1524 Company: EJT Received by: _____ Date/Time: _____ Company: _____									
Relinquished by: _____										Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____									
Relinquished by: FEORY										Date/Time: _____ Company: _____ Received by: Date/Time: 12/18/25 10:00 Re _____ Company: _____									
Custody Seals Intact: ☐ Yes ☐ No										Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: 38/39 IR-4									

Ver: 10/10/2024

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Ver. 10/10/2024
12/26/2025

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156557-1

Login Number: 156557

List Source: Eurofins Seattle

List Number: 1

Creator: Mcalpine, James 1

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ERM-West

Job Number: 580-156557-1

Login Number: 156557

List Number: 2

Creator: Ferreira, Bruno

List Source: Eurofins Calscience

List Creation: 12/18/25 03:35 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



APPENDIX C DATA VALIDATION MEMOS



MEMO

TO	Sarah Seekins
FROM	Isaac Barraza
DATE	2026-01-21
REFERENCE	0732445
SUBJECT	Data Review of Arkema, Fourth Quarter 2025 Groundwater. Samples Collected November 4-7, December 8-15, 2025: Eurofins, Data Package(s) 580-155538-1, 580-155638-1, 580-156384-1, 580-156488-1, 580-156488-2, 580-156495-1 and 580-156557-1.

Environmental Resources Management, Inc. (ERM) assessed the data quality and applied any necessary qualifiers following the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review*, November 2020 and *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review*, November 2020. Field duplicates were assessed following *Environmental Data Review Supplement for Region 1 Data Review Elements and Superfund Specific Guidance/Procedures*, September 2020.

ERM performed a Stage 2A data validation on 100 percent of the laboratory data.

ERM reviewed the following items as part of the data validation.

- **Chain of Custody:** The chains of custody were reviewed for proper completion and that the laboratory performed the requested methods and reported the requested target analytes for each sample.
- **Dilutions and Reanalysis:** Dilutions, calibration ranges, and reanalyses were reviewed as applicable. The best result was chosen when more than one result was reported as final.
- **Case Narrative:** The case narrative was reviewed for comments and any necessary qualifiers added.
- **Sample Preservation:** The appropriate temperature and chemical preservation requirements were reviewed. Headspace for volatile sample analysis was reviewed, if applicable.
- **Holding Times:** The period of time between collection of the sample and preparation/analysis of the sample was evaluated.

- **Laboratory Blank Samples:** The preparation and analysis of reagent (contaminant-free) water was evaluated, along with the required frequency.
- **Field Blank Samples:** The collection and analysis of field blanks was evaluated. The reviewed data package(s) included the following associated field blanks: Filter, rinse, trip and field.
- **Laboratory Control Spike Samples:** Laboratory control spike sample preparation frequency and recoveries were reviewed as applicable.
- **Matrix Spike Samples:** Matrix spike and post digestion spike sample preparation frequency and recoveries were reviewed as applicable.
- **Surrogate Spikes:** The addition of appropriate surrogates and their recoveries were evaluated.
- **Field Duplicate Samples:** Field duplicate recoveries and/or absolute differences were reviewed as applicable.

Data validation findings are summarized in the sections below. As necessary, the following data quality flags were applied during validation. Professional judgment was used when multiple flags were applied to one result; therefore, the final flag may differ from the one presented in an individual table.

- J = estimated concentration
- J+ = the result is an estimated concentration, but may be biased high
- J- = the result is an estimated concentration, but may be biased low
- UJ = estimated reporting limit
- U = evaluated to be non-detected at the reporting limit
- R = rejected, data not usable
- NJ = tentative identification and estimated concentration

Validation outliers and any necessary data qualifications are summarized in tables at the end of this memo. The table below indicates the included validation tables with findings.

List of Attached Tables

Table 1: Case Narrative Evaluation

Table 2: Laboratory Blank Evaluation

Table 3: Field Blank Evaluation

Table 4: Laboratory Control Spike Evaluation

List of Attached Tables

Table 5: Matrix Spike Evaluation

Table 6: Surrogate Evaluation

Table 7: Field Duplicate Evaluation

CHAIN-OF-CUSTODY DISCREPANCIES

The laboratory did not note discrepancies between the chains-of-custody and the received sample containers.

SAMPLES WITH NON-PREFERRED RESULTS

All samples had only one final result reported for each analyte and method combination. All results are considered preferred.

CASE NARRATIVE EVALUATION

The laboratory observed additional issues encountered during sample preparation or analysis as noted in Table 1.

PRESERVATION EVALUATION

The laboratory received the sample shipments in good condition, within the method-prescribed temperature preservation requirements of less than 6°C, with acceptable sample pH values, and, as applicable, all vials for volatile analysis were received with no documented headspace.

HOLDING TIME EVALUATION

The samples were prepared and analyzed within the method-prescribed time period from the date of collection, with appropriate considerations for sample preservation requirements.

LABORATORY BLANK EVALUATION

The laboratory blank sample results were non-detected for each of the target analytes, with the exceptions and any necessary qualifications noted in Table 2. The following criteria were taken into consideration when assessing blank contamination and applying any necessary qualifications:

- Non-detected results or results greater than five times the blank concentration (ten times for inorganics or common laboratory contaminants) were considered not affected by contamination and were not qualified.
- If results were associated with more than one blank, the greater of the two blank concentrations was used for applying qualifications.

- Results less than the reporting limit, as adjusted for dilution, were qualified as non-detect (U) at the sample reporting limit.
- Results within five times the blank concentration (ten times for inorganics or common laboratory contaminants), greater than the reporting limit, but less than the blank concentration, as adjusted for dilution, were qualified as non-detect (U) at the sample concentration.
- Results within five times the blank concentration (ten times for inorganics or common laboratory contaminants), greater than the reporting limit, and greater than the blank concentration, as adjusted for dilution, were qualified as estimates with a high bias (J+).

FIELD BLANK EVALUATION

The Filter, rinse, trip, and field blank sample results were non-detected for each of the target analytes, with the exceptions and any necessary qualifications noted in Table 3. Any field blank detections associated with laboratory blank contamination and qualified as non-detected (U) are not included in Table 3. The following criteria were taken into consideration when assessing blank contamination and applying any necessary qualifications:

- Non-detected results or results greater than five times the blank concentration (ten times for inorganics or common laboratory contaminants) were considered not affected by contamination and were not qualified.
- If results were associated with more than one blank, the greater of the two blank concentrations was used for applying qualifications.
- Results less than the reporting limit were qualified as non-detect (U) at the sample reporting limit.
- Results within five times the blank concentration (ten times for inorganics or common laboratory contaminants), greater than the reporting limit, but less than the blank concentration were qualified as non-detect (U) at the sample concentration.
- Results within five times the blank concentration (ten times for inorganics or common laboratory contaminants), greater than the reporting limit, and greater than the blank concentration were qualified as estimates with a high bias (J+).
- Equipment and field blank results associated with method blank contamination were attributed to and qualified for laboratory introduced contamination. No additional qualifications were made to sample results based on the equipment and/or field blanks in these instances.

LABORATORY CONTROL SPIKE EVALUATION

The laboratory control sample (LCS) recoveries and, if included, the laboratory control sample duplicate (LCSD) recoveries and relative percent differences (RPD) were within the laboratory's limits of acceptance, with the exceptions and any necessary qualifications noted in Table 4. Results were not qualified if the paired spiked sample recovery was acceptable, if high recoveries or RPDs were associated with non-detected results, or if the exception was not associated with reported results.

MATRIX SPIKE EVALUATION

The matrix spike (MS) recoveries and, if included, the matrix spike duplicate (MSD) recoveries and RPDs were within the laboratory's limits of acceptance for target analytes for spiked project samples, with the exceptions and any necessary qualifications noted in Table 5. MS/MSDs performed on non-project parent samples, if included, are not representative of the matrix for this project and were therefore not reviewed or presented. Results were not qualified if the paired spiked sample recovery was acceptable, if high recoveries or RPDs were associated with non-detected results, if the parent sample result was greater than four times that of the spike, if the spike was diluted out, or if the exception was not associated with reported results.

Matrix spike situations requiring additional professional judgement are detailed below.

- There was insufficient historical data available for comparison; therefore, the non-detect methylene chloride results for samples PMW-20G-110625 and PMW-09B-121025 were rejected due to very low (0%) matrix spike/matrix spike duplicate recoveries.

SURROGATE EVALUATION

The surrogate recoveries were within the laboratory limits of acceptance, with the exceptions and any necessary qualifications noted in Table 6. Results were not qualified if the sample dilution factor was greater than or equal to 10, if high recoveries were associated with non-detected results, if only one acid or base/neutral surrogate for semivolatiles was out, if the affected surrogate was not associated with reported analytes, or if the affected sample was laboratory quality control.

FIELD DUPLICATE EVALUATION

One or more samples were submitted to the laboratory as field duplicates. RPDs or absolute differences were calculated as appropriate for detected results. When results were greater than or equal to five times the reporting limit, RPD control limits of 30 for an aqueous matrix or 50 for a non-aqueous matrix were used. When results were less than five times the reporting limit, difference limits of $\pm$ two times the reporting limit for an aqueous matrix or $\pm$ four times the reporting limit for a non-aqueous matrix were used. Control limits were not applicable if both results were less than the

reporting limits. If one result was greater than the reporting limit and the other was not detected, the reporting limit for the non-detect result was used when calculating differences. Additionally, if the reporting limits were not the same between the parent and field duplicate samples, professional judgment was used to determine the difference control limit or if the calculation was meaningful. The RPDs and/or absolute differences were within QAPP criteria or EPA Region 1 guidance, whichever is applicable, with any exceptions and necessary qualifications noted in Table 7.

CALIBRATION RANGE EVALUATION

All results were reported within each instrument's calibration range.

PROFESSIONAL JUDGEMENT EVALUATION

Additional qualifiers using the validator's professional judgement were not necessary.

OVERALL ASSESSMENT

Excluding rejected results, all data can be used for decision-making purposes; however, the limitation identified by the applied qualifier should be considered when using the data. The quality of the data generated during this investigation is acceptable for the preparation of technically defensible documents.

Table 1
Case Narrative Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Sample ID	Method	Analyte	Reason	ERM Qualifier
580-155538-1	None for qualification, samples ND	8260D	Dichlorodifluoromethane	Batch 580-508115	--
			2,2-Dichloropropane	CCV high bias	
	None for qualification, analytes reported from column with passing CCV	8081B	2,4'-DDD	Batch 580-508353	
			2,4'-DDE	CCV high bias	
			2,4'-DDT		
	None for qualification, samples ND		2,4'-DDE	Batch 580-508353	
	None for qualification, analytes reported from column with passing CCV		2,4'-DDD (Dissolved)	Batch 580-508353	
			2,4'-DDE (Dissolved)	CCV high bias	
			2,4'-DDT (Dissolved)		
	None for qualification, samples ND	314.0	Perchlorate	Batch 570-653852	
				CCV high bias	
580-155638-1	None for qualification, samples ND	8260D	Chloromethane	Batch 580-508533	--
	PMW-19b-110625 PMW-01b-110725 PMW-01g-110725 TB-110625		Carbon tetrachloride trans-1,3-Dichloropropene 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Chlorodibromomethane Ethylene Dibromide 1,1,1,2-Tetrachloroethane Bromoform 1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	Batch 580-508643 CCV low bias	UJ

Table 1
Case Narrative Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Sample ID	Method	Analyte	Reason	ERM Qualifier
580-155638-1	PMW-19b-110625 PMW-01b-110725 PMW-01g-110725 TB-110625	8260D	n-Butylbenzene 1,2-Dibromo-3-Chloropropane 1,2,4-Trichlorobenzene Naphthalene	Batch 580-508643 CCV low bias	UJ
	None for qualification, samples ND		Methylene Chloride	Batch 580-508643 CCV high bias	--
580-156384-1	TB-120825 MWA-82-120825 MWA-81i-120825 MWA-41-120825 PA-23d-120925 PA-24d-120925 MWA-31i(D)-120925 PA-22d-120925 MWA-63-120925 PA-17iR-120925 Dup-01-120925	8260D 8260D LL	Bromomethane	Batch 580-510208 CCV low bias	UJ
580-156488-2	TB-121025 PMW-18b-121025 PMW-09b-121025 PMW-09G-121025 PMW-06b2-121025 PMW-06b-121025 PMW-05b2-121025 PMW-05b-121125 Dup-02-121125 PMW-04b-121125	8260D	Dichlorodifluoromethane Carbon tetrachloride	Batch 580-510727 CCV low bias	UJ

Table 1
Case Narrative Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Sample ID	Method	Analyte	Reason	ERM Qualifier
580-156488-2	PMW-04b-121125	8260D	4-Methyl-2-pentanone cis-1,3-Dichloropropene Toluene trans-1,3-Dichloropropene 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Chlorodibromomethane Ethylene Dibromide 1,1,1,2-Tetrachloroethane Ethylbenzene m-Xylene & p-Xylene o-Xylene Styrene Bromoform Isopropylbenzene	Internal standard response outside of acceptance limits	Detects J Non-detects UJ
580-156495-1	None for qualification, samples ND	8260D	Chloromethane	Batch 580-510546 CCV high bias	--
580-156557-1	None for qualification, samples ND	8260D 8260D LL	Dichlorodifluoromethane Chloromethane Chlorobenzene	Batch 580-510763 CCV high bias	--

Table 1
Case Narrative Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Sample ID	Method	Analyte	Reason	ERM Qualifier
580-156557-1	TB-121225 PA-03-121225 PA-10i-121225 PA-04-121225 PA-18d-121225 RB-02-121225 PA-32i-121225 PA-31-121225 PA-44i-121525 PA-08-121525 PA-25d-121525 PA-15i-121525 PA-09-121525 MWA-56d-121525 MWA-58d-121525	8260D 8260D LL	2,2-Dichloropropane Carbon tetrachloride	Batch 580-510763 CCV low bias	UJ

-- = not applicable; associated data not affected

CCV = continuing calibration verification

J = estimated detected result

ND = not detected

UJ = non-detected, estimated report limit

Table 2
Laboratory Blank Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Blank ID	Analyte	Reported Blank Conc.	Blank RL	Associated Sample	Assoc. Sample Result	Assoc. Sample RL	Units	ERM Qualifier
580-155538-1	MB 580-508115/8	tert-Butylbenzene	0.598	2.0	None for qualification, samples ND	--	--	µg/L	--
580-155538-1	MB 580-508165/41	Chloride	0.669	1.5	RB-01-110525	0.93	1.5	mg/L	1.5 U
580-155638-1	MB 580-508543/4	Chloride	0.538	1.5	None for qualification, samples > 10x blank	--	--	mg/L	--
580-156384-1	MB 580-510208/10	Toluene	0.0612	0.20	PA-17iR-120925	0.13	0.20	µg/L	0.20 U
					DUP-01-120925	0.12	0.20	µg/L	0.20 U
580-156495-1	MB 580-510479/1-A	4,4'-DDT	0.0118	0.020	None for qualification, sample ND	--	--	µg/L	--
580-156557-1	MB 580-510763/7	n-Butylbenzene	0.455	1.0	TB-121225	0.43	1.0	µg/L	1.0 U

Notes:

-- = not applicable; associated data not affected

Conc. = concentration

MB = method blank

µg/L = micrograms per liter

mg/L = milligrams per liter

ND = not detected

RL = reporting limit

U = non-detected

Table 3
Field Blank Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Blank ID	Analyte	Reported Blank Conc.	Blank RL	Associated Sample	Assoc. Sample Result	Assoc. Sample RL	Units	ERM Qualifier
580-156557-1	RB-02-121225	4-Isopropyltoluene	0.28	0.50	PA-32i-121225	0.27	0.50	µg/L	0.50 U
					PA-31-121225	0.27	0.50		0.50 U
					PA-44i-121525	0.27	0.50		0.50 U
					PA-25d-121525	0.27	0.50		0.50 U
					PA-15i-121525	0.27	0.50		0.50 U
580-156495-1	RB-01-121125	Chloride	0.44	1.5	None for qualification, sample > 10x blank	--	--	µg/L	--

Notes:

Conc. = concentration

µg/L = micrograms per liter

RB = rinse blank

RL = reporting limit

U = non-detected

Table 4
Laboratory Control Spike Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Spike Sample ID	Associated Sample	Analyte	Recovery (%)	Limit (%)	RPD	RPD Limit	Result	Units	ERM Qualifier
580-155538-1	LCS 580-508050/6-A LCSD 580-508050/7-A	None for qualification, one recovery passes	Toxaphene	45/Pass	50-150	70	15	--	--	--
	LCS 580-508143/4-A LCSD 580-508143/5-A	None for qualification, one recovery passes	delta-BHC	47/Pass	51-120	32	23	--	--	--
		None for qualification, samples ND	alpha-BHC	Pass/Pass	54-120	31	23			
			beta-BHC	Pass/Pass	54-120	33	19			
			cis-Chlordane	Pass/Pass	48-120	35	27			
			Endosulfan I	Pass/Pass	45-123	32	26			
			4,4'-DDE	Pass/Pass	47-120	34	25			
			Dieldrin	Pass/Pass	48-122	32	23			
			Endrin	Pass/Pass	48-120	36	24			
			4,4'-DDD	Pass/Pass	53-120	36	19			
			Endosulfan II	Pass/Pass	24-120	32	26			
			4,4'-DDT	Pass/Pass	39-122	36	20			
			gamma-BHC (Lindane)	Pass/Pass	55-120	32	21			
			trans-Chlordane	Pass/Pass	48-120	33	28			
			Endosulfan sulfate	Pass/Pass	56-120	31	21			
			Heptachlor	Pass/Pass	35-120	33	26			
			Heptachlor epoxide	Pass/Pass	49-120	29	24			
			Endrin ketone	Pass/Pass	51-120	30	25			
			Methoxychlor	Pass/Pass	44-129	28	20			
580-155638-1	LCS 580-508533/4 LCSD 580-508533/5	None for qualification, samples ND	Methylene Chloride	185/178	77-125	Pass	18	--	--	--
	LCS 580-508227/2-A LCSD 580-508227/3-A		Toxaphene	Pass/Pass	50-150	20	15			
	LCS 580-508643/5 LCSD 580-508643/6		Methylene Chloride	594/549	77-125	Pass	18			
	LCS 580-508227/4-A LCSD 580-508227/5-A	None for qualification, one recovery passes	delta-BHC	50/Pass	51-120	Pass	23	--	--	--
		None for qualification, samples ND	beta-BHC	Pass/Pass	54-120	24	19			
			4,4'-DDD	Pass/Pass	53-120	24	19			
			4,4'-DDT	Pass/Pass	39-122	27	20			
			Endosulfan sulfate	Pass/Pass	56-120	28	21			
			Methoxychlor	Pass/Pass	44-129	29	20			
			Endrin ketone	Pass/Pass	51-120	27	25			
580-156495-1	LCS 580-510479/2-A LCSD 580-510479/3-A	FILTB-01-121025 RB-01-121125	delta-BHC	18/18	51-120	Pass	23	ND	µg/L	UJ

Table 4
Laboratory Control Spike Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Spike Sample ID	Associated Sample	Analyte	Recovery (%)	Limit (%)	RPD	RPD Limit	Result	Units	ERM Qualifier

Notes:

-- = not applicable; associated data not affected

LCS = laboratory control sample

LCSD = laboratory control sample duplicate

µg/L = micrograms per liter

ND = not detected

RPD = relative percent difference

UJ = non-detected, estimated report limit

Table 5
Matrix Spike Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Spike Sample ID	Associated Sample	Analyte	Recovery (%)	Limit (%)	RPD	RPD Limit	Result	Units	ERM Qualifier
580-155638-1	PMW-20G-110625 MS/MSD	PMW-20G-110625	Methylene chloride	0/0	77-125	NC	18	ND	µg/L	R
			Perchlorate	62/65	80-120	Pass	15	4.0	µg/L	J-
			Chloride	59/62	90-110	Pass	15	180	mg/L	J-
580-156488-1	PMW-09B-121025 MS/MSD	PMW-09B-121025	Chloride	76/75	90-110	Pass	15	140	mg/L	J-
580-156488-2	PMW-09B-121025 MS/MSD	PMW-09B-121025	Methylene chloride	0/0	77-125	NC	18	ND	µg/L	R
		None for qualification, parent sample ND	Benzene	Pass/124	80-122	Pass	14	--	--	--
			Chlorobromomethane	Pass/128	78-120	Pass	13			
			1,1-Dichloroethene	Pass/135	70-129	Pass	23			
			Dibromomethane	Pass/122	80-120	Pass	11			
			Dichlorodifluoromethane	Pass/151	20-150	Pass	33			
			m,p-Xylenes	Pass/122	80-120	Pass	14			
			o-Xylene	Pass/122	80-120	Pass	16			
			trans-1,2-Dichloroethene	Pass/129	75-120	Pass	21			
580-156557-1	PA-32I-121225 MS/MSD	None for qualification, parent sample ND	1,1-Dichloroethene	142/143	60-129	Pass	29	--	--	--
			Chlorobromomethane	132/132	79-121	Pass	20			
			Chloroethane	152/150	54-140	Pass	33			
			Chloroform	129/128	75-120	Pass	21			
			Dichlorodifluoromethane	153/151	20-150	Pass	30			
			Trichlorofluoromethane	152/150	60-132	Pass	32			
			trans-1,2-Dichloroethene	125/129	69-121	Pass	27			
			1,1-Dichloroethane	Pass/121	74-120	Pass	26			
			Chloromethane	Pass/153	32-150	Pass	33			

Notes:

-- = not applicable; associated data not affected

J- = detected results are estimated with a low bias

MS = matrix spike

MSD = matrix spike duplicate

µg/L = micrograms per liter

mg/L = milligrams per liter

NC = not calculated

ND = not detected

R = The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria.

RPD = relative percent difference

Table 6
Surrogate Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Sample ID	Method	Surrogate	Recovery (%)	Limit (%)	Affected Analyte	Dilution Factor	ERM Qualifier
580-155538-1	PMW-02B-110425	8081B	DCB Decachlorobiphenyl	41	50-120	All	1	UJ
	RB-01-110525		DCB Decachlorobiphenyl	18	50-120	All		UJ
	PMW-08B-110525		DCB Decachlorobiphenyl	43	50-120	4,4'-DDD		J-
					All remaining analytes	UJ		
	LCS 580-508050/6-A		DCB Decachlorobiphenyl	28	50-120	None for qualification, QC sample	--	--
			Tetrachloro-m-xylene	37	42-120			
	MB 580-508143/1-A		DCB Decachlorobiphenyl	4	50-120			
			Tetrachloro-m-xylene	3	42-120			
580-156488-2	PMW-05b2-121025	8260D	Toluene-d8	121	80-120	Tetrachloroethene	1	J+
	PMW-05b-121125		Toluene-d8	131	80-120	Toluene		
	DUP-02-121125		Toluene-d8	131	80-120	Toluene		
	PMW-04b-121125	8260D	Toluene-d8	539	80-120	Toluene	1	J+
						Tetrachloroethene		
						o-Xylene		
						Styrene		
						Isopropylbenzene		
						Bromobenzene		
4-Bromofluorobenzene			398	80-120	1,3-Dichlorobenzene			
			1,4-Dichlorobenzene					
580-156557-1	PA-26d-121525	8260D	Dibromofluoromethane	123	80-120	None for qualification, sample ND	1	--
	PA-09-121525	8260D	Dibromofluoromethane	121	80-120	None for qualification, detected analyte not associated with surrogate	1	--
	MWA-56d-121525	8260D	1,2-Dichloroethane-d4 (12/18/25)	126	80-120	None for qualification, sample ND	1	--
			Dibromofluoromethane (12/18/25)	125	80-120			
			Dibromofluoromethane (12/22/25)	123	80-120	None for qualification, analyte not associated with surrogate		
			1,2-Dichloroethane-d4 (12/24/25)	123	80-120	None for qualification, dilution factor ≥ 10	10	
	MWA-58D-121525	8260D	1,2-Dichloroethane-d4	124	80-120	None for qualification, analyte not associated with surrogate	1	--
			Dibromofluoromethane	125	80-120			

Table 6
Surrogate Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Sample ID	Method	Surrogate	Recovery (%)	Limit (%)	Affected Analyte	Dilution Factor	ERM Qualifier

Notes:

-- = not applicable; associated data not affected
J- = detected results are estimated with a low bias
J+ = detected results are estimated with a high bias
ND = not detected
UJ = non-detected, estimated report limit

Table 7
Field Duplicate Evaluation
Fourth Quarter 2025 Groundwater
Arkema
Portland, Oregon

Lab Package	Primary/Duplicate Sample ID	Analyte	Concentration		Report Limit		Units	AbD	RPD	Limit	ERM Qualifier
			Sample	Duplicate	Sample	Duplicate					
580-155538-1	PMW-08g-110525/ DUP-01-110525	Chloroform	1.5	1.4	1.0	1.0	µg/L	0.1	--	2.0	--
		Chlorobenzene	4.6	4.5	1.0	1.0		0.1	--	2.0	--
		Chloride	3800	3800	150	150	mg/L	--	0	30	--
580-156384-1	PA-17iR-120925/ Dup-01-120925	Toluene	0.13	0.12	0.20	0.20	µg/L	--	--	NA	--
		Tetrachloroethene	0.11	ND	0.50	0.50	µg/L	--	--	NA	--
		Chloride	24	24	1.5	1.5	mg/L	--	0	30	--
580-156488-1	PMW-05b-121125/ Dup-02-121125	4,4'-DDT	0.036	0.0084	0.020	0.020	µg/L	--	--	NA	--
		Perchlorate	6200	6400	400	400	µg/L	--	3.2	30	--
		Chloride	1700	1700	75	75	mg/L	--	0	30	--
580-156488-2	PMW-05b-121125/ Dup-02-121125	1,1-Dichloroethane	1.7	1.7	1.0	1.0	µg/L	0.0	--	2.0	--
		cis-1,2-Dichloroethene	0.92	0.90	1.0	1.0		--	--	NA	--
		Chloroform	4.5	4.4	1.0	1.0		0.1	--	2.0	--
		Benzene	2.6	2.5	1.0	1.0		0.1	--	2.0	--
		1,2-Dichloroethane	0.57	0.55	1.0	1.0		--	--	NA	--
		Trichloroethene	1.0	0.97	1.0	1.0		--	--	NA	--
		Toluene	0.68	0.68	1.0	1.0		--	--	NA	--
		1,4-Dichlorobenzene	0.26	0.26	1.0	1.0		--	--	NA	--
		Chlorobenzene	2000	2000	100	100		--	0	30	--

Notes:

-- = not applicable; associated data not affected

AbD = absolute Difference

µg/L = micrograms per liter

mg/L = milligrams per liter

NA = not applicable

ND = not detected

RPD = relative percent difference



APPENDIX D PRIOR GROUNDWATER MONITORING PROGRAM DATA TABLES AND GRAPHS

Appendix D
Prior Groundwater Monitoring Plan Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Cluster	Sample ID	Date	Chloride	Chlorobenzene	Perchlorate
					ug/L	ug/L	ug/L
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-102319	10/23/2019	5,900	< 0.44 U	< 0.95 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-021220	02/12/2020	10,900	0.16 j	< 0.95 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-051820	05/18/2020	14,000	< 0.025 U	< 0.95 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-081820	08/18/2020	16,000	< 0.025 U	< 0.95 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-102720	10/27/2020	5,800	< 0.025 U	< 0.95 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-031821	03/18/2021	18,000	< 0.025 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-092221	09/22/2021	10,000	< 0.025 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-121421	12/14/2021	5,300	< 0.025	< 2.0
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-031422	03/14/2022	14,000 J-	< 0.060 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-060622	06/06/2022	9,600	< 0.060 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-110722	11/07/2022	21,000	< 0.060 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-030623	03/06/2023	7,800	< 0.060 U	< 2.0 UJ
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-061323	06/13/2023	7,500	< 0.060	< 2.0
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-082123	08/21/2023	7,100	< 0.060 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-121023	12/10/2023	5,600	< 0.20 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-022624	02/26/2024	8,000	< 0.060 U	< 2.0 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-061024	06/10/2024	7,600	0.060 j	2.6 j
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-091024	09/10/2024	18,000	< 0.060 U	< 0.91 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-121124	12/11/2024	4,900 J+	< 0.060 U	< 0.91 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-021825	02/18/2025	5,400	< 0.060	< 0.91
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-051325	05/13/2025	8,600	< 0.070	< 0.91
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-090325	09/03/2025	4,200 J+	< 0.060 U	< 0.91 U
Shallow	MWA-41	GCC6 & Proximal Wells	MWA-41-120825	12/08/2025	4,300	< 0.060 U	< 0.43 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-110619	11/06/2019	83,000	< 44 U	< 0.95 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-021720	02/17/2020	8,400	< 0.44 U	< 0.95 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-052620	05/26/2020	13,000	< 0.44 U	< 0.95 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-082420	08/24/2020	29,000	< 0.44 U	< 0.95 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-110320	11/03/2020	71,000	< 0.44 U	< 4.8 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-032921	03/29/2021	7,200 J	< 0.44 U	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-092321	09/23/2021	58,000 J	< 0.44 UJ	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-121521	12/15/2021	14,000	< 0.44	< 2.0
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-031522	03/15/2022	5,500 J-	< 4.4 UJ	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-060822	06/08/2022	4,900	< 0.30 U	13
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-110922	11/09/2022	33,000	< 0.44 U	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-030923	03/09/2023	5,500	5.6 j	< 10 UJ
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-061523	06/15/2023	5,700 j	< 0.44	< 2.0
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-082323	08/23/2023	17,000	< 0.44 U	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-121223	12/12/2023	15,000	< 0.44 U	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-022724	02/27/2024	4,500	< 4.4 U	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-061324	06/13/2024	6,600	< 0.44 U	< 2.0 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-091024	09/10/2024	23,000	< 0.44 U	< 0.91 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-121024	12/10/2024	15,000 J+	< 0.44 U	< 4.5 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-022125	02/21/2025	5,800	< 4.4	< 1.8
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-051425	05/14/2025	4,700	< 0.30 UJ	< 4.5
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-090425	09/04/2025	20,000	< 0.44 U	< 0.91 U
Shallow	MWA-63	GCC1 & Proximal Wells	MWA-63-120925	12/09/2025	14,000	< 0.22 U	< 0.43 U
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-102319	10/23/2019	14,700	< 0.44 U	190
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-021120	02/11/2020	34,800	0.24	< 48 U
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-051920	05/19/2020	10,000	< 0.025 U	71 j
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-081820	08/18/2020	15,000	0.030 j	530
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-102720	10/27/2020	14,000	< 0.20 U	77
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-031821	03/18/2021	11,000 J	< 0.025 U	290
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-092121	09/21/2021	14,000	< 0.025 U	56
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-121421	12/14/2021	13,000	< 0.025	150
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-031422	03/14/2022	11,000 J-	< 0.060 U	52
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-060622	06/06/2022	11,000	< 0.060 U	340
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-110722	11/07/2022	9,000	< 0.060 U	120
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-030623	03/06/2023	11,000	< 0.060 U	210 J-
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-061323	06/13/2023	9,900	< 0.060	150
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-082123	08/21/2023	9,700	< 0.060 U	210
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-121023	12/10/2023	14,000	< 0.20 U	< 10 U
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-022524	02/25/2024	7,900	< 0.060 U	20
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-061024	06/10/2024	11,000	0.11 j	270
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-090924	09/09/2024	11,000	< 0.060 U	220
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-121124	12/11/2024	9,200 J+	< 0.060 U	56
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-021825	02/18/2025	9,100	< 0.060	420
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-051325	05/13/2025	9,400	< 0.070	93
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-090225	09/02/2025	8,800	< 0.060 U	150
Shallow	MWA-82	GCC6 & Proximal Wells	MWA-82-120825	12/08/2025	8,500	< 0.060 U	5.6
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-102519	10/25/2019	9,700	< 0.44 U	< 4.8 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-021420	02/14/2020	9,700	0.29	< 48 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-052120	05/21/2020	8,300	< 0.025 U	< 48 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-081820	08/18/2020	10,000	< 0.025 U	< 95 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-102820	10/28/2020	< 9,000 U	< 0.025 U	< 19 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-032221	03/22/2021	9,600 J	< 0.025 U	< 20 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-092221	09/22/2021	7,800	< 0.025 U	< 20 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-121321	12/13/2021	7,300	< 0.025	< 20
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-031622	03/16/2022	7,300	< 0.060 U	< 20 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-060822	06/08/2022	5,500	< 0.070 U	< 4.0 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-110822	11/08/2022	6,200	< 0.060 U	< 4.0 U

Appendix D
 Prior Groundwater Monitoring Plan Data Table
 Arkema Quarter 4, 2025, Groundwater Monitoring Report
 Arkema Inc. Facility
 Portland, Oregon

Aquifer	Well ID	Cluster	Sample ID	Date	Chloride	Chlorobenzene	Perchlorate
					ug/L	ug/L	ug/L
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-030723	03/07/2023	6,500	< 0.060 U	< 4.0 UJ
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-061423	06/14/2023	4,500	< 0.060	< 2.0
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-082223	08/22/2023	4,500	< 0.060 U	< 2.0 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-121123	12/11/2023	4,600	< 0.060 U	< 4.0 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-022624	02/26/2024	4,200	< 0.20 U	< 2.0 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-061224	06/12/2024	3,700	< 0.060 U	< 10 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-090924	09/09/2024	3,800	< 0.060 U	< 9.1 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-120924	12/09/2024	4,300 J+	< 0.060 U	< 9.1 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-022025	02/20/2025	3,900	< 0.060	< 18
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-051325	05/13/2025	9,300	< 0.070	< 36
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-090225	09/02/2025	3,600 J+	< 0.060 U	< 4.5 U
Shallow	PA-03	GCC1 & Proximal Wells	PA-03-121225	12/12/2025	4,400	< 0.060 U	< 17 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-102819	10/28/2019	14,300	< 2.0 U	< 4.8 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-021720	02/17/2020	13,700	0.14 j	< 48 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-052220	05/22/2020	12,000	< 0.025 U	< 4.8 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-081920	08/19/2020	14,000 J+	< 0.025 U	< 19 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-102920	10/29/2020	12,000	< 0.025 U	< 4.8 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-032421	03/24/2021	7,900 J	< 0.025 U	< 20 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-092221	09/22/2021	11,000	< 0.025 U	< 10 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-121321	12/13/2021	7,000	< 0.025	< 20
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-031722	03/17/2022	6,500	< 0.060 U	< 2.0 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-060822	06/08/2022	7,900	< 0.35 U	< 2.0 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-110922	11/09/2022	4,600	< 0.060 U	< 4.0 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-030823	03/08/2023	5,400	< 0.060 U	< 10 UJ
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-061523	06/15/2023	6,900 j	< 0.060	< 4.0
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-082223	08/22/2023	5,900	< 0.060 U	< 10 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-121223	12/12/2023	6,100	< 0.060 U	< 2.0 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-022724	02/27/2024	5,300	< 0.060 U	< 4.0 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-061224	06/12/2024	5,700	< 0.060 U	< 2.0 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-091024	09/10/2024	4,900	< 0.060 U	< 4.5 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-121024	12/10/2024	5,200 J+	< 0.060 U	< 9.1 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-022125	02/21/2025	4,000	< 0.060	< 9.1
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-051325	05/13/2025	60,000	< 0.35	< 9.1
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-090425	09/04/2025	5,000	< 0.060 U	< 4.5 U
Shallow	PA-04	GCC1 & Proximal Wells	PA-04-121225	12/12/2025	5,800	< 0.060 U	< 17 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-102219	10/22/2019	201,000	< 0.44 U	< 19 U
Shallow	PA-08	GCC6 & Proximal Wells	Pa-08-021320	02/13/2020	197,000	0.53	< 48 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-051920	05/19/2020	130,000	0.11 j	< 48 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-081820	08/18/2020	100,000	< 0.025 U	< 48 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-102720	10/27/2020	130,000	0.092 j	< 19 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-031821	03/18/2021	110,000	< 0.025 U	< 20 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-092121	09/21/2021	200,000	< 0.25 U	< 20 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-121321	12/13/2021	130,000	0.084	< 20
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-031422	03/14/2022	250,000 J-	< 0.060 U	< 20 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-060622	06/06/2022	330,000	< 0.60 U	< 20 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-110722	11/07/2022	770,000	< 0.060 U	< 10 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-030723	03/07/2023	380,000	0.24	< 10 UJ
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-061323	06/13/2023	110,000	< 0.060	11
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-082123	08/21/2023	53,000	< 0.060 U	17
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-121123	12/11/2023	29,000	< 0.060 U	< 4.0 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-022624	02/26/2024	140,000	< 0.060 U	< 10 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-061024	06/10/2024	190,000	0.10 j	19 j
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-090924	09/09/2024	280,000	< 0.060 U	< 9.1 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-120924	12/09/2024	230,000	< 0.060 U	33
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-022025	02/20/2025	460,000	< 0.060	28
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-051225	05/12/2025	260,000	< 0.70	< 36
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-090225	09/02/2025	430,000	< 0.060 U	< 4.5 U
Shallow	PA-08	GCC6 & Proximal Wells	PA-08-121525	12/15/2025	38,000	0.060 j	< 4.3 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-110119	11/01/2019	23,600	< 0.44 U	< 48 U
Shallow	PA-09	GCC6 & Proximal Wells	Pa-09-021220	02/12/2020	199,000	0.16 j	< 0.95 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-051820	05/18/2020	14,000	< 0.025 U	< 19 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-081820	08/18/2020	160,000 J+	< 0.025 U	< 19 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-102820	10/28/2020	14,000 J+	< 0.20 U	40
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-031621	03/16/2021	19,000	< 0.025 U	36
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-092121	09/21/2021	61,000	< 0.25 U	< 20 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-121321	12/13/2021	13,000	< 0.25	< 20
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-031522	03/15/2022	24,000 J-	< 0.060 U	20
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-060722	06/07/2022	19,000	< 0.060 U	120
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-110822	11/08/2022	68,000	< 0.060 U	< 10 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-030723	03/07/2023	120,000 j	0.39	< 4.0 UJ
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-061323	06/13/2023	110,000	< 0.060	6.2
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-082123	08/21/2023	5,700	< 0.060 U	< 2.0 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-121123	12/11/2023	5,600	< 0.060 U	< 2.0 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-022624	02/26/2024	160,000	< 0.060 U	< 20 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-061024	06/10/2024	130,000	< 0.060 U	11 j
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-090924	09/09/2024	15,000	< 0.060 U	84
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-121024	12/10/2024	6,600 J+	< 0.060 U	< 4.5 U
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-022025	02/20/2025	180,000	< 0.060	< 9.1
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-051225	05/12/2025	69,000	< 0.070	< 4.5
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-090225	09/02/2025	32,000	< 0.060 U	4.8 j

Appendix D
 Prior Groundwater Monitoring Plan Data Table
 Arkema Quarter 4, 2025, Groundwater Monitoring Report
 Arkema Inc. Facility
 Portland, Oregon

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					ug/L	ug/L	ug/L
Shallow	PA-09	GCC6 & Proximal Wells	PA-09-121525	12/15/2025	12,000	0.061 j	68
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-103019	10/30/2019	9,300	< 0.44 U	< 9.5 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-021820	02/18/2020	10,500	0.15 j	< 48 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-052720	05/27/2020	9,500	< 0.025 U	< 9.5 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-082420	08/24/2020	8,800 J+	< 0.025 U	< 9.5 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-110220	11/02/2020	8,200 j	< 0.025 U	< 4.8 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-032921	03/29/2021	5,500 J	< 0.025 U	< 20 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-092321	09/23/2021	8,700	< 0.025 U	< 10 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-121521	12/15/2021	7,000	< 0.025	< 20
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-031522	03/15/2022	4,500 J-	< 0.060 U	< 10 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-060922	06/09/2022	4,300	< 0.070 U	< 100 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-110822	11/08/2022	5,900	< 0.060 U	< 4.0 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-030723	03/07/2023	5,800 J+	< 0.060 U	< 2.0 UJ
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-061623	06/16/2023	2,500	< 0.060	< 40
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-082423	08/24/2023	4,600	< 0.060 U	< 4.0 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-121223	12/12/2023	6,400	< 0.060 U	< 2.0 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-022724	02/27/2024	3,500	< 0.060 U	< 2.0 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-061324	06/13/2024	3,800	< 0.060 U	< 10 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-091124	09/11/2024	8,300	< 0.060 U	< 4.5 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-121024	12/10/2024	4,200 J+	< 0.060 U	< 4.5 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-021925	02/19/2025	3,400 J+	< 0.060	< 9.1
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-051425	05/14/2025	3,400	< 0.070 UJ	< 9.1
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-090425	09/04/2025	7,600	< 0.060 U	< 4.5 U
Shallow	PA-31	GCC1 & Proximal Wells	PA-31-121225	12/12/2025	2,200	< 0.060 U	< 4.3 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-102319	10/23/2019	49,800	< 0.44 U	< 0.95 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-021220	02/12/2020	37,300	0.26	< 0.95 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-051820	05/18/2020	95,000	< 0.025 U	< 0.95 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-081820	08/18/2020	190,000	< 0.025 U	< 0.95 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-102720	10/27/2020	66,000	< 0.025 U	< 0.95 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-031821	03/18/2021	42,000	< 0.025 U	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-092221	09/22/2021	130,000	< 0.025 U	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-121421	12/14/2021	58,000	< 0.025	< 4.0
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-031422	03/14/2022	14,000 J-	< 0.060 U	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-060622	06/06/2022	34,000	< 0.060 U	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-110722	11/07/2022	610,000	< 0.060 U	< 10 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-030623	03/06/2023	95,000	< 0.060 U	< 2.0 UJ
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-061323	06/13/2023	27,000	< 0.060	< 2.0
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-082123	08/21/2023	19,000	< 0.060 U	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-121023	12/10/2023	39,000	< 0.20 U	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-022624	02/26/2024	23,000	< 0.060 U	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-061024	06/10/2024	26,000	0.085 j	< 2.0 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-091024	09/10/2024	8,400	< 0.060 U	< 0.91 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-121124	12/11/2024	33,000 J+	< 0.060 U	< 0.91 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-021825	02/18/2025	12,000	< 0.060	< 0.91
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-051325	05/13/2025	28,000	< 0.070	< 0.91
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-090325	09/03/2025	38,000	< 0.060 U	< 0.91 U
Intermediate	MWA-81i	GCC6 & Proximal Wells	MWA-81i-120825	12/08/2025	42,000	< 0.060 U	< 8.6 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-102519	10/25/2019	119,000	< 0.44 U	< 4.8 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-021720	02/17/2020	98,600	0.52	< 48 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-052620	05/26/2020	82,000	0.51	< 48 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-081920	08/19/2020	67,000	0.52	< 95 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-102920	10/29/2020	82,000	0.70	< 4.8 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-032421	03/24/2021	1,300,000	< 0.44 U	< 20 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-092221	09/22/2021	76,000	0.67	< 20 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-121321	12/13/2021	72,000	0.65	< 20
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-031722	03/17/2022	90,000	< 0.060 U	< 20 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-060822	06/08/2022	84,000	0.37 j	< 2.0 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-110922	11/09/2022	45,000	1.5	< 10 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-030823	03/08/2023	41,000	5.7	< 10 UJ
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-061623	06/16/2023	35,000	1.3 J+	< 20
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-082223	08/22/2023	53,000	0.67	< 4.0 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-121223	12/12/2023	58,000	0.90	< 4.0 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-022724	02/27/2024	55,000	0.53	< 10 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-061224	06/12/2024	44,000	0.71	< 10 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-091024	09/10/2024	30,000	< 0.060 U	< 9.1 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-121024	12/10/2024	25,000 J+	0.64	< 91 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-022125	02/21/2025	27,000	1.0	< 36
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-051425	05/14/2025	36,000	0.82 J-	< 36
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-090425	09/04/2025	5,000	< 0.060 U	< 4.5 U
Intermediate	PA-10i	GCC1 & Proximal Wells	PA-10i-121225	12/12/2025	12,000	< 0.060 U	< 17 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-110519	11/05/2019	115,000	< 0.44 U	< 48 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-021820	02/18/2020	249,000	< 0.025 U	< 48 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-051820	05/18/2020	270,000	< 0.025 U	< 48 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-081720	08/17/2020	250,000	< 0.025 U	< 48 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-102620	10/26/2020	230,000	< 2.5 U	< 4.8 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-031721	03/17/2021	260,000	< 0.025 U	< 20 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-092121	09/21/2021	360,000	< 0.25 U	< 20 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-121421	12/14/2021	340,000	< 0.025	< 20
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-031422	03/14/2022	250,000 J-	< 0.060 U	< 20 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15i-060622	06/06/2022	300,000	< 0.60 U	< 20 U

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 Arkema Quarter 4, 2025, Groundwater Monitoring Report
 Arkema Inc. Facility
 Portland, Oregon

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					ug/L	ug/L	ug/L
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-110722	11/07/2022	850,000	0.29	< 10 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-030823	03/08/2023	290,000	< 0.060 U	< 10 UJ
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-061323	06/13/2023	290,000	0.073 j	< 4.0
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-082123	08/21/2023	41,000	< 0.060 U	< 10 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-121123	12/11/2023	4,400	< 0.20 U	< 10 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-022624	02/26/2024	20,000	< 0.060 U	< 10 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-061224	06/12/2024	86,000 J-	< 0.060 U	< 10 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-090924	09/09/2024	59,000	< 0.060 U	< 9.1 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-121124	12/11/2024	64,000	< 0.060 U	< 9.1 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-021825	02/18/2025	44,000	< 0.060	< 18
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-051225	05/12/2025	34,000	< 0.70	< 36
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-090325	09/03/2025	42,000	< 0.060 U	< 4.5 U
Intermediate	PA-15i	GCC6 & Proximal Wells	PA-15I-121525	12/15/2025	14,000	< 0.060 U	< 4.3 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-110419	11/04/2019	319,000	< 0.44 U	< 48 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-021220	02/12/2020	186,000	0.22	< 48 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-051920	05/19/2020	150,000	0.073 j	< 48 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-081920	08/19/2020	95,000 J+	0.13 j	< 48 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-102720	10/27/2020	69,000	0.31	< 4.8 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-031721	03/17/2021	140,000	< 0.025 U	< 20 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-092121	09/21/2021	50,000	< 0.25 U	< 10 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-121421	12/14/2021	95,000	0.21	< 20
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-031522	03/15/2022	110,000 J-	< 0.060 U	< 10 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-060722	06/07/2022	110,000	< 0.30 U	< 20 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-110822	11/08/2022	270,000	< 0.060 U	< 4.0 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-030823	03/08/2023	530,000	< 0.060 U	< 20 UJ
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-061423	06/14/2023	120,000 J-	< 0.060	< 4.0
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-082223	08/22/2023	35,000	< 0.060 U	< 4.0 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-121123	12/11/2023	12,000	< 0.20 U	< 4.0 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-022724	02/27/2024	12,000	< 0.060 U	< 20 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-061024	06/10/2024	17,000	< 0.060 U	< 10 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-121024	12/10/2024	15,000 J+	0.15 j	< 9.1 U
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-022125	02/21/2025	32,000	< 0.060	< 36
Intermediate	PA-16i	GCC6 & Proximal Wells	PA-16I-051225	05/12/2025	11,000	< 0.35	< 9.1
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-102819	10/28/2019	73,600	0.57 j	< 48 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-021920	02/19/2020	65,400	24	< 190 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-052120	05/21/2020	60,000	0.16 j	< 48 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-082420	08/24/2020	62,000	< 0.025 U	< 95 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-102820	10/28/2020	50,000	< 0.20 U	< 4.8 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-032321	03/23/2021	43,000	0.15 J	< 20 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-092221	09/22/2021	35,000	< 0.025 U	< 20 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-121321	12/13/2021	30,000	< 0.025	< 20
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-031622	03/16/2022	23,000	0.072 j	< 20 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-060822	06/08/2022	26,000	< 0.70 U	< 10 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-110822	11/08/2022	13,000	< 0.60 U	< 10 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-030823	03/08/2023	25,000	< 0.060 U	< 10 UJ
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-061423	06/14/2023	15,000	0.073 j	< 4.0
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-082223	08/22/2023	8,800 J	< 0.060 U	< 2.0 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-121123	12/11/2023	20,000	< 0.20 U	< 4.0 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-022624	02/26/2024	32,000	< 0.060 U	< 2.0 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-061224	06/12/2024	35,000	0.16 j	< 10 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-090924	09/09/2024	43,000	< 0.060 U	< 9.1 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-120924	12/09/2024	49,000	0.12 j	< 91 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-022125	02/21/2025	58,000	< 0.44	< 91
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-051325	05/13/2025	57,000	< 0.70	< 91
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-090225	09/02/2025	41,000	< 0.060 U	< 4.5 U
Intermediate	PA-17iR	GCC1 & Proximal Wells	PA-17iR-120925	12/09/2025	24,000	< 0.060 U	< 17 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-103019	10/30/2019	161,000	< 0.44 U	< 48 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-021820	02/18/2020	170,000	0.50 J+	< 190 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-052220	05/22/2020	160,000	0.28	< 48 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-082120	08/21/2020	150,000 J+	0.30	< 95 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-110220	11/02/2020	170,000	< 0.025 U	< 48 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-040121	04/01/2021	130,000	0.43	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-092321	09/23/2021	100,000	< 0.025 U	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-121521	12/15/2021	93,000	0.29	< 20
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-031522	03/15/2022	89,000 J-	0.28 J+	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-060922	06/09/2022	87,000	< 0.70 U	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-110822	11/08/2022	75,000 J-	0.28	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-030723	03/07/2023	83,000 j	< 0.060 U	< 20 UJ
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-061623	06/16/2023	31,000	< 0.29 U	< 40
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-082423	08/24/2023	71,000	0.13 j	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-121323	12/13/2023	32,000	0.15 j	< 4.0 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-022824	02/28/2024	7,600,000	0.29	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-061324	06/13/2024	85,000	0.36	< 20 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-091124	09/11/2024	88,000	0.21	< 18 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-121024	12/10/2024	79,000	0.29	< 91 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-022025	02/20/2025	44,000	< 0.060	< 91
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-051425	05/14/2025	47,000	< 0.35 UJ	< 91
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-090425	09/04/2025	67,000	0.19 j	< 4.5 U
Intermediate	PA-32i	GCC1 & Proximal Wells	PA-32I-121225	12/12/2025	4,700	< 0.060 U	< 17 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44I-102919	10/29/2019	243,000	< 0.44 U	< 4.8 U

Appendix D
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Arkema Quarter 4, 2025, Groundwater Monitoring Report
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Portland, Oregon

Aquifer	Well ID	Cluster	Sample ID	Date	Chloride	Chlorobenzene	Perchlorate
					ug/L	ug/L	ug/L
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-021220	02/12/2020	99,200	0.18 j	< 48 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-051920	05/19/2020	53,000	< 0.025 U	< 95 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-081820	08/18/2020	76,000	< 0.025 U	< 48 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-102720	10/27/2020	34,000	< 0.025 U	< 4.8 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-031621	03/16/2021	60,000	< 0.025 U	7.1 J
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-092321	09/23/2021	39,000	< 0.025 U	390
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-121421	12/14/2021	51,000	< 0.025	130
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-031522	03/15/2022	23,000 J-	< 0.060 U	270
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-060622	06/06/2022	47,000	< 0.30 U	66
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-110722	11/07/2022	75,000	< 0.060 U	< 2.0 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-030623	03/06/2023	15,000	< 0.060 U	< 2.0 UJ
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-061323	06/13/2023	20,000	< 0.060	< 2.0
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-082223	08/22/2023	370,000	< 0.060 U	< 10 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-121023	12/10/2023	1,900	< 0.060 U	< 4.0 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-022524	02/25/2024	93,000	< 0.060 U	< 10 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-061124	06/11/2024	320,000	< 0.060 U	< 10 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-091024	09/10/2024	220,000	< 0.060 U	< 4.5 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-121124	12/11/2024	55,000	< 0.060 U	< 9.1 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-021825	02/18/2025	< 1,500 U	< 0.060	< 0.91
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-051325	05/13/2025	62,000	< 0.35	< 36
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-090325	09/03/2025	190,000	< 0.060 U	< 4.5 U
Intermediate	PA-44i	GCC6 & Proximal Wells	PA-44i-121525	12/15/2025	2,500	< 0.060 U	< 4.3 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-110519	11/05/2019	1,640,000	< 0.44 U	< 48 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(d)-022620	02/26/2020	1,480,000	2.4 U	< 0.95 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(d)-052920	05/29/2020	1,600,000	< 0.025 U	< 9.5 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(d)-082720	08/27/2020	1,500,000	0.071 j	< 0.95 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(d)-110420	11/04/2020	1,500,000	0.64 J	< 4.8 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-040221	04/02/2021	180,000	0.039 J	< 20 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-092421	09/24/2021	1,700,000	0.047 j	< 10 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-121621	12/16/2021	1,500,000	< 0.025	< 20
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-031722	03/17/2022	2,200,000	0.060 j	< 20 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-060922	06/09/2022	2,000,000	< 0.70 U	< 20 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-111022	11/10/2022	1,600,000	1.1	< 40 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-030923	03/09/2023	1,200,000	< 0.060 U	< 20 UJ
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-061623	06/16/2023	450,000	7.0	< 10
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-082323	08/23/2023	830,000	< 0.060 U	< 10 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-121323	12/13/2023	780,000	< 0.060 U	< 10 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-022824	02/28/2024	6,300,000	0.061 j	< 10 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-061324	06/13/2024	650,000	< 0.060 U	< 10 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-091124	09/11/2024	530,000	< 0.060 U	< 0.91 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-121224	12/12/2024	570,000	< 0.060 U	< 0.91 U
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-022125	02/21/2025	730,000	< 0.060	< 0.91
Deep	MWA-11i(d)	Well Distal from BW and GCCs	MWA-11i(D)-051425	05/14/2025	900,000	< 0.070 UJ	< 0.91
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(d)-102419	10/24/2019	25,900,000	0.57 j	100,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-021320	02/13/2020	27,700,000	0.58 j	91,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-052020	05/20/2020	27,000,000	< 0.44 U	100,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-081920	08/19/2020	23,000,000	0.52 j	89,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(d)-103020	10/30/2020	30,000,000	< 0.44 U	91,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-032421	03/24/2021	27,000,000	< 0.44 U	91,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-092321	09/23/2021	29,000,000	< 0.44 U	91,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-121521	12/15/2021	18,000,000	< 0.44	99,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-031622	03/16/2022	20,000,000	< 0.44 U	97,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-060722	06/07/2022	28,000,000	0.32 j	100,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-111022	11/10/2022	19,000,000	0.55 J	97,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-030923	03/09/2023	25,000,000	0.58 j	97,000 J-
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-061523	06/15/2023	16,000,000	< 1.0 U	86,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-082323	08/23/2023	27,000,000	< 0.44 U	98,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-121123	12/11/2023	14,000,000	< 0.44 U	28,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-022824	02/28/2024	26,000,000	< 0.44 U	100,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-061224	06/12/2024	21,000,000	< 4.4 U	100,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-091024	09/10/2024	16,000,000	< 0.44 U	87,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-121224	12/12/2024	13,000,000	< 0.44 U	74,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-021925	02/19/2025	6,000,000	< 0.44	3,700
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-051325	05/13/2025	22,000,000	0.43 J-	100,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-090425	09/04/2025	22,000,000	< 0.44 U	110,000
Deep	MWA-31i(d)	GCC5 & Proximal Wells	MWA-31i(D)-120925	12/09/2025	23,000,000	0.28 j	120,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-102419	10/24/2019	20,100,000	< 0.44 U	3,300
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-021420	02/14/2020	22,300,000	< 2.0 U	3,500
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-052120	05/21/2020	21,000,000	< 0.44 U	5,700
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-082020	08/20/2020	24,000,000	< 0.44 U	6,400
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56d-102920	10/29/2020	22,000,000	< 0.44 U	7,100
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-032521	03/25/2021	26,000,000	< 4.4 U	6,500
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-092421	09/24/2021	21,000,000	< 0.44 U	8,100
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-121621	12/16/2021	18,000,000	< 0.44	8,400
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-031722	03/17/2022	19,000,000	< 0.44 U	9,200
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-060822	06/08/2022	18,000,000	< 0.30 U	11,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-110922	11/09/2022	15,000,000	< 0.44 U	12,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-030923	03/09/2023	16,000,000	< 0.44 U	15,000 J-
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-061523	06/15/2023	15,000,000	< 4.4	13,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-082323	08/23/2023	14,000,000	< 4.4 U	14,000

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Arkema Quarter 4, 2025, Groundwater Monitoring Report
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Portland, Oregon

Aquifer	Well ID	Cluster	Sample ID	Date	Chloride	Chlorobenzene	Perchlorate
					ug/L	ug/L	ug/L
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-121223	12/12/2023	14,000,000	< 4.4 U	14,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-022824	02/28/2024	14,000,000	< 4.4 U	16,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-061224	06/12/2024	13,000,000	< 4.4 U	15,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-091124	09/11/2024	10,000,000	< 4.4 U	14,000 J
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-121224	12/12/2024	12,000,000	< 4.4 U	13,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-021925	02/19/2025	13,000,000	< 4.4	13,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-051425	05/14/2025	14,000,000	< 0.30 UJ	12,000
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-090425	09/04/2025	12,000,000 J	< 0.44 U	14,000 J
Deep	MWA-56d	GCC4 & Proximal Wells	MWA-56D-121525	12/15/2025	130,000,000	< 0.22 U	13,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58d-102519	10/25/2019	18,900,000	< 0.44 U	61,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-021320	02/13/2020	21,100,000	< 0.44 U	49,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-032621	03/26/2021	19,000,000	< 0.44 U	46,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-082020	08/20/2020	20,000,000	< 0.44 U	45,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58d-102920	10/29/2020	20,000,000	< 0.44 U	44,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-032621	03/26/2021	29,000,000 J-	< 0.44 U	43,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-092421	09/24/2021	23,000,000	< 0.44 U	43,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-121621	12/16/2021	23,000,000	< 4.4	38,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-031722	03/17/2022	26,000,000	< 4.4 U	44,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-060822	06/08/2022	23,000,000	< 0.30 U	47,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-110922	11/09/2022	19,000,000	< 0.44 UJ	49,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-030923	03/09/2023	22,000,000	< 2.2 U	49,000 J-
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-061523	06/15/2023	19,000,000	< 2.2	50,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-082323	08/23/2023	20,000,000	< 2.2 U	50,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-121223	12/12/2023	19,000,000	< 2.2 U	50,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-022824	02/28/2024	19,000,000	< 4.4 U	50,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-061224	06/12/2024	19,000,000	< 4.4 U	47,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-091124	09/11/2024	17,000,000	< 4.4 U	54,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-121224	12/12/2024	17,000,000	< 4.4 U	51,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-021925	02/19/2025	18,000,000	< 4.4	53,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-051425	05/14/2025	18,000,000	< 0.30 UJ	48,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-090425	09/04/2025	18,000,000	< 0.44 U	53,000
Deep	MWA-58d	GCC4 & Proximal Wells	MWA-58D-121525	12/15/2025	180,000,000	< 0.22 U	55,000
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-032921	03/29/2021	110,000	81	< 20 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-030923	03/09/2023	50,000	< 0.44 U	< 20 UJ
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-061623	06/16/2023	27,000 J-	< 0.44	< 40
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-082123	08/21/2023	80,000	< 0.44 U	< 10 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-121223	12/12/2023	54,000	< 0.44 U	< 10 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-022724	02/27/2024	98,000	< 0.44 U	< 20 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-061224	06/12/2024	85,000	< 0.44 U	< 10 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-090924	09/09/2024	67,000	< 0.44 U	< 9.1 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-121024	12/10/2024	65,000	< 0.44 U	< 9.1 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-022125	02/21/2025	75,000	< 0.44	< 36
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-051425	05/14/2025	53,000	< 0.30 UJ	< 9.1
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-090425	09/04/2025	72,000	< 0.44 U	< 4.5 U
Deep	PA-18d	GCC1 & Proximal Wells	PA-18D-121225	12/12/2025	60,000	< 0.22 U	< 17 U
Deep	PA-19d	GCC2	Pa-19d-110619	11/06/2019	94,000	9,300 J-	< 48 U
Deep	PA-19d	GCC2	PA-19d-022620	02/26/2020	111,000	8,300	< 48 U
Deep	PA-19d	GCC2	PA-19d-052920	05/29/2020	140,000	8,200	< 48 U
Deep	PA-19d	GCC2	PA-19D-082620	08/26/2020	160,000	5,200	< 95 U
Deep	PA-19d	GCC2	PA-19d-110520	11/05/2020	180,000	3,800	< 48 U
Deep	PA-19d	GCC2	PA-19D-040521	04/05/2021	340,000	7,100	< 20 U
Deep	PA-19d	GCC2	PA-19D-092321	09/23/2021	320,000 J	< 0.44 R	< 20 U
Deep	PA-19d	GCC2	PA-19D-121621	12/16/2021	330,000	2,700 J	< 200
Deep	PA-19d	GCC2	PA-19D-031722	03/17/2022	340,000	2,600	< 20 U
Deep	PA-19d	GCC2	PA-19D-060922	06/09/2022	360,000	3,200	< 20 U
Deep	PA-19d	GCC2	PA-19D-111022	11/10/2022	280,000	2,500	< 20 U
Deep	PA-19d	GCC2	PA-19D-030923	03/09/2023	350,000	12,000 J	< 10 UJ
Deep	PA-19d	GCC2	PA-19D-061623	06/16/2023	320,000	9,000	< 40
Deep	PA-19d	GCC2	PA-19D-082423	08/24/2023	320,000	6,600	< 20 U
Deep	PA-19d	GCC2	PA-19D-121323	12/13/2023	340,000	7,600	< 10 U
Deep	PA-19d	GCC2	PA-19D-022824	02/28/2024	330,000	5,700	< 10 U
Deep	PA-19d	GCC2	PA-19D-061324	06/13/2024	290,000	12,000	< 20 U
Deep	PA-19d	GCC2	PA-19D-091124	09/11/2024	270,000	6,300	< 4.5 U
Deep	PA-19d	GCC2	PA-19D-121224	12/12/2024	300,000	11,000	100
Deep	PA-19d	GCC2	PA-19D-022025	02/20/2025	280,000	11,000	89
Deep	PA-19d	GCC2	PA-19D-051425	05/14/2025	250,000	13,000 J-	100
Deep	PA-20d	GCC3	PA-20d-110719	11/07/2019	570,000	41	56 J+
Deep	PA-20d	GCC3	Pa-20d-022420	02/24/2020	789,000	39	58
Deep	PA-20d	GCC3	PA-20d-052120	05/21/2020	840,000	40	46
Deep	PA-20d	GCC3	PA-20D-082520	08/25/2020	800,000 J+	31	58
Deep	PA-20d	GCC3	PA-20d-110320	11/03/2020	840,000	37 J	61
Deep	PA-20d	GCC3	PA-20D-032521	03/25/2021	1,100,000	23	76
Deep	PA-20d	GCC3	PA-20D-092221	09/22/2021	1,100,000	24	99
Deep	PA-20d	GCC3	PA-20D-121521	12/15/2021	1,000,000	23	< 100
Deep	PA-20d	GCC3	PA-20D-031722	03/17/2022	1,200,000	12	140
Deep	PA-20d	GCC3	PA-20D-060922	06/09/2022	1,100,000	18	< 20 U
Deep	PA-20d	GCC3	PA-20D-111022	11/10/2022	1,000,000	9.3	< 20 U
Deep	PA-20d	GCC3	PA-20D-030923	03/09/2023	1,100,000	13	< 10 UJ
Deep	PA-20d	GCC3	PA-20D-061523	06/15/2023	880,000	14	< 20
Deep	PA-20d	GCC3	PA-20D-082323	08/23/2023	840,000	20	< 10 U

Appendix D
Prior Groundwater Monitoring Plan Data Table
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Portland, Oregon

Aquifer	Well ID	Cluster	Sample ID	Date	Chloride	Chlorobenzene	Perchlorate
					ug/L	ug/L	ug/L
Deep	PA-20d	GCC3	PA-20D-121223	12/12/2023	810,000	18	< 10 U
Deep	PA-20d	GCC3	PA-20D-022824	02/28/2024	820,000	14	< 10 U
Deep	PA-20d	GCC3	PA-20D-061324	06/13/2024	680,000	4.5	< 10 U
Deep	PA-20d	GCC3	PA-20D-091124	09/11/2024	620,000	2.7	74
Deep	PA-20d	GCC3	PA-20D-121224	12/12/2024	580,000	1.7	48
Deep	PA-20d	GCC3	PA-20D-022025	02/20/2025	580,000	1.7	28
Deep	PA-20d	GCC3	PA-20D-051425	05/14/2025	460,000	4.1 J-	< 0.91
Deep	PA-21d	GCC3	Pa-21d-110719	11/07/2019	347,000	27,000	2,400
Deep	PA-21d	GCC3	Pa-21d-022620	02/26/2020	463,000	38,000	1,300
Deep	PA-21d	GCC3	PA-21D-052120	05/21/2020	420,000	49,000 J	1,200
Deep	PA-21d	GCC3	PA-21D-082520	08/25/2020	360,000	36,000	1,300
Deep	PA-21d	GCC3	PA-21d-110420	11/04/2020	370,000	40,000 J+	1,300
Deep	PA-21d	GCC3	PA-21D-040121	04/01/2021	430,000	47,000	< 20 U
Deep	PA-21d	GCC3	PA-21D-092421	09/24/2021	350,000	39,000 J	1,800
Deep	PA-21d	GCC3	PA-21D-121521	12/15/2021	320,000	49,000 J	1,200
Deep	PA-21d	GCC3	PA-21D-031722	03/17/2022	360,000	16,000	1,100
Deep	PA-21d	GCC3	PA-21D-060922	06/09/2022	360,000	27,000	< 20 U
Deep	PA-21d	GCC3	PA-21D-111022	11/10/2022	290,000	15,000	< 100 U
Deep	PA-21d	GCC3	PA-21D-030923	03/09/2023	340,000	30,000 J	110 J-
Deep	PA-21d	GCC3	PA-21D-061623	06/16/2023	330,000	23,000	< 100
Deep	PA-21d	GCC3	PA-21D-082323	08/23/2023	330,000	26,000	< 100 U
Deep	PA-21d	GCC3	PA-21D-121223	12/12/2023	340,000	11,000	< 10 U
Deep	PA-21d	GCC3	PA-21D-022824	02/28/2024	300,000	27,000	< 10 U
Deep	PA-21d	GCC3	PA-21D-061324	06/13/2024	300,000	41,000	< 10 U
Deep	PA-21d	GCC3	PA-21D-022025	02/20/2025	350,000	43,000	1,100
Deep	PA-21d	GCC3	PA-21D-051425	05/14/2025	370,000	41,000 J-	1,100
Deep	PA-22d	GCC4 & Proximal Wells	PA-22d-102419	10/24/2019	10,200,000	< 0.44 U	54,000
Deep	PA-22d	GCC4 & Proximal Wells	Pa-22d-022120	02/21/2020	9,190,000	< 0.44 U	38,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22d-052020	05/20/2020	9,800,000	< 0.44 U	40,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-082120	08/21/2020	9,200,000 J+	< 0.44 U	38,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22d-110320	11/03/2020	9,100,000	< 0.44 U	37,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-032421	03/24/2021	8,200,000	< 0.44 U	33,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-092221	09/22/2021	7,400,000	< 0.44 U	26,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-121521	12/15/2021	7,100,000	< 0.44	24,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-031622	03/16/2022	8,000,000	< 0.44 U	23,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-060822	06/08/2022	7,300,000	< 0.30 U	22,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-110922	11/09/2022	6,000,000	< 0.44 U	17,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-030823	03/08/2023	6,000,000	< 0.44 U	17,000 J-
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-061523	06/15/2023	5,600,000	< 0.44	15,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-082323	08/23/2023	4,800,000	< 0.44 U	13,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-121223	12/12/2023	5,300,000	< 0.44 U	13,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-022724	02/27/2024	5,300,000	< 0.44 U	14,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-061224	06/12/2024	5,100,000	< 0.44 U	14,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-091124	09/11/2024	4,300,000	< 0.44 U	15,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-121224	12/12/2024	5,000,000	< 0.44 U	14,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-022025	02/20/2025	5,200,000	< 0.44	13,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-051325	05/13/2025	5,100,000	< 0.30 UJ	13,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-090425	09/04/2025	7,700,000	< 0.44 U	12,000
Deep	PA-22d	GCC4 & Proximal Wells	PA-22D-120925	12/09/2025	4,600,000	< 0.22 U	10,000
Deep	PA-23d	GCC5 & Proximal Wells	PA-23d-110519	11/05/2019	12,500	2.8	< 0.95 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23d-021920	02/19/2020	5,690,000	< 0.44 U	< 0.95 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23d-052020	05/20/2020	12,000,000	1.3 j	< 4.8 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-082020	08/20/2020	22,000,000	< 0.44 U	< 4.8 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23d-102920	10/29/2020	27,000,000	< 0.44 U	< 0.95 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-032521	03/25/2021	16,000,000	< 0.44 U	< 1,000 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-092321	09/23/2021	17,000,000	< 0.44 U	< 100 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-121421	12/14/2021	5,700,000	< 0.44	< 50
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-031622	03/16/2022	89,000	< 0.44 U	< 2.0 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-060722	06/07/2022	9,700,000	< 0.30 U	< 100 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-111022	11/10/2022	6,900,000	< 0.44 U	< 200 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-030823	03/08/2023	17,000,000	< 0.44 U	< 200 UJ
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-061523	06/15/2023	25,000,000	< 0.44	< 400
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-082223	08/22/2023	29,000,000	< 0.44 U	< 400 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-121123	12/11/2023	30,000,000	< 0.44 U	< 300 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-022724	02/27/2024	9,700,000	< 0.44 U	< 100 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-061124	06/11/2024	31,000,000	< 0.44 U	< 400 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-091024	09/10/2024	33,000,000	< 0.44 U	< 18 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-121124	12/11/2024	31,000,000	< 0.44 U	< 0.91 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-021925	02/19/2025	33,000,000	< 0.44	< 91
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-051325	05/13/2025	31,000,000	< 0.30 UJ	< 36
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-090325	09/03/2025	110,000,000	< 0.44 U	< 91 U
Deep	PA-23d	GCC5 & Proximal Wells	PA-23D-120925	12/09/2025	29,000,000	< 0.22 U	< 17 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24d-110619	11/06/2019	42,300,000	< 0.44 U	< 48 U
Deep	PA-24d	GCC5 & Proximal Wells	Pa-24d-022020	02/20/2020	41,500,000	< 0.44 U	< 48 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24d-051920	05/19/2020	46,000,000	< 0.44 U	< 48 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-082020	08/20/2020	43,000,000	< 0.44 U	< 19 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24d-102920	10/29/2020	44,000,000	< 0.44 U	< 4.8 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-031821	03/18/2021	44,000,000	< 0.44 U	< 200 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-092221	09/22/2021	38,000,000	< 0.44 U	< 100 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-121521	12/15/2021	35,000,000	< 0.44	< 200

Appendix D
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Aquifer	Well ID	Cluster	Sample ID	Date	Chloride	Chlorobenzene	Perchlorate
					ug/L	ug/L	ug/L
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-031622	03/16/2022	38,000,000	< 0.44 U	< 200 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-060722	06/07/2022	35,000,000	< 0.30 U	< 400 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-111022	11/10/2022	32,000,000	< 0.44 U	< 200 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-030823	03/08/2023	33,000,000	< 0.44 U	< 400 UJ
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-061523	06/15/2023	33,000,000	< 0.44	< 400
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-082223	08/22/2023	31,000,000	< 0.44 U	< 400 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-121123	12/11/2023	31,000,000	< 0.44 U	< 200 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-022724	02/27/2024	30,000,000	< 0.44 U	< 400 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-061224	06/12/2024	30,000,000	< 0.44 U	< 400 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-091024	09/10/2024	30,000,000	< 0.44 U	< 18 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-121124	12/11/2024	30,000,000	< 0.44 U	< 0.91 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-021925	02/19/2025	29,000,000	< 0.44	< 91
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-051225	05/12/2025	630,000	< 3.0 UJ	< 36
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-090425	09/04/2025	29,000,000	< 0.44 U	< 36 U
Deep	PA-24d	GCC5 & Proximal Wells	PA-24D-120925	12/09/2025	32,000,000	< 0.22 U	< 17 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25d-110519	11/05/2019	1,100	< 0.44 U	< 0.95 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25d-021820	02/18/2020	22,100	< 0.025 U	< 0.95 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25d-051820	05/18/2020	23,000	< 0.025 U	< 0.95 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-081820	08/18/2020	24,000	< 0.025 U	< 9.5 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25d-102720	10/27/2020	20,000	< 0.20 U	< 0.95 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-031821	03/18/2021	20,000	< 0.025 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-092121	09/22/2021	24,000	< 0.025 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-121421	12/14/2021	23,000	< 0.025	< 2.0
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-031422	03/14/2022	18,000 J-	< 0.060 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-060722	06/07/2022	23,000	< 0.060 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-110722	11/07/2022	34,000	< 0.060 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-030823	03/08/2023	11,000 J+	< 0.060 U	< 2.0 UJ
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-061323	06/13/2023	10,000	< 0.060	< 2.0
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-082223	08/22/2023	24,000	< 0.060 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-121123	12/11/2023	12,000	< 0.060 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-022724	02/27/2024	13,000	< 0.060 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-061124	06/11/2024	30,000	< 0.060 U	< 2.0 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-090924	09/09/2024	21,000	< 0.060 U	< 0.91 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-121024	12/10/2024	30,000 J+	< 0.060 U	< 0.91 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-021825	02/18/2025	32,000	< 0.060	< 0.91
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-051225	05/12/2025	15,000	< 0.070	< 0.91
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-090325	09/03/2025	22,000	< 0.060 U	< 0.91 U
Deep	PA-25d	GCC6 & Proximal Wells	PA-25D-121525	12/15/2025	11,000	< 0.060 U	< 0.43 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26d-110419	11/04/2019	7,400	< 0.44 U	< 0.95 U
Deep	PA-26d	GCC6 & Proximal Wells	Pa-26d-021320	02/13/2020	46,000	0.71	< 0.95 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-051820	05/18/2020	48,000	< 0.025 U	< 0.95 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-081920	08/19/2020	48,000	< 0.025 U	< 9.5 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26d-102820	10/28/2020	52,000	< 0.025 U	1.1 j
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-031621	03/16/2021	37,000	< 0.025 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-092321	09/23/2021	60,000	< 0.025 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-121321	12/13/2021	62,000	< 0.025	< 4.0
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-031522	03/15/2022	72,000 J-	< 0.060 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-060722	06/07/2022	63,000	< 0.060 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-110822	11/08/2022	6,500	< 0.060 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-030823	03/08/2023	69,000	< 0.060 U	< 2.0 UJ
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-061423	06/14/2023	67,000 J	< 0.060	< 2.0
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-082223	08/22/2023	74,000	< 0.060 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-121123	12/11/2023	27,000	< 0.060 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-022624	02/26/2024	64,000	< 0.060 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-061024	06/10/2024	80,000	< 0.060 U	< 2.0 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-090924	09/09/2024	60,000	< 0.060 U	< 0.91 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-121024	12/10/2024	80,000	< 0.060 U	< 0.91 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-022125	02/21/2025	84,000	< 0.060	< 0.91
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-051225	05/12/2025	86,000	< 0.070	< 0.91
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-090325	09/03/2025	87,000	< 0.060 U	< 0.91 U
Deep	PA-26d	GCC6 & Proximal Wells	PA-26D-121525	12/15/2025	18,000	< 0.060 U	< 4.3 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27d-102519	10/25/2019	1,150,000	< 0.44 U	< 4.8 U
Deep	PA-27d	GCC1 & Proximal Wells	Pa-27d-021420	02/14/2020	824,000	0.84 j	< 48 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-052120	05/21/2020	870,000	< 0.44 U	< 48 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-081820	08/18/2020	810,000 J+	0.52 j	< 95 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27d-110420	11/04/2020	1,100,000	3.5 J	< 19 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-032321	03/23/2021	710,000 J-	< 0.44 U	< 20 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-092221	09/22/2021	840,000	< 0.44 U	< 20 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-121321	12/13/2021	930,000	< 0.44	< 20
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-031622	03/16/2022	1,000,000	< 0.44 U	< 20 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-060822	06/08/2022	890,000	< 0.30 U	< 20 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-110822	11/08/2022	960,000	< 0.44 U	< 10 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-030823	03/08/2023	670,000	< 0.44 U	< 20 UJ
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-061423	06/14/2023	690,000	< 0.44	< 20
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-082223	08/22/2023	660,000	< 0.44 U	< 10 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-121223	12/12/2023	450,000	< 0.44 U	< 10 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-022724	02/27/2024	460,000	< 0.44 U	< 20 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-061224	06/12/2024	540,000	< 0.44 U	< 10 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-090924	09/09/2024	720,000	< 0.44 U	< 9.1 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-120924	12/09/2024	590,000	< 0.44 U	< 9.1 U

Appendix D
Prior Groundwater Monitoring Plan Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Cluster	Sample ID	Date	Chloride	Chlorobenzene	Perchlorate
					ug/L	ug/L	ug/L
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-022125	02/21/2025	600,000	< 0.44	< 36
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-051325	05/13/2025	600,000	< 1.5 UJ	< 91
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-090225	09/02/2025	860,000	< 0.44 U	< 4.5 U
Deep	PA-27d	GCC1 & Proximal Wells	PA-27D-121125	12/11/2025	4,600,000	0.43 j	< 0.43 U
Deep	PA-30d	GCC2	PA-30d-103119	10/31/2019	170,000	4,900 J-	< 48 U
Deep	PA-30d	GCC2	Pa-30d-022520	02/25/2020	207,000	5,700	< 190 U
Deep	PA-30d	GCC2	PA-30d-052120	05/21/2020	280,000	5,800	< 48 U
Deep	PA-30d	GCC2	PA-30D-082720	08/27/2020	320,000	5,800	< 95 U
Deep	PA-30d	GCC2	PA-30d-110520	11/05/2020	440,000	4,700	< 48 U
Deep	PA-30d	GCC2	PA-30D-040221	04/02/2021	56,000	4,600	< 100 U
Deep	PA-30d	GCC2	PA-30D-092421	09/24/2021	540,000	< 0.44 R	< 20 U
Deep	PA-30d	GCC2	PA-30D-121621	12/16/2021	490,000	3,500	< 200
Deep	PA-30d	GCC2	PA-30D-031722	03/17/2022	490,000	4,700	< 20 U
Deep	PA-30d	GCC2	PA-30D-060922	06/09/2022	460,000	6,600	< 20 U
Deep	PA-30d	GCC2	PA-30D-111022	11/10/2022	270,000	26,000	< 20 U
Deep	PA-30d	GCC2	PA-30D-030923	03/09/2023	300,000	24,000	< 20 UJ
Deep	PA-30d	GCC2	PA-30D-061623	06/16/2023	310,000	19,000	< 40
Deep	PA-30d	GCC2	PA-30D-082423	08/24/2023	320,000	20,000	< 20 U
Deep	PA-30d	GCC2	PA-30D-121323	12/13/2023	320,000	22,000	< 10 U
Deep	PA-30d	GCC2	PA-30D-022824	02/28/2024	370,000	18,000	< 20 U
Deep	PA-30d	GCC2	PA-30D-061424	06/14/2024	320,000	13,000	< 20 U
Deep	PA-30d	GCC2	PA-30D-091124	09/11/2024	270,000	8,200	< 18 U
Deep	PA-30d	GCC2	PA-30D-121224	12/12/2024	250,000	7,000	< 91 U
Deep	PA-30d	GCC2	PA-30D-022025	02/20/2025	280,000	6,700	< 91
Deep	PA-30d	GCC2	PA-30D-051525	05/15/2025	310,000	6,900 J-	< 91
Gravel	PMW-01g		PMW-01G-110725	11/07/2025	76,000	2.7	2.2
Gravel	PMW-08g		PMW-08G-110525	11/05/2025	3,800,000	4.6	< 4.3 U
Gravel	PMW-09g		PMW-09G-121025	12/10/2025	160,000	4.8	22
Gravel	PMW-19g		PMW-19G-110625	11/06/2025	260,000	< 0.22 U	1.9 j
Gravel	PMW-20g		PMW-20G-110625	11/06/2025	180,000 J-	1.2	4.0 J-
Basalt	PMW-01b		PMW-01B-110725	11/07/2025	77,000	1.8	< 0.43 U
Basalt	PMW-02b		PMW-02B-110425	11/04/2025	510,000	2.3	< 4.3 U
Basalt	PMW-03b		PMW-03B-110425	11/04/2025	610,000	71	< 2.1 U
Basalt	PMW-04b		PMW-04B-121125	12/11/2025	460,000	41,000	2,100
Basalt	PMW-05b		PMW-05B-121125	12/11/2025	1,700,000	2,000	6,200
Basalt	PMW-05b2		PMW-05B2-121025	12/10/2025	2,400,000	1,300	4,900
Basalt	PMW-06b		PMW-06B-121025	12/10/2025	1,100,000	120	710
Basalt	PMW-06b2		PMW-06B2-121025	12/10/2025	3,900,000	22	5,100
Basalt	PMW-08b		PMW-08B-110525	11/05/2025	14,000,000	1.6	< 17 U
Basalt	PMW-09b		PMW-09B-121025	12/10/2025	140,000 J-	2.6	23
Basalt	PMW-18b		PMW-18B-121025	12/10/2025	1,400,000	0.23 j	< 2.1 U
Basalt	PMW-19b		PMW-19B-110625	11/06/2025	400,000	< 0.22 U	< 0.43 U

Notes:

Bolded values indicate concentrations above the Reportable Detection Limit.

< = Compound not detected. Reportable detection limit shown.

µg/L = micrograms per liter

Qualifiers:

j = The analyte was positively identified; associated numerical value is the approximate concentration of the analyte in the sample.

J = The analyte was positively identified; associated numerical value is the approximate concentration of the analyte in the sample.

J+ = The concentration of the sample is considered to be biased high, as the associated QC results exceed the upper control limits.

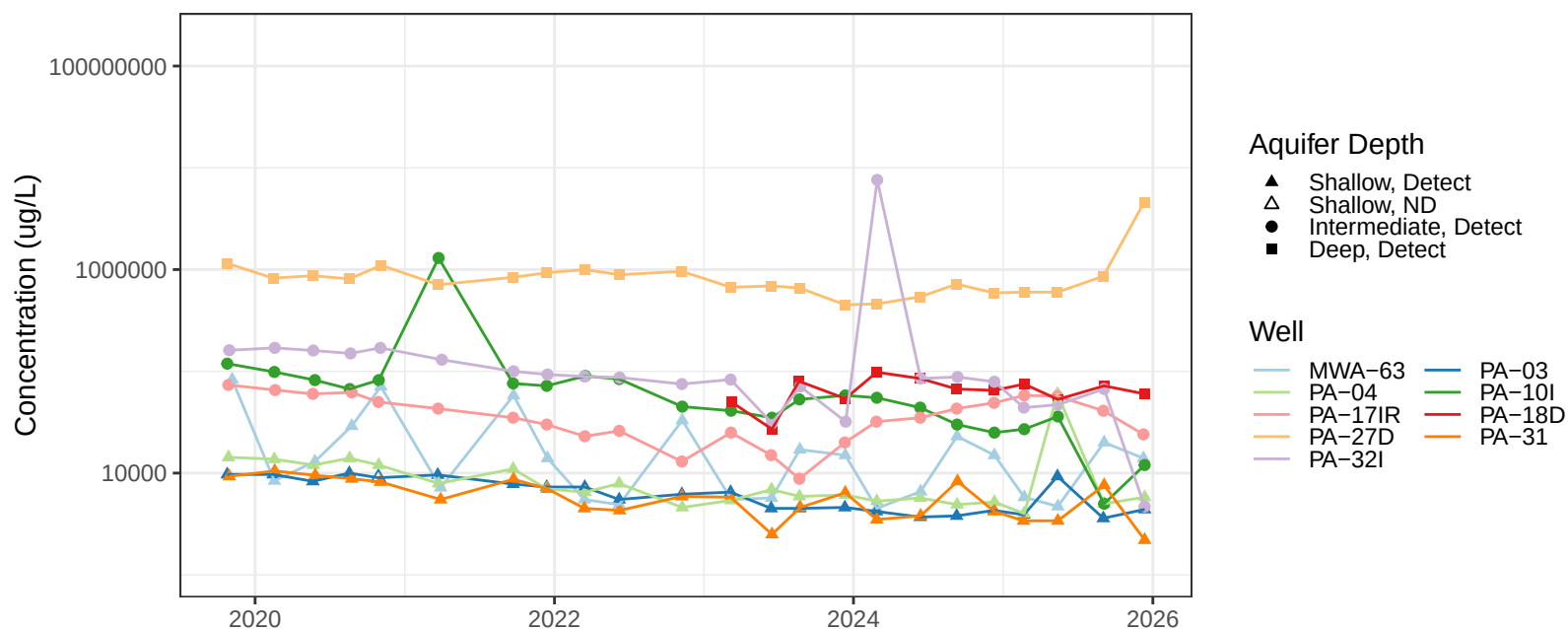
J- = The concentration of the sample is considered to be biased low, as the associated QC results are outside the lower control limits.

U = Compound not detected based on quality assurance review.

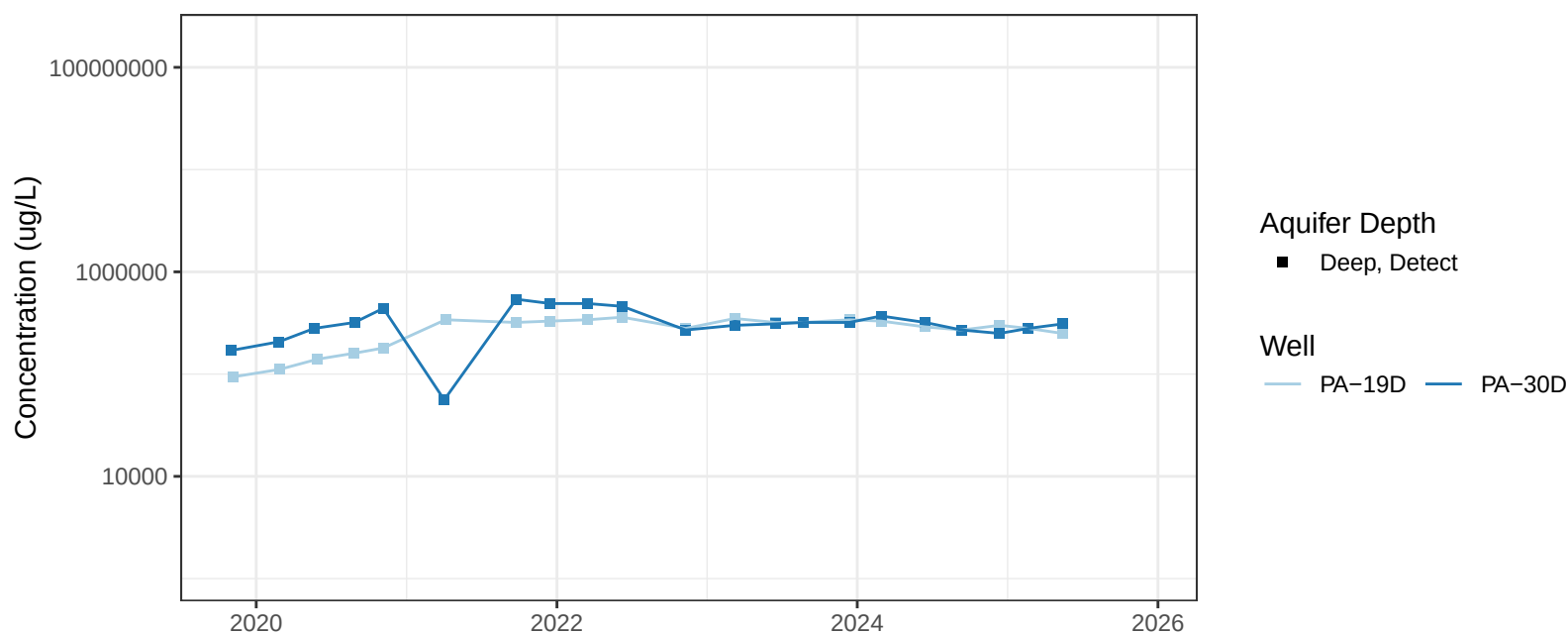
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.

R = Rejected. Quality control indicates that the data are unusable (compound may or may not be present).

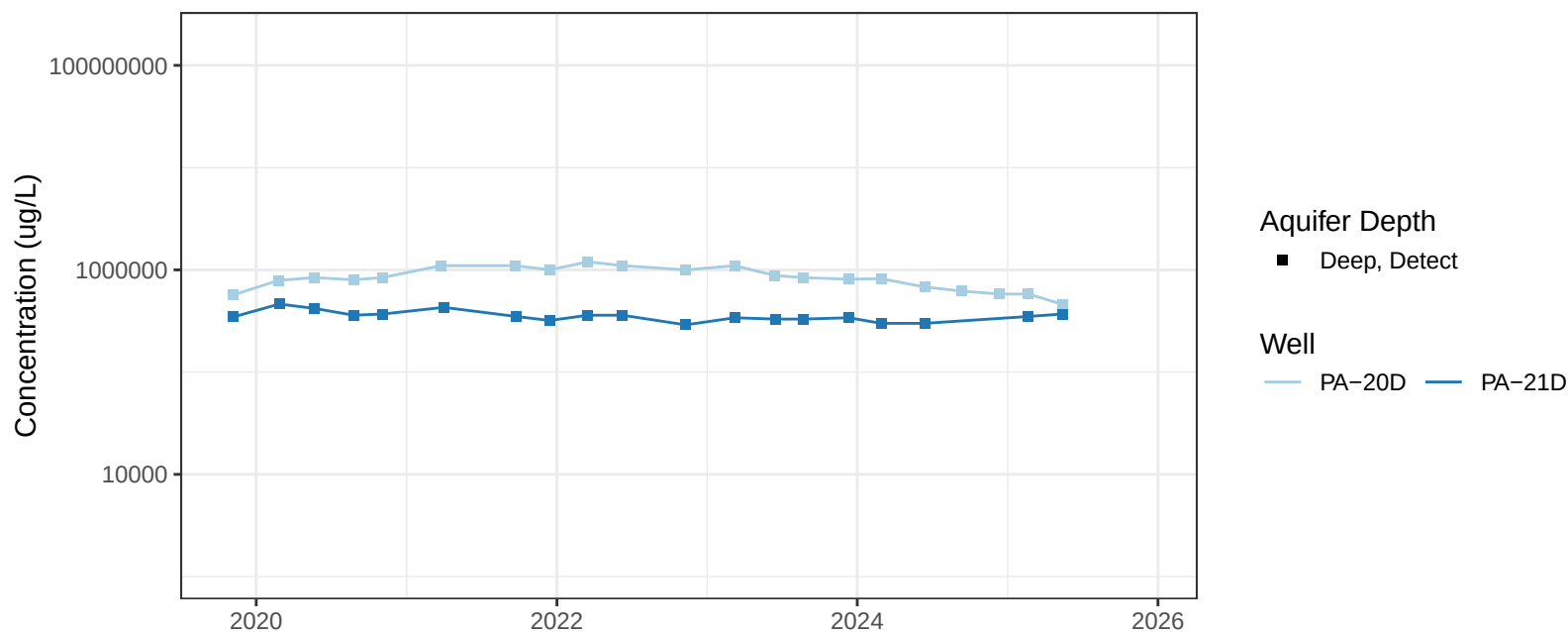
Chloride in GCC1 & Proximal Wells



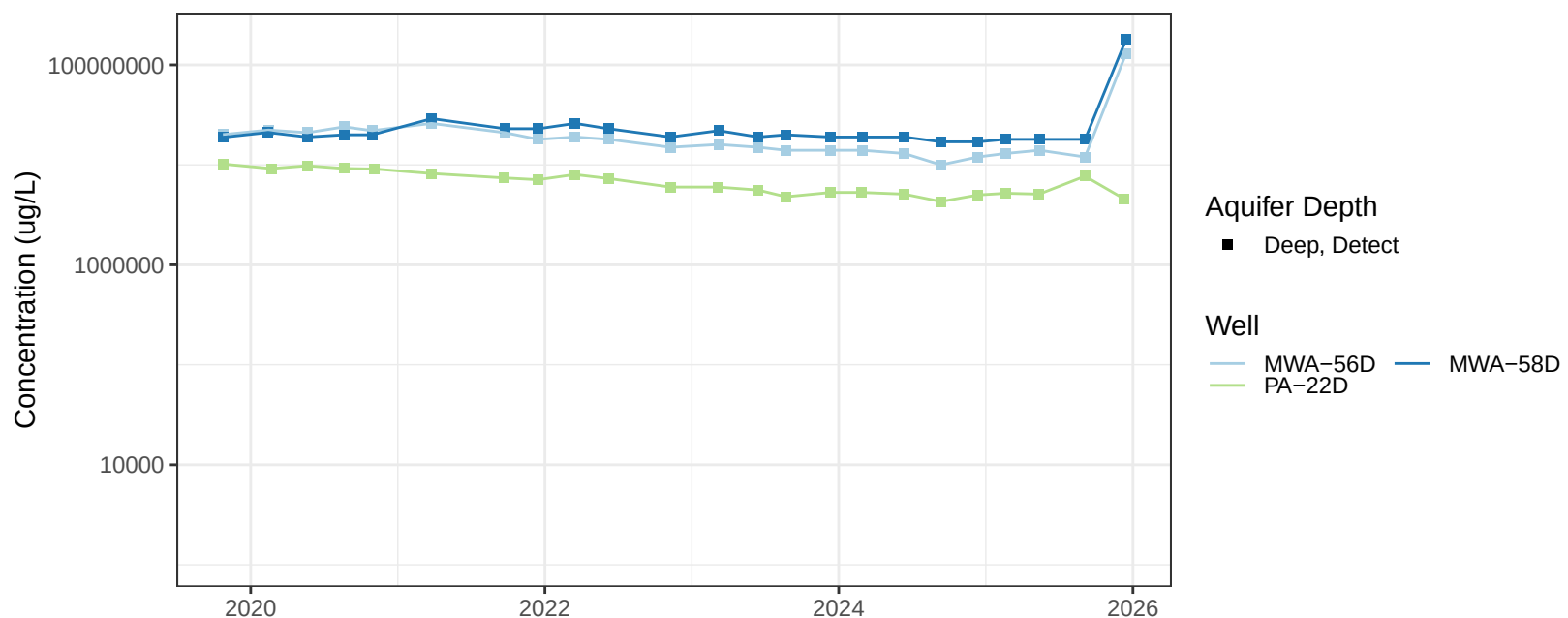
Chloride in GCC2



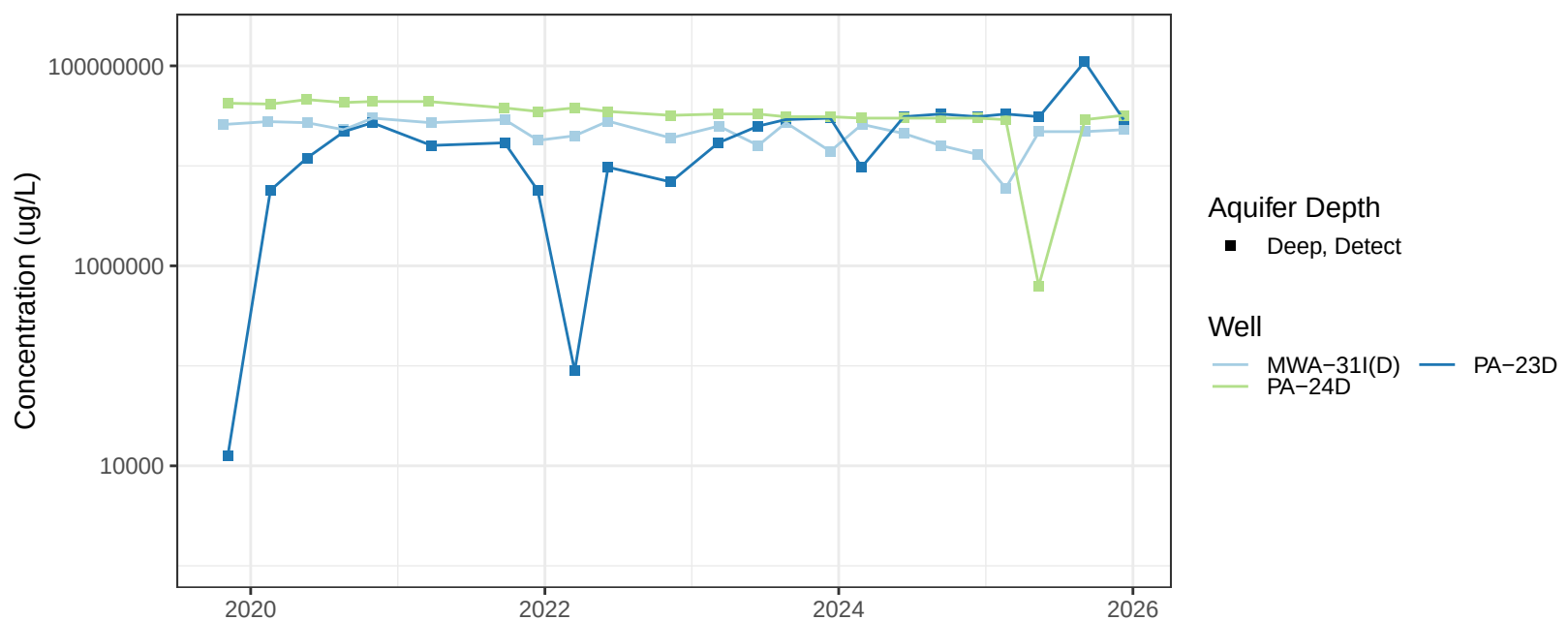
Chloride in GCC3



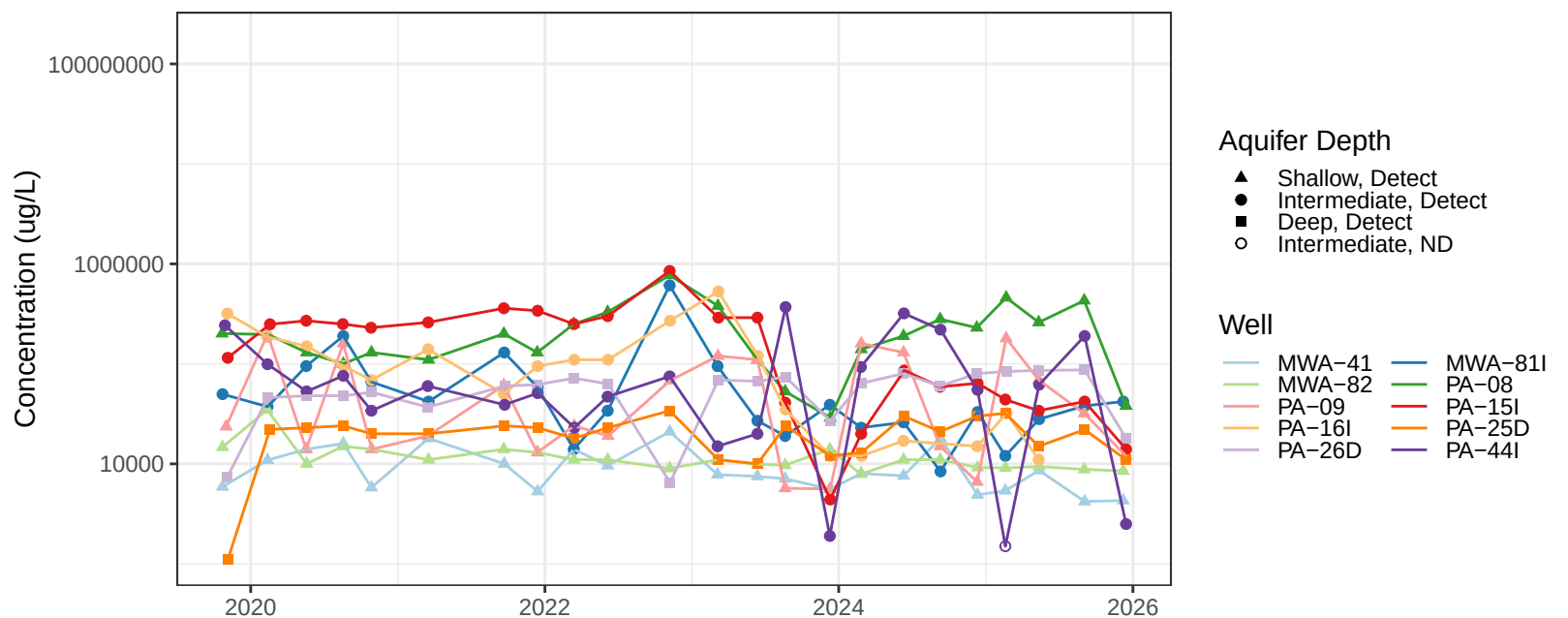
Chloride in GCC4 & Proximal Wells



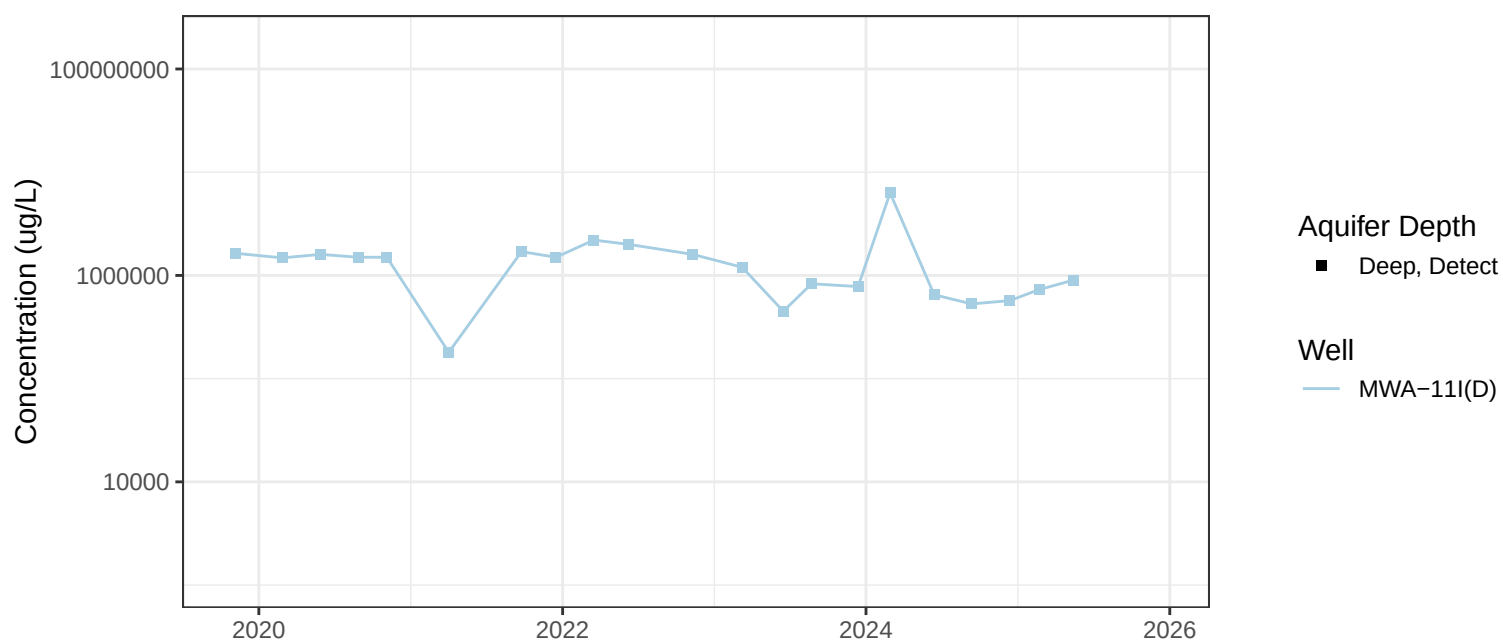
Chloride in GCC5 & Proximal Wells



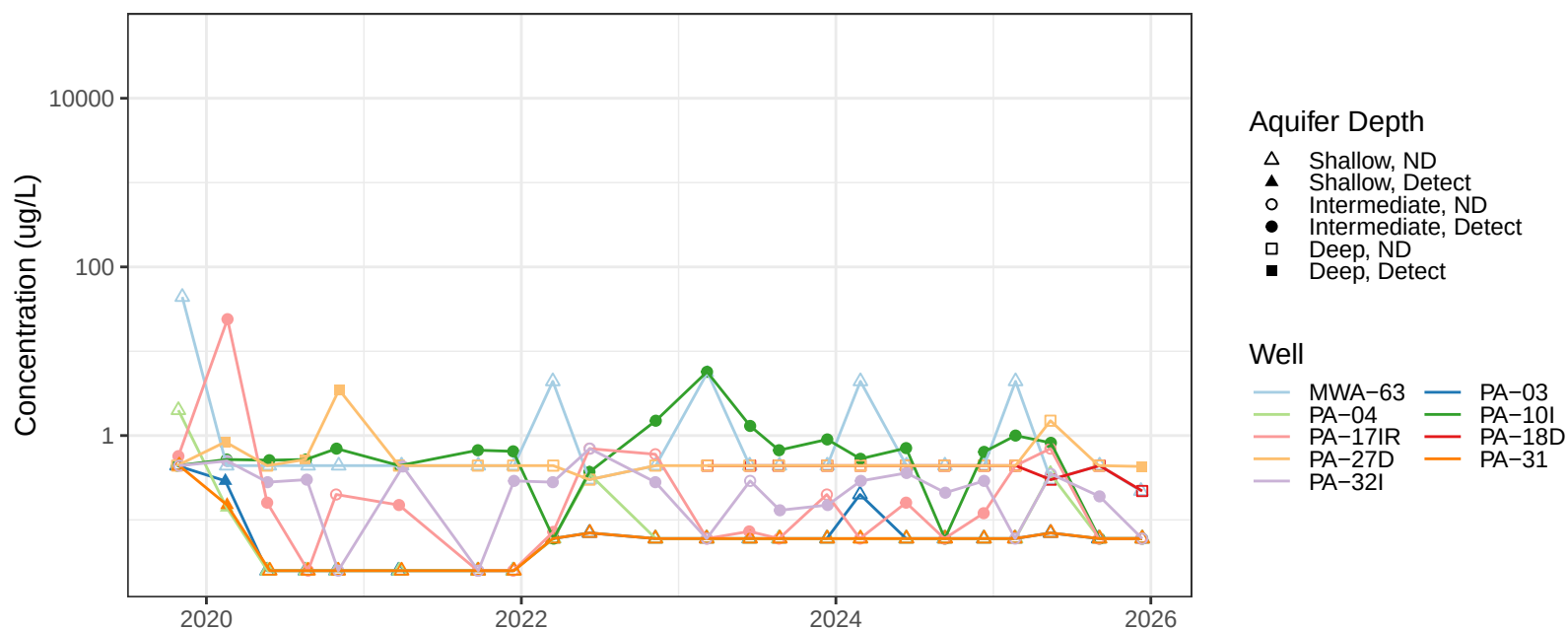
Chloride in GCC6 & Proximal Wells



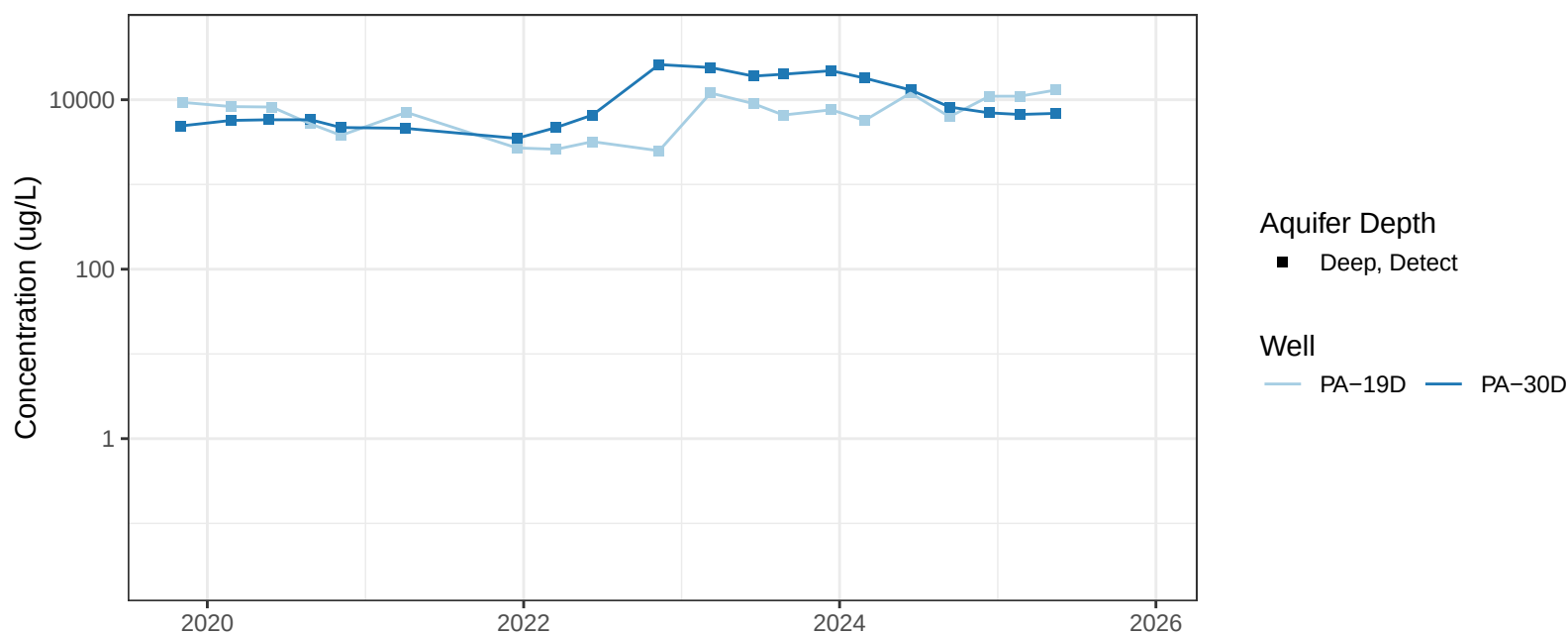
Chloride in Well Distal from BW and GCCs



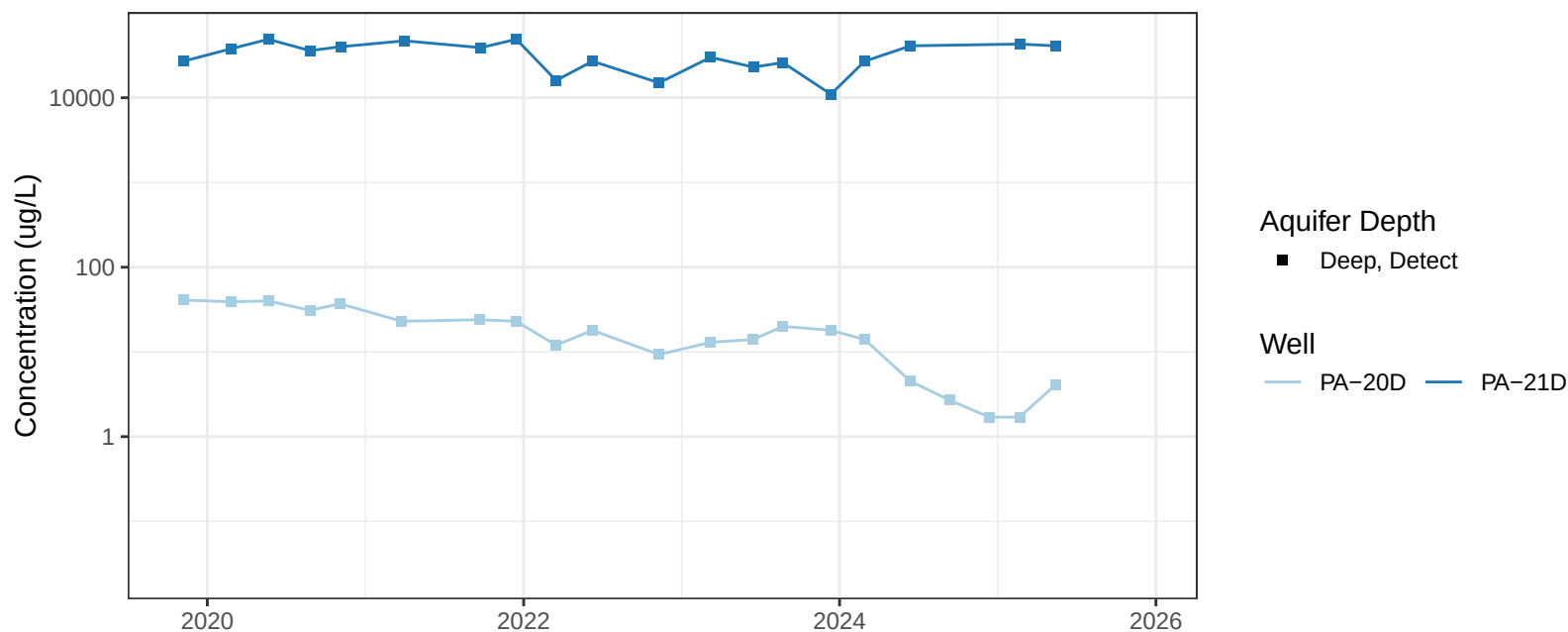
Chlorobenzene in GCC1 & Proximal Wells



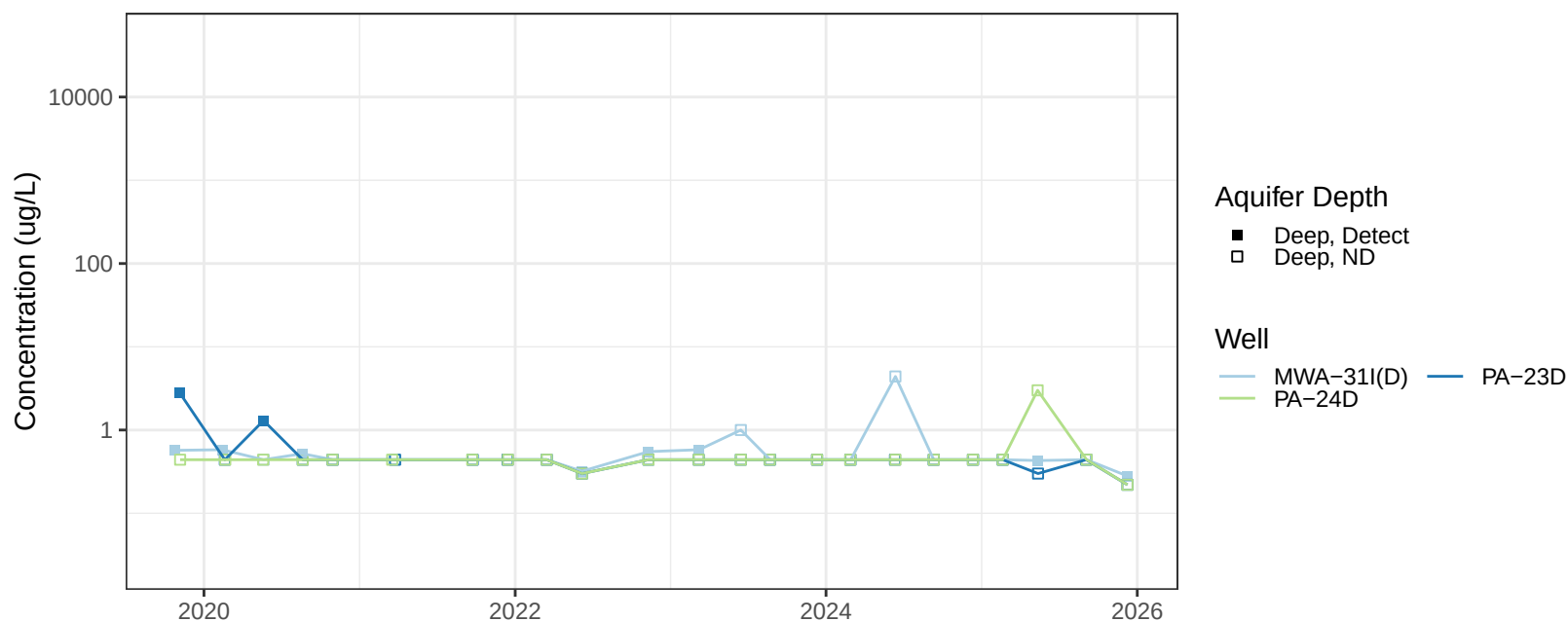
Chlorobenzene in GCC2



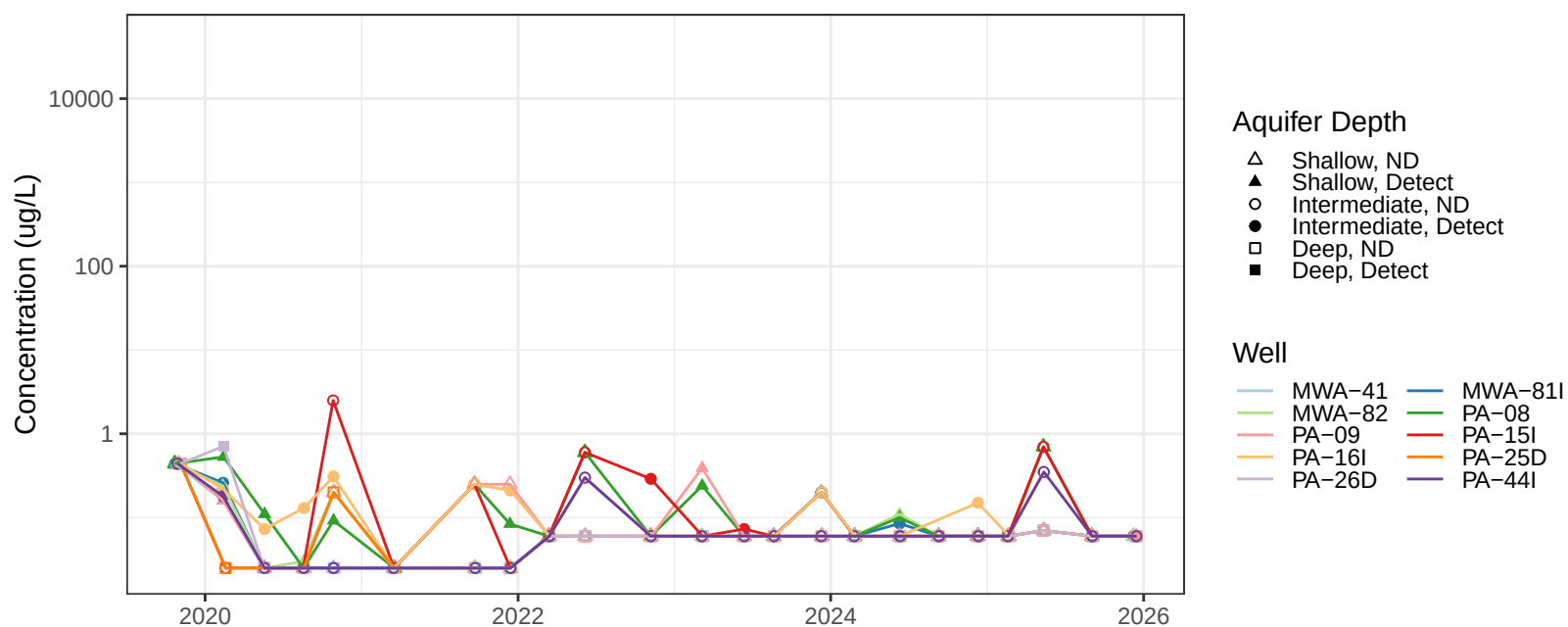
Chlorobenzene in GCC3



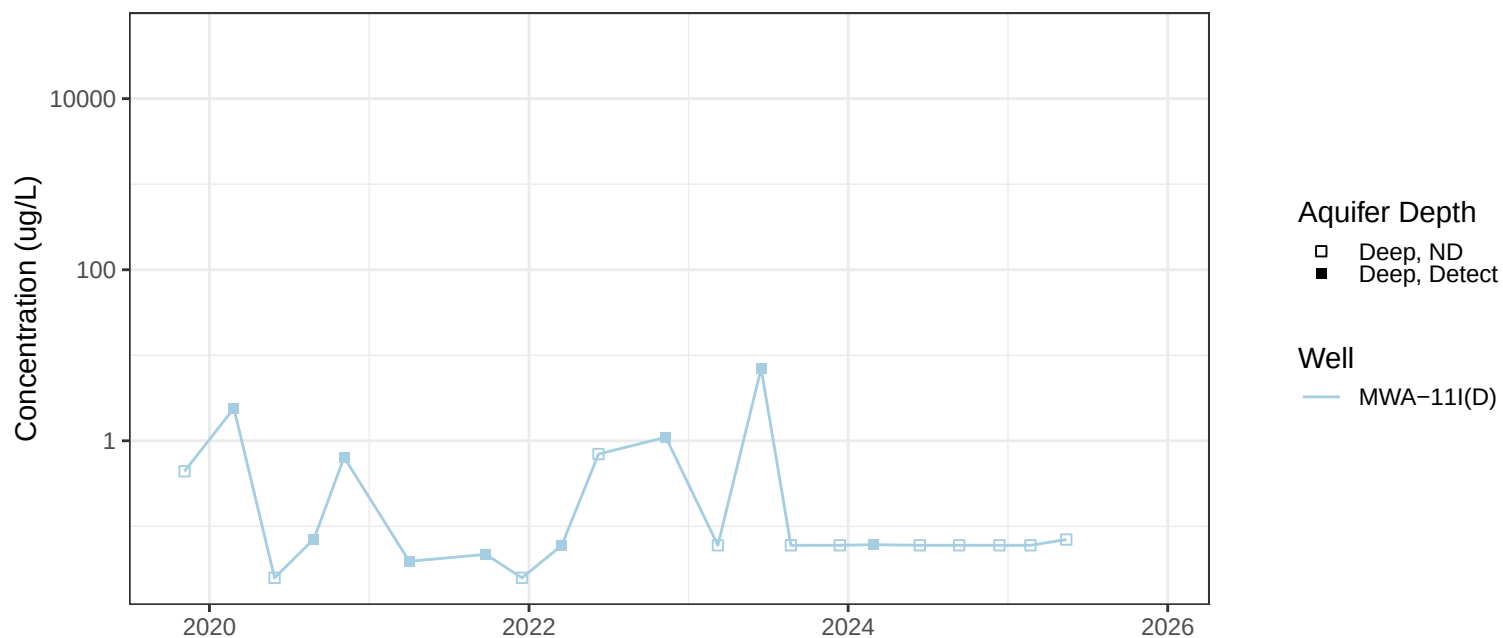
Chlorobenzene in GCC5 & Proximal Wells



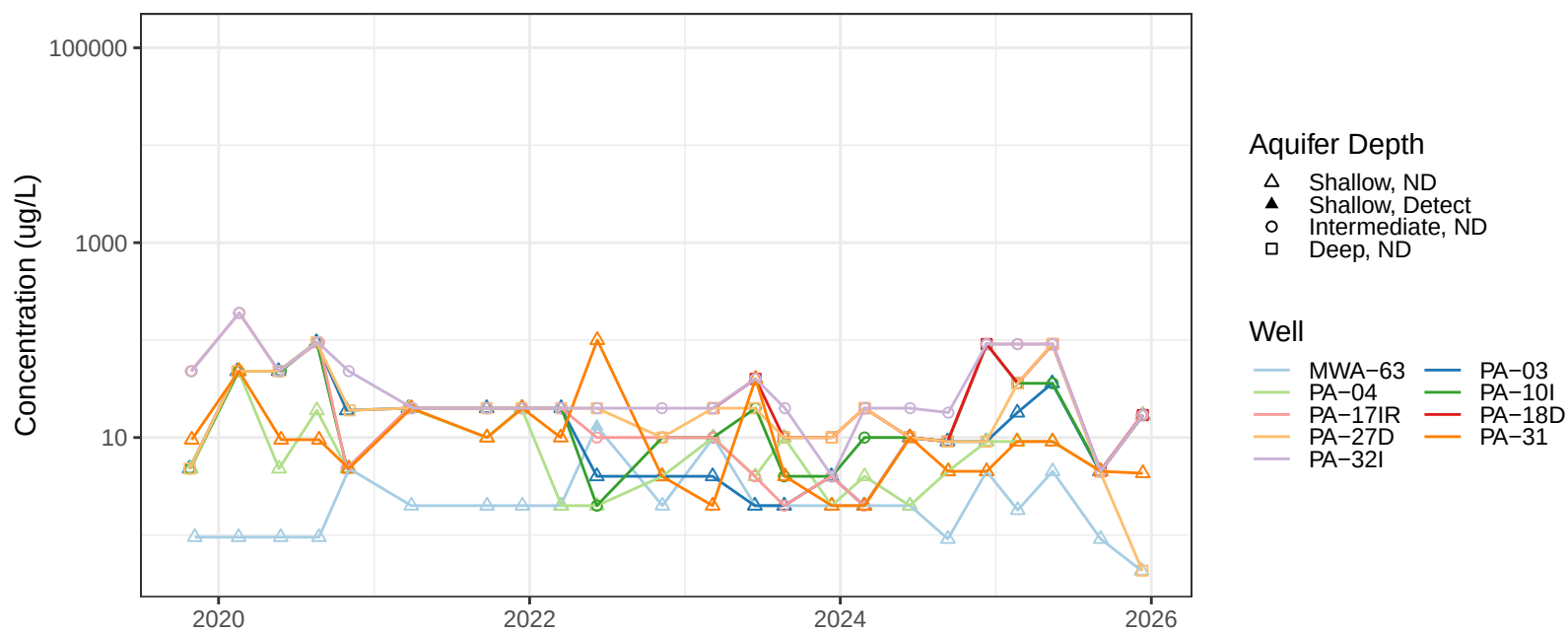
Chlorobenzene in GCC6 & Proximal Wells



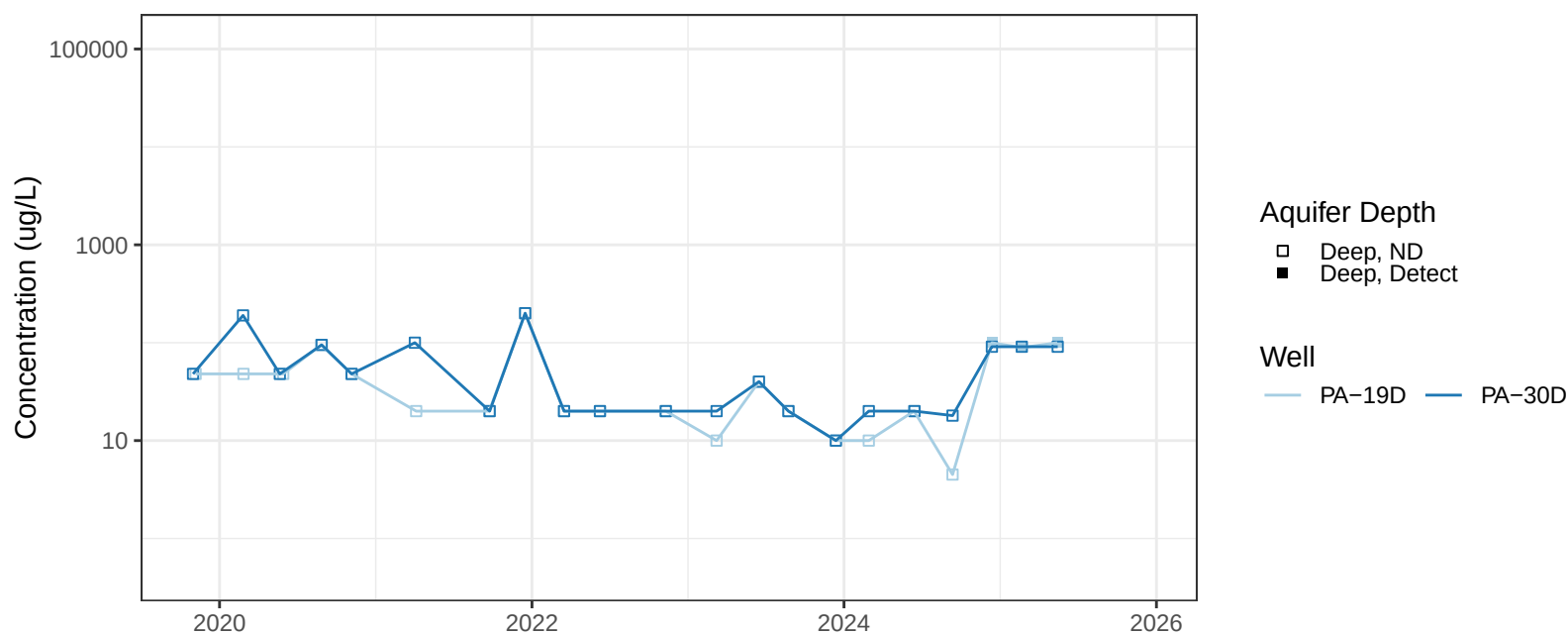
Chlorobenzene in Well Distal from BW and GCCs



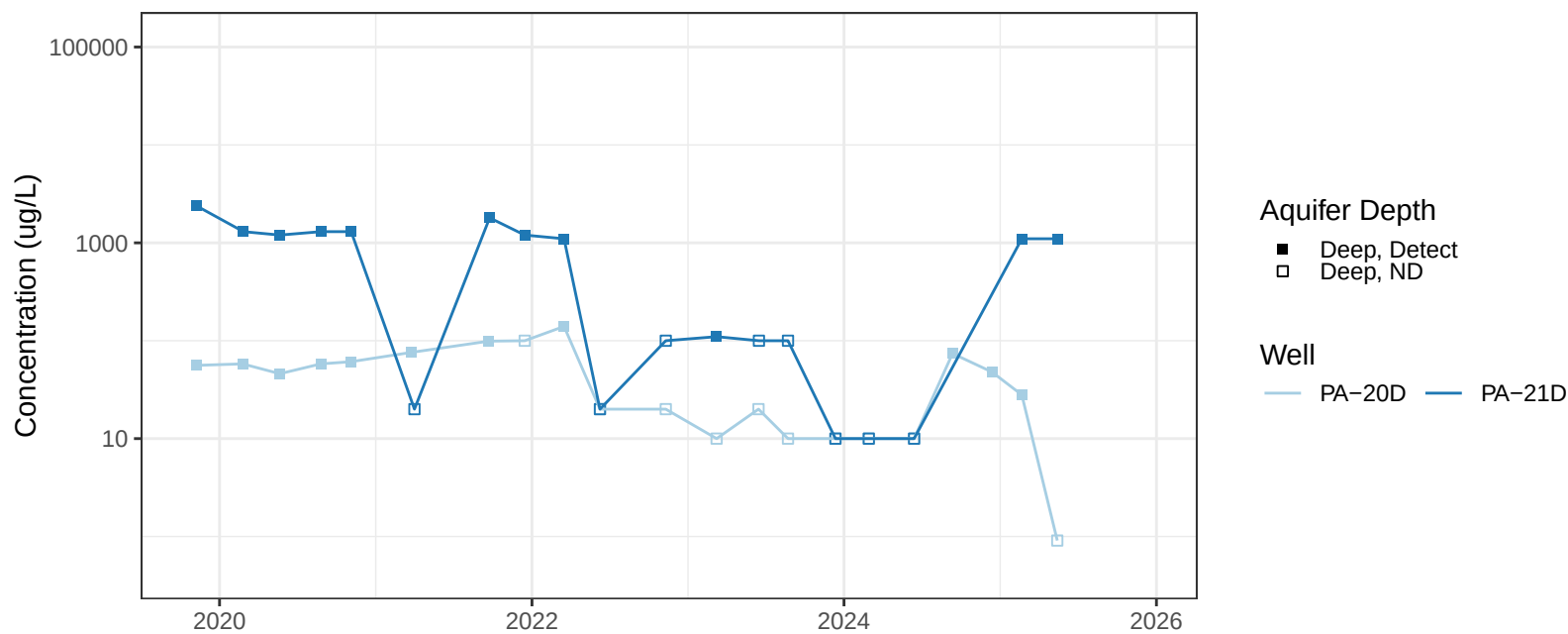
Perchlorate in GCC1 & Proximal Wells



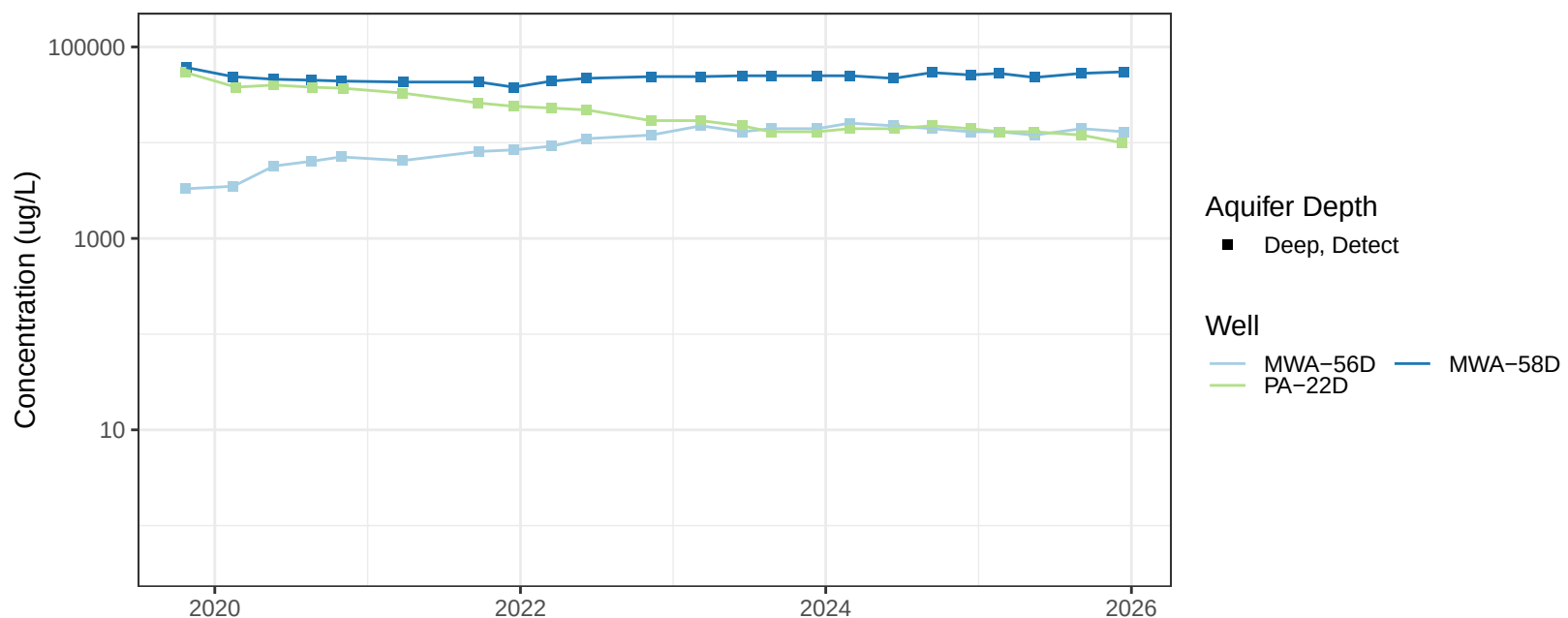
Perchlorate in GCC2



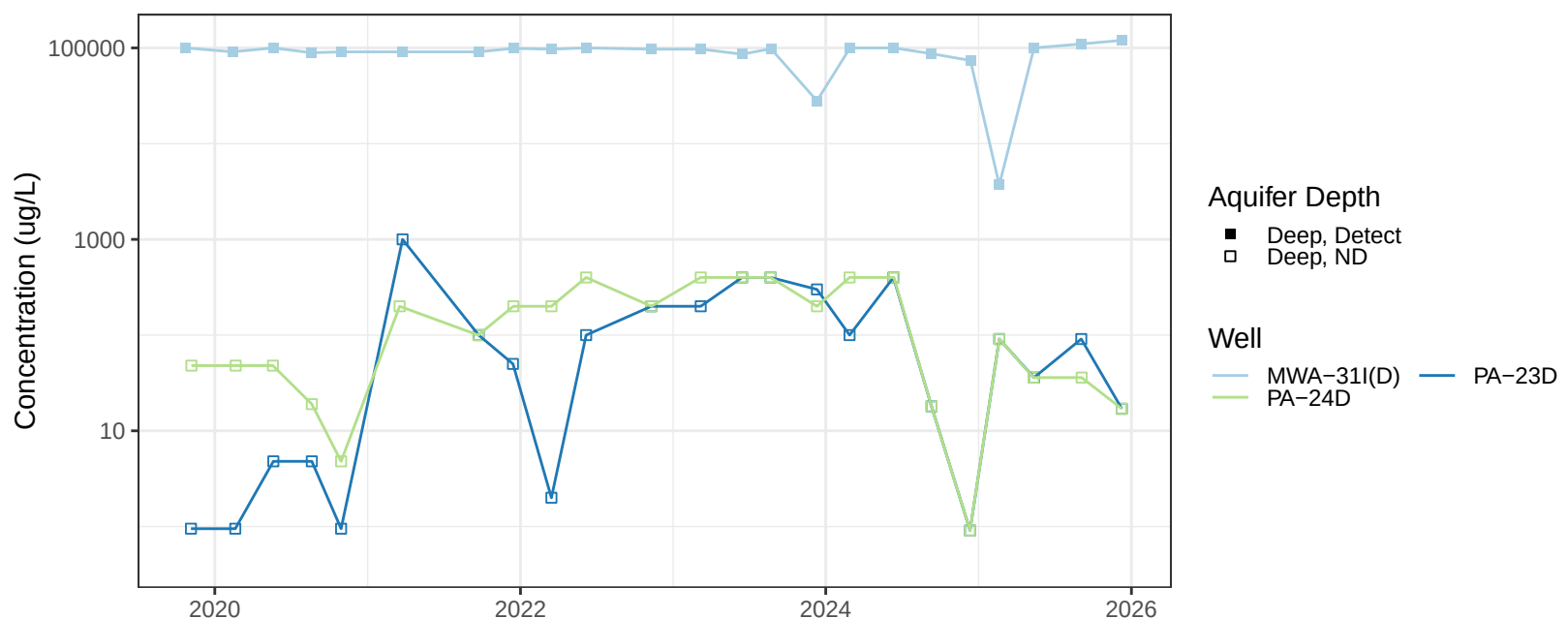
Perchlorate in GCC3



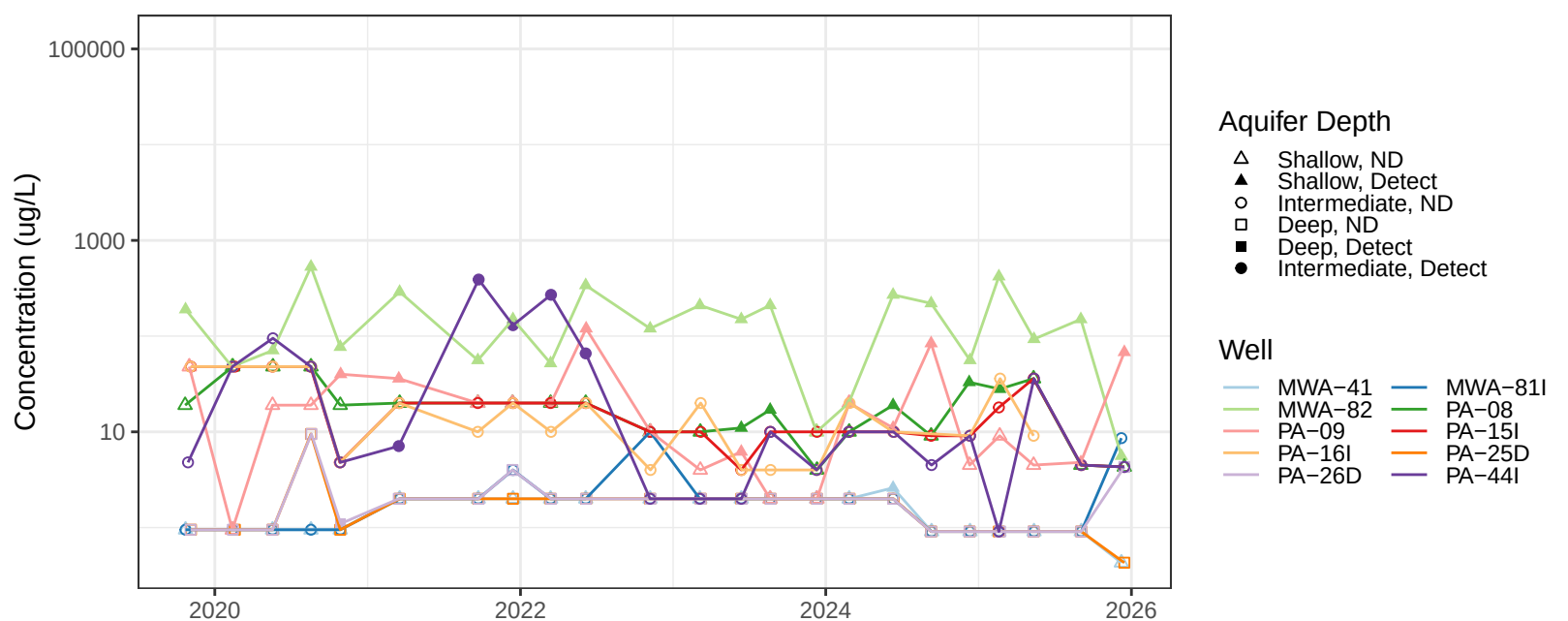
Perchlorate in GCC4 & Proximal Wells



Perchlorate in GCC5 & Proximal Wells



Perchlorate in GCC6 & Proximal Wells





APPENDIX E HISTORICAL DATA TABLE

Appendix E
Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Shallow	MWA-2	GAMWA210297	1/2/1997		< 0.1 U		< 0.1 U		0.12	0.12 T		< 5 U		
Shallow	MWA-2	GAMWA210397	3/12/1997		< 0.1 UJ		< 0.1 UJ		< 0.1 UJ	< 0.1 UJT		7		
Shallow	MWA-2	GAMWA210697	6/24/1997		< 0.1 UJ		< 0.1 UJ		< 0.1 UJ	< 0.1 UJT		6,000		
Shallow	MWA-2	GAMWA210997	9/30/1997		0.17 J		< 0.1 UJ		< 0.1 UJ	0.17 JT		9,000		
Shallow	MWA-2	GW059801	5/28/1998		0.25 J		< 0.04 U		0.33 J	0.58 JT	10,400	4		
Shallow	MWA-2	GW019907	1/27/1999		0.32		0.04		0.18	0.54 T	41,100 T	94		
Shallow	MWA-2	GW029906	4/27/1999		0.8		< 0.04 U		0.6	1.4 T	16,800	970 J		
Shallow	MWA-2	GW039907	8/24/1999		0.7		< 0.4 UJ		< 0.4 UJ	0.7 T	33,800	4,400		
Shallow	MWA-2	GW049905	11/16/1999		0.39 J		< 0.04 UJ		< 0.24 U	0.39 JT	41,700	2,100		
Shallow	MWA-2	GW010111	3/29/2001		0.57		< 0.1 U		< 0.1 U	0.57 T	158,000 J	4,300		
Shallow	MWA-2	GW020106	6/12/2001		0.4		0.055		< 0.05 UJ	0.455 T	384,000	4,600		
Shallow	MWA-2	GW04100205	4/10/2002		0.41		< 0.099 U		< 0.099 U	0.41 T	1,400,000	27,000		
Shallow	MWA-2	GW-060903-01	6/9/2003		< 1.70 U		< 1.70 U		< 2.80 U	< 2.8 UT	981,000	13,700		1,400
Shallow	MWA-2	MWA-2-111004	11/10/2004		< 0.500 UJ		< 0.500 UJ		< 0.500 UJ	< 0.5 UJT		30,200		
Shallow	MWA-2	MWA-2-031005	3/10/2005		< 2.50 UJ		< 2.50 UJ		< 2.50 UJ	< 2.5 UJT		15,400		
Shallow	MWA-2	MWA-2-062205	6/22/2005		3.35		< 0.500 UJ		< 0.500 UJ	3.35 T		12,200		
Shallow	MWA-2	MWA-2-091505	9/15/2005		0.543 J		< 0.184 U		0.0789 J	0.8089 JT		21,900		
Shallow	MWA-2	MWA-2-102705	10/27/2005		0.477		0.0965		< 0.236 UJ	0.5735 T		23,500		
Shallow	MWA-2	MWA-2-122005	12/20/2005		0.312		< 0.239 UJ		< 0.239 UJ	0.312 T		16,200		
Shallow	MWA-2	MWA-2-011306	1/13/2006		0.510		< 0.0971 UJ		< 0.0971 UJ	0.51 T		4		
Shallow	MWA-2	MWA-2-032906	3/29/2006		0.240		< 0.0952 UJ		0.190	0.43 T		4,050		
Shallow	MWA-2	MWA-2-040407	4/4/2007		0.292		< 0.287 U		< 0.191 U	0.292 A	376,000	2,570		73.8
Shallow	MWA-2	MWA-2-080609	8/6/2009		< 0.286 U		< 0.286 U		0.191	0.191 A	340,000	18,200		3.9
Shallow	MWA-15R	GW010117	3/30/2001		37		< 10 U		450	487 T	1960,000 J	260,000		
Shallow	MWA-15R	GW020121	6/15/2001		7.4		< 0.96 U		73 J	80.4 JT	1,560,000	210,000		
Shallow	MWA-15R	GW04160201	4/16/2002		25		4.2 J		75 J	104 JT	407,000	48,000		
Shallow	MWA-15R	GW-061003-04	6/10/2003		28.4 J		< 3.40 U		113	141 JT	388,000	13,300		350
Shallow	MWA-15R	MWA-15R-100203	10/2/2003									27,200		
Shallow	MWA-15R	MWA-15R-111403	11/14/2003									163,000		
Shallow	MWA-15R	MWA-15R-011304	1/13/2004									64,400		
Shallow	MWA-15R	MWA-15R-013004	1/30/2004									24,600		
Shallow	MWA-15R	MWA-15R-030204	3/2/2004									2,450		
Shallow	MWA-15R	MWA-15R-111004	11/10/2004		27.7		< 5.00 UJ		86.2	113 T		154,000		
Shallow	MWA-15R	MWA-15R-031005	3/10/2005		79.7		< 25.0 UJ		534	613.7 T		97,000		
Shallow	MWA-15R	MWA-15R-062205	6/22/2005		40.9		9.88		193	243.78 T		87,700		
Shallow	MWA-15R	MWA-15R-091605	9/16/2005		73.2		11.2 J		619 J	703 JT		240,000		
Shallow	MWA-15R	MWA-15R-122105	12/21/2005		10.1		1.53		86.5	98.13 T		217,000		
Shallow	MWA-15R	MWA-15R-033006	3/30/2006		124		24		458	606 T		72,900		
Shallow	MWA-15R	MWA-15R-041707	4/17/2007		48.3 J		7.71		207	263 JA	129,000	34		
Shallow	MWA-15R	MWA-15R-081909	8/19/2009		111		21.9		702	835 A	156,000	23,500	< 25 UJ	
Shallow	MWA-15R	MWA-15R-090309	9/3/2009		377		52.1		5,210	5,640 A				
Shallow	MWA-18	GW010105	3/27/2001						0.046 J	0.046 JT	1,200,000	41		
Shallow	MWA-18	GW020110	6/13/2001		0.015 J		< 0.0094 U		< 0.026 U	0.015 JT	894,000 J	34	< 50 UJ	
Shallow	MWA-18	GW04040203	4/4/2002		< 0.0096 U		< 0.0096 U		< 0.019 U	< 0.019 UT	2,210,000	8		
Shallow	MWA-18	GW-060603-03	6/6/2003		< 0.0170 U		< 0.0170 U		< 0.0280 U	< 0.028 UT	1,410,000	< 3.06 U		< 25 U
Shallow	MWA-18	MWA-18-050505	5/5/2005								612,000		833	
Shallow	MWA-18	MWA-18-071405	7/14/2005										676	
Shallow	MWA-18	MWA-18	8/3/2005		< 0.0500 U		< 0.0500 U		< 0.0500 U	< 0.05 UT		0.580		
Shallow	MWA-18	MWA-18-081605	8/16/2005										248	
Shallow	MWA-18	MWA-18-091205	9/12/2005								410,000		1,180	3.4
Shallow	MWA-18	MWA-18-120805	12/8/2005										5.90 J	
Shallow	MWA-18	MWA-18-011006	1/10/2006										30.0	
Shallow	MWA-18	MWA-18-021306	2/13/2006										< 4.55 U	
Shallow	MWA-18	MWA-18-072606	7/26/2006										3.4	
Shallow	MWA-18	MWA-18-041107	4/11/2007		< 0.0971 U		< 0.0971 U		< 0.0971 U	< 0.0971 UA	233,000	1.33	2.2 J	< 8.0 U
Shallow	MWA-18	MWA-18-081009	8/10/2009		0.0155		0.00671 J		0.00789 J	0.0301 JA	270,000	0.930 J	340 J	< 4 U
Shallow	MWA-19	GW010104	3/27/2001		< 0.02 UJ		< 0.02 UJ		0.095 J	0.095 JT	5,540,000	< 0.5 U		
Shallow	MWA-19	GW020112	6/13/2001		< 0.0099 U		< 0.0099 U		< 0.016 U	< 0.016 UT	12,700,000 J	< 0.5 U	< 50 UJ	

Appendix E
Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Shallow	MWA-19	GW04040204	4/4/2002		< 0.0097 U		< 0.0097 U		0.1	0.1 T	13,100,000	< 0.5 U		
Shallow	MWA-19	GW-060603-04	6/6/2003		0.0935		< 0.0170 U		0.23	0.324 T	5,180,000	< 0.64 U		< 82 U
Shallow	MWA-19	MWA-19-050605	5/6/2005								2,100,000		2,680	
Shallow	MWA-19	MWA-19-071305	7/13/2005										159	
Shallow	MWA-19	MWA-19	8/3/2005		0.114		< 0.0500 U		0.576	0.69 T		3.14		
Shallow	MWA-19	MWA-19-081705	8/17/2005										407	
Shallow	MWA-19	MWA-19-091305	9/13/2005								1,240,000		824	< 1 U
Shallow	MWA-19	MWA-19-120805	12/8/2005										101	
Shallow	MWA-19	MWA-19-010906	1/9/2006										33.2	
Shallow	MWA-19	MWA-19-021006	2/10/2006										12.1	
Shallow	MWA-19	MWA-19-072606	7/26/2006										56.8	
Shallow	MWA-19	MWA-19-040907	4/9/2007		0.0743 J		< 0.0966 U		0.242	0.316 JA	737,000	1.79	11.3	< 80.0 U
Shallow	MWA-19	MWA-19-081009	8/10/2009		0.183 J		0.175 J		1.14	1.5 JA	406,000	0.390 J	500 J	< 40 U
Shallow	MWA-20	GW010103	3/27/2001						0.088 J	0.088 JT	2,810,000 T	2,700		
Shallow	MWA-20	GW020114	6/13/2001						0.052 J	0.052 JT	1,780,000 J	1,100	59.5	
Shallow	MWA-20	GW04090204	4/9/2002								1,135,000 T	1,900		
Shallow	MWA-20	GW-060503-03	6/5/2003		0.0688 J				0.213 J	0.282 JT	1,500,000	215		
Shallow	MWA-20	MWA-20-050905	5/9/2005										436	
Shallow	MWA-20	MWA-20-071305	7/13/2005										74.1	
Shallow	MWA-20	MWA-20	8/4/2005		< 0.0500 U		< 0.0500 U		< 0.0500 U	< 0.05 UT		1,540		
Shallow	MWA-20	MWA-20-081505	8/15/2005										676	
Shallow	MWA-20	MWA-20-090705	9/7/2005										573	
Shallow	MWA-20	MWA-20-121205	12/12/2005										9.67 J	
Shallow	MWA-20	MWA-20-011006	1/10/2006										52.5	
Shallow	MWA-20	MWA-20-020906	2/9/2006										43.8	
Shallow	MWA-20	MWA-20-072506	7/25/2006										14.36 J	
Shallow	MWA-20	MWA-20-041107	4/11/2007		< 0.0485 U		< 0.0485 U		0.0692 J	0.0692 J	583,000	1,500 J	8.6	< 33.9 U
Shallow	MWA-20	MWA-20-081709	8/17/2009		< 0.00952 U		< 0.00952 U		0.00836 J	0.00836 JA	164,000	1,780	67 J	< 40 U
Shallow	MWA-22	GW020122	6/15/2001		0.83		< 0.096 U		0.15	0.98 T	4,870,000	38		
Shallow	MWA-22	GW04110203	4/11/2002		< 0.099 U		< 0.099 U		< 0.099 U	< 0.099 UT	5,430,000	310		
Shallow	MWA-22	GW-061003-02	6/10/2003		< 0.13 U		< 0.0170 UJ		< 0.348 U	< 0.348 UT	6,210,000	128		
Shallow	MWA-22	MWA-22	8/1/2005		0.115		< 0.0500 U		1.29	1.405 T		6,460		
Shallow	MWA-22	MWA-22-041607	4/16/2007		0.133		< 0.0976 U		< 0.0976 U	0.133 A	4,200,000	538	103	
Shallow	MWA-22	MWA-22-081909	8/19/2009		< 0.144 U		< 0.0962 U		< 0.0962 U	< 0.144 UA	2,870,000	123	48 J	< 40 U
Shallow	MWA-22	MWA-22-022119	2/21/2019	< 0.10 UJ	0.026 J-	< 0.10 UJ	0.0060 J-	< 0.10 UJ	< 0.010 UJ	0.032		3,400	< 13 UJ	< 48
Shallow	MWA-24	GW11150102	11/15/2001									< 2.5 U		
Shallow	MWA-24	GW04080201	4/8/2002								408,000			
Shallow	MWA-24	GW-060503-04	6/5/2003		< 0.232 U		< 0.0340 U		< 0.0560 U	< 0.232 UT	583,000			
Shallow	MWA-24	MWA-24-050505	5/5/2005								529,000		52.8 J	
Shallow	MWA-24	MWA-24-071205	7/12/2005										54.1 J	
Shallow	MWA-24	MWA-24-081105	8/11/2005										35.5	
Shallow	MWA-24	MWA-24-090705	9/7/2005										20.3	
Shallow	MWA-24	MWA-24-091405	9/14/2005											30
Shallow	MWA-24	MWA-24-120705	12/7/2005										63.5	
Shallow	MWA-24	MWA-24-011106	1/11/2006										31.9	
Shallow	MWA-24	MWA-24-020806	2/8/2006										30.6	
Shallow	MWA-24	MWA-24-072506	7/25/2006										24	
Shallow	MWA-24	MWA-24-040307	4/3/2007								274,000	1.90 J	76.2	258 J
Shallow	MWA-24	MWA-24-080509	8/5/2009								237,000	< 0.500 U	86 J	17.9
Shallow	MWA-29	GW04080204	4/8/2002		< 0.0096 U		< 0.0096 U		< 0.0096 U	< 0.0096 UT	21,900,000	< 0.5 U		
Shallow	MWA-29	GW-060403-06	6/4/2003		< 0.0170 UJ		< 0.0170 UJ		< 0.0280 UJ	< 0.028 UJT	11,700,000			< 110 U
Shallow	MWA-29	MWA-29-050905	5/9/2005								9,100,000		14.1	
Shallow	MWA-29	MWA-29-071805	7/18/2005										< 4.55 U	
Shallow	MWA-29	MWA-29-081205	8/12/2005										< 4.55 U	
Shallow	MWA-29	MWA-29-091205	9/12/2005								12,600,000		107	4,800
Shallow	MWA-29	MWA-29-120805	12/8/2005										186	
Shallow	MWA-29	MWA-29-010606	1/6/2006										14.1	
Shallow	MWA-29	MWA-29-020806	2/8/2006										19.5	

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Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Shallow	MWA-29	MWA-29-072406	7/24/2006										< 20 U	
Shallow	MWA-29	MWA-29-041607	4/16/2007		< 0.0966 U		< 0.0966 U		< 0.0966 U	< 0.0966 UA	9,710,000		< 20 UJ	243
Shallow	MWA-29	MWA-29-080609	8/6/2009		< 0.00952 U		< 0.00952 U		< 0.00952 U	< 0.00952 UA	3,750,000		< 25 UJ	< 20 U
Shallow	MWA-30	GW04120203	4/12/2002		0.18		0.021 J		0.012	0.213 JT	179,000,000	< 0.5 U		
Shallow	MWA-30	GW-060403-08	6/4/2003		< 0.0170 UJ		< 0.0170 UJ		< 0.0280 UJ	< 0.028 UJT	164,000,000			7,900
Shallow	MWA-30	MWA-30-050605	5/6/2005								104,000,000		3,040	
Shallow	MWA-30	MWA-30-051005	5/10/2005											621
Shallow	MWA-30	MWA-30-071805	7/18/2005										13.0	
Shallow	MWA-30	MWA-30	8/3/2005		< 0.0500 U		< 0.0500 U		< 0.0500 U	< 0.05 UT		< 0.136 U		
Shallow	MWA-30	MWA-30-081705	8/17/2005										6,270	
Shallow	MWA-30	MWA-30-010606	1/6/2006										32.8	
Shallow	MWA-30	MWA-30-021006	2/10/2006										< 4.55 U	
Shallow	MWA-30	MWA-30-072606	7/26/2006										< 2 U	
Shallow	MWA-30	MWA-30-040507	4/5/2007		< 0.0962 U		< 0.0962 U		< 0.0962 U	< 0.0962 UA	39,400,000	0.900	8.5 J	< 80.0 U
Shallow	MWA-30	MWA-30-081009	8/10/2009		0.148		< 0.00943 U		< 0.00943 U	0.148 A	12,900,000	< 2.00 UJ	1,100 J	< 80 U
Shallow	MWA-33	GW-060503-05	6/5/2003								198,000	< 2.51 U		540
Shallow	MWA-33	GW-061103-02	6/11/2003		< 0.0170 UJ		< 0.0170 UJ		< 0.518 U	< 0.518 UT	286,000			320
Shallow	MWA-33	MWA-33-050505	5/5/2005										44.6	
Shallow	MWA-33	MWA-33-071405	7/14/2005										51.8	
Shallow	MWA-33	MWA-33-081105	8/11/2005										36.2	
Shallow	MWA-33	MWA-33-090705	9/7/2005										30.2	
Shallow	MWA-33	MWA-33-091405	9/14/2005											1,500
Shallow	MWA-33	MWA-33-120805	12/8/2005										17.7	
Shallow	MWA-33	MWA-33-011106	1/11/2006										8.74 J	
Shallow	MWA-33	MWA-33-020806	2/8/2006										14.8	
Shallow	MWA-33	MWA-33-072406	7/24/2006										11 J	
Shallow	MWA-33	MWA-33-040307	4/3/2007		0.0688 J		0.106		0.0892 J	0.264 JA	336,000		11.9	< 20.0 U
Shallow	MWA-33	MWA-33-080509	8/5/2009		< 0.0952 U		< 0.0952 U		< 0.0952 U	< 0.0952 UA	929,000		14 J	< 8 U
Shallow	MWA-40	MWA-40-050505	5/5/2005										< 4.55 U	
Shallow	MWA-40	MWA-40-071205	7/12/2005										< 4.55 U	
Shallow	MWA-40	MWA-40-081105	8/11/2005										< 4.55 U	
Shallow	MWA-40	MWA-40-090705	9/7/2005										4.76 J	
Shallow	MWA-40	MWA-40-120705	12/7/2005										< 4.55 U	
Shallow	MWA-40	MWA-40-011106	1/11/2006										< 4.55 U	
Shallow	MWA-40	MWA-40-020806	2/8/2006										< 4.55 U	
Shallow	MWA-40	MWA-40-072406	7/24/2006										9.5 J	
Shallow	MWA-40	MWA-40-040307	4/3/2007								294,000		21.7	< 400 U
Shallow	MWA-40	MWA-40-080509	8/5/2009								220,000		42 J	< 20 U
Shallow	MWA-41	MWA-41-050905	5/9/2005										< 4.55 U	
Shallow	MWA-41	MWA-41-071505	7/15/2005										< 4.55 U	
Shallow	MWA-41	MWA-41-081205	8/12/2005										< 4.55 U	
Shallow	MWA-41	MWA-41-090705	9/7/2005										< 4.55 U	
Shallow	MWA-41	MWA-41-120805	12/8/2005										0.600 J	
Shallow	MWA-41	MWA-41-010506	1/5/2006										< 4.55 U	
Shallow	MWA-41	MWA-41-020806	2/8/2006										< 4.55 U	
Shallow	MWA-41	MWA-41-072406	7/24/2006										15.1 J	
Shallow	MWA-41	MWA-41-041607	4/16/2007								26,600		< 0.6 U	1.7 J
Shallow	MWA-41	MWA-41-080609	8/6/2009								26,300		< 25 UJ	< 4 U
Shallow	MWA-42	MWA-42-050505	5/5/2005										56.2	
Shallow	MWA-42	MWA-42-071205	7/12/2005										< 4.55 U	
Shallow	MWA-42	MWA-42	8/2/2005		< 0.250 UJ		< 0.250 UJ		< 0.250 UJ	< 0.25 UJT		94.0		
Shallow	MWA-42	MWA-42-081505	8/15/2005										11.9	
Shallow	MWA-42	MWA-42-090805	9/8/2005								913,000			
Shallow	MWA-42	MWA-42-092305	9/23/2005										46.7	
Shallow	MWA-42	MWA-42-120705	12/7/2005										27.7	
Shallow	MWA-42	MWA-42-011106	1/11/2006										5.77 J	
Shallow	MWA-42	MWA-42-020906	2/9/2006										6.26 J	
Shallow	MWA-42	MWA-42-072506	7/25/2006										8.6 J	

Appendix E
Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Shallow	MWA-42	MWA-42-040307	4/3/2007		0.101		0.197		0.111	0.409 A	45,000	3.35	7.4	< 80.0 U
Shallow	MWA-42	MWA-42-081709	8/17/2009		0.104		0.152		< 0.0952 U	0.256 A	816,000	129	< 25 UJ	< 40 U
Shallow	MWA-46	MWA-46-050605	5/6/2005										49.5 J	
Shallow	MWA-46	MWA-46-071405	7/14/2005										41.1	
Shallow	MWA-46	MWA-46	8/4/2005		< 0.0500 U		< 0.0500 U		0.611 J	0.611 JT		40.2		
Shallow	MWA-46	MWA-46-081605	8/16/2005										20.3	
Shallow	MWA-46	MWA-46-091305	9/13/2005								1,250,000		43.3	< 1 U
Shallow	MWA-46	MWA-46-120905	12/9/2005										16.7	
Shallow	MWA-46	MWA-46-010906	1/9/2006										< 4.55 U	
Shallow	MWA-46	MWA-46-021306	2/13/2006										5.14 J	
Shallow	MWA-46	MWA-46-072606	7/26/2006										35.4	
Shallow	MWA-46	MWA-46-041107	4/11/2007		< 0.0980 U		< 0.0980 U		0.323	0.323 A	1,820,000	938	22	< 80.0 U
Shallow	MWA-46	MWA-46-081009	8/10/2009		0.429		0.176 J		0.728	1.33 JA	651,000	1.54	< 250 UJ	< 40 U
Shallow	MWA-47	MWA-47-050605	5/6/2005										< 4.55 U	
Shallow	MWA-47	MWA-47-071905	7/19/2005										< 40.0 UJ	
Shallow	MWA-47	MWA-47-081705	8/17/2005										4.63 J	
Shallow	MWA-47	MWA-47-090905	9/9/2005								9,690,000		< 4.55 U	66,000
Shallow	MWA-47	MWA-47-121205	12/12/2005										< 4.55 U	
Shallow	MWA-47	MWA-47-010606	1/6/2006										14.3	
Shallow	MWA-47	MWA-47-021006	2/10/2006										< 4.55 U	
Shallow	MWA-47	MWA-47-072606	7/26/2006										< 2 U	
Shallow	MWA-47	MWA-47-040507	4/5/2007		0.265		0.0489 J		0.152	0.466 JA	3,690,000	0.540	< 20 UJ	82.3
Shallow	MWA-47	MWA-47-080609	8/6/2009		0.200		0.0353 J		0.0931 J	0.328 JA	2,110,000	0.880 J	110 J	< 20 U
Shallow	MWA-47	MWA-47-022119	2/21/2019	0.040 j	0.067	< 0.10	< 0.0050	< 0.10	0.041	0.148		33	1.1	3.9 j
Shallow	MWA-61	MWA-61	8/1/2005		< 2.50 UJ		< 2.50 UJ		< 2.50 UJ	< 2.5 UJT		5,800		
Shallow	MWA-61	MWA-61-102605	10/26/2005		0.109		< 0.236 UJ		0.129	0.238 T		2,100		
Shallow	MWA-61	MWA-61-112105	11/21/2005		0.11		0.0557 J		0.204	0.369 JT		133		
Shallow	MWA-61	MWA-61-011306	1/13/2006		0.545		< 0.0472 U		0.124	0.669 T		465		
Shallow	MWA-61	MWA-61-040407	4/4/2007		0.567		< 0.0980 U		< 0.0980 U	0.567 A	683,000	325		343
Shallow	MWA-61	MWA-61-081009	8/10/2009		0.356 J		< 0.476 U		< 0.476 U	0.356 JA	473,000	715 J		489
Shallow	MWA-61	MWA-61-022119	2/21/2019	0.27 J+	0.50 J+	< 0.10	0.016 J+	< 0.10	0.029 J+	0.815		690	< 1.0	37
Shallow	MWA-63	MWA-63-102705	10/27/2005		< 0.0472 U		< 0.0472 U		< 0.0472 U	< 0.0472 UT		7.60		
Shallow	MWA-63	MWA-63-112105	11/21/2005		< 0.0495 U		< 0.0495 U		0.0533 J	0.0533 JT		< 0.272 U		
Shallow	MWA-63	MWA-63-040407	4/4/2007		< 0.00995 UJ		< 0.00995 UJ		0.00603 J	0.00603 JA	358,000	0.180 J		< 4.0 U
Shallow	MWA-63	MWA-63-080509	8/5/2009		< 0.00952 U		< 0.00952 U		0.00574 J	0.00574 JA	690,000	< 100 U		< 8 U
Shallow	MWA-63	MWA-63-022119	2/21/2019	< 0.10	< 0.0050	< 0.10	< 0.0050	< 0.10	< 0.010	< 0.10		5,800	< 1.0 UJ	< 4.0
Shallow	MWA-69	MWA-69	8/2/2005		17.3		< 5.00 UJ		51.1	68.4 T		9,010		
Shallow	MWA-69	MWA-69-102505	10/25/2005		3.93		0.289		6.84	11.059 T		2,690		
Shallow	MWA-69	MWA-69-112205	11/22/2005		4.36		0.425		9.33	14.115 T		3,640		
Shallow	MWA-69	MWA-69-011606	1/16/2006		8.64		0.838		29.5	38.978 T		166		
Shallow	MWA-69	MWA-69-041707	4/17/2007		15.6		1.05 J		46.4 J	62.9 JA	511,000	5,360		29.5 J
Shallow	MWA-69	MWA-69-081109	8/11/2009		50.0		4.16		57.9	112.06	297,000	6,930		< 20 U
Shallow	MWA-69	MWA-69-090309	9/3/2009		7.45		0.369		5.95	13.8 A				
Intermediate	MWA-81	GWG001	11/24/1998									1,700		
Intermediate	MWA-81	GW019906	1/27/1999		5.3 J		0.07 J		1 J	6.37 JT	2,660,000	4,800		
Intermediate	MWA-81	GW029908	4/27/1999		0.16 J		< 0.04 UJ		< 0.04 UJ	0.16 JT	2,290,000	4,300 J		
Intermediate	MWA-81	GW039905	8/24/1999		0.05 J		< 0.04 UJ		< 0.04 UJ	0.05 JT	2,660,000	3,400		
Intermediate	MWA-81	GW049906	11/16/1999		0.08 J					0.08 JT	2,530,000	2,800		
Intermediate	MWA-81	GW010112	3/29/2001		< 0.1 U		< 0.1 U		< 0.1 U	< 0.1 UT	1,660,000 J	4,100		
Intermediate	MWA-81	GW020107	6/12/2001		0.11 J					0.11 JT	1,420,000	1,400		
Intermediate	MWA-81	GW04100206	4/10/2002		0.08		< 0.0097 U		0.012	0.092 T	2,110,000	940		
Intermediate	MWA-81	GW-060903-02	6/9/2003		< 0.0170 U		< 0.0170 U		< 0.0280 U	< 0.028 UT	2,380,000	23		< 20 U
Intermediate	MWA-81	MWA-81-111004	11/10/2004		< 0.0500 U		< 0.0500 U		0.590	0.59 T		24		
Intermediate	MWA-81	MWA-81-031005	3/10/2005		< 0.0500 U		< 0.0500 U		0.138 J	0.138 JT		185		
Intermediate	MWA-81	MWA-81-062105	6/21/2005		< 0.0500 U		< 0.0500 U		< 0.0500 U	< 0.05 UT		27		
Intermediate	MWA-81	MWA-81-091505	9/15/2005		< 0.00103 U		< 0.00367 U		0.0243 J	0.0243 JT		122		
Intermediate	MWA-81	MWA-81-102705	10/27/2005		< 0.0472 U		< 0.0472 U		< 0.0472 U	< 0.0472 UT		215		
Intermediate	MWA-81	MWA-81-112105	11/21/2005		< 0.0472 U		< 0.0472 U		0.0678 J	0.0678 JT		46		

Appendix E
Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Intermediate	MWA-8I	MWA-8I-122005	12/20/2005		< 0.0957 UJ		< 0.0957 UJ		< 0.0957 UJ	< 0.0957 UJT		25		
Intermediate	MWA-8I	MWA-8I-032906	3/29/2006		< 0.0490 U		< 0.0490 U		< 0.0490 U	< 0.049 UT		18		
Intermediate	MWA-8I	MWA-8I-040407	4/4/2007		< 0.0976 U		< 0.0976 U		< 0.0976 U	< 0.0976 UA	1,420,000	4,910		< 200 U
Intermediate	MWA-8I	MWA-8I-080609	8/6/2009		< 0.0190 U		< 0.0190 U		0.0194	0.0194 A	1,020,000	746		< 20 U
Intermediate	MWA-32I	GW-060403-10	6/4/2003		< 0.0170 UJ		< 0.0170 UJ		< 0.0280 UJ	< 0.028 UJT	31,000,000			200,000
Intermediate	MWA-32I	MWA-32I-050605	5/6/2005								17,600,000		176	
Intermediate	MWA-32I	MWA-32I-051005	5/10/2005											158,000
Intermediate	MWA-32I	MWA-32I-071805	7/18/2005										119	
Intermediate	MWA-32I	MWA-32I	8/3/2005		< 0.0500 U		< 0.0500 U		< 0.0500 U	< 0.05 UT		1		
Intermediate	MWA-32I	MWA-32I-081705	8/17/2005										555	
Intermediate	MWA-32I	MWA-32I-091405	9/14/2005								13,700,000		386	160,000
Intermediate	MWA-32I	MWA-32I-120905	12/9/2005										14.4	
Intermediate	MWA-32I	MWA-32I-010606	1/6/2006										6.55 J	
Intermediate	MWA-32I	MWA-32I-021006	2/10/2006										6.72 J	
Intermediate	MWA-32I	MWA-32I-072606	7/26/2006										< 2 U	
Intermediate	MWA-32I	MWA-32I-040507	4/5/2007		0.0818 J		< 0.0952 U		< 0.0952 U	0.0818 JA	33,800,000	0.470 J	8 J	131 J
Intermediate	MWA-32I	MWA-32I-081009	8/10/2009		0.0568 J		< 0.0962 U		< 0.0962 U	0.0568 JA	2,520,000	0.180 J	210 J	29,900
Intermediate	MWA-34I	GW-060603-05	6/6/2003		0.0892		< 0.0170 U		0.327	0.416 T	3,040,000	666		4,600
Intermediate	MWA-34I	MWA-34I-050605	5/6/2005								5,260,000		35.8	
Intermediate	MWA-34I	MWA-34I-071805	7/18/2005										17.6	
Intermediate	MWA-34I	MWA-34I	8/3/2005		< 0.0500 U		< 0.0500 U		< 0.0500 U	< 0.05 UT		1,540		
Intermediate	MWA-34I	MWA-34I-081705	8/17/2005										192	
Intermediate	MWA-34I	MWA-34I-091305	9/13/2005								4,580,000		26.9	5,900
Intermediate	MWA-34I	MWA-34I-120905	12/9/2005										30.2	
Intermediate	MWA-34I	MWA-34I-010906	1/9/2006										13.5	
Intermediate	MWA-34I	MWA-34I-021006	2/10/2006										12.3	
Intermediate	MWA-34I	MWA-34I-072606	7/26/2006										34.5	
Intermediate	MWA-34I	MWA-34I-040907	4/9/2007		< 0.0971 U		< 0.0971 U		< 0.0971 U	< 0.0971 UA	1,400,000	3,920	32.6	< 80.0 U
Intermediate	MWA-34I	MWA-34I-081109	8/11/2009		< 0.0200 U		< 0.0200 U		< 0.0200 U	< 0.02 UA	740,000	3,240	< 250 UJ	< 40 U
Intermediate	MWA-49I	MWA-49I-050605	5/6/2005										< 4.55 U	
Intermediate	MWA-49I	MWA-49I-071405	7/14/2005										< 4.55 U	
Intermediate	MWA-49I	MWA-49I	8/3/2005		< 0.0500 U		< 0.0500 U		0.204	0.204 T		6		

Appendix E
Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Intermediate	MWA-49I	MWA-49I-081605	8/16/2005										< 4.55 U	
Intermediate	MWA-49I	MWA-49I-091305	9/13/2005								10,600,000		< 4.55 U	160,000
Intermediate	MWA-49I	MWA-49I-120905	12/9/2005										< 4.55 U	
Intermediate	MWA-49I	MWA-49I-010906	1/9/2006										< 4.55 U	
Intermediate	MWA-49I	MWA-49I-021306	2/13/2006										< 4.55 U	
Intermediate	MWA-49I	MWA-49I-072606	7/26/2006										< 2 U	
Intermediate	MWA-49I	MWA-49I-041107	4/11/2007		< 0.0971 U		< 0.0971 U		0.135	0.135 A	11,000,000	0.780 J	0.9 J	42,800
Intermediate	MWA-49I	MWA-49I-081009	8/10/2009		0.0402 J		0.0394 J		0.269	0.349 JA	7,560,000	< 10.0 U	< 25 UJ	58,900
Intermediate	MWA-51I	MWA-51I-050505	5/5/2005										48.5	
Intermediate	MWA-51I	MWA-51I-071405	7/14/2005										63.1	
Intermediate	MWA-51I	MWA-51I	8/3/2005		< 0.0500 U		< 0.0500 U		1.21	1.21 T		845		
Intermediate	MWA-51I	MWA-51I-081605	8/16/2005										24.3	
Intermediate	MWA-51I	MWA-51I-091305	9/13/2005								8,910,000		46.8	590
Intermediate	MWA-51I	MWA-51I-120805	12/8/2005										22.0	
Intermediate	MWA-51I	MWA-51I-011006	1/10/2006										< 4.55 U	
Intermediate	MWA-51I	MWA-51I-021306	2/13/2006										10.7	
Intermediate	MWA-51I	MWA-51I-041107	4/11/2007		0.103		< 0.0962 U		0.0572 J	0.16 JA	4,640,000	358	31.3	54.6 J
Intermediate	MWA-51I	MWA-51I-081009	8/10/2009		0.113		< 0.0962 U		0.0363 J	0.149 JA	2,780,000	336 J	< 250 UJ	< 40 U
Intermediate	MWA-53I	MWA-53I-050905	5/9/2005										< 4.55 U	
Intermediate	MWA-53I	MWA-53I-071805	7/18/2005										< 4.55 U	
Intermediate	MWA-53I	MWA-53I-081205	8/12/2005										< 4.55 U	
Intermediate	MWA-53I	MWA-53I-091205	9/12/2005								14,300,000		< 4.55 U	1,400
Intermediate	MWA-53I	MWA-53I-120805	12/8/2005										1.10 J	
Intermediate	MWA-53I	MWA-53I-010606	1/6/2006										< 4.55 U	
Intermediate	MWA-53I	MWA-53I-020806	2/8/2006										< 4.55 U	
Intermediate	MWA-53I	MWA-53I-072406	7/24/2006										6.8 J	
Intermediate	MWA-53I	MWA-53I-041607	4/16/2007								16,200,000		< 6 UJ	209
Intermediate	MWA-53I	MWA-53I-080609	8/6/2009								5,980,000		< 25 UJ	< 20 U
Intermediate	MWA-54I	MWA-54I-050505	5/5/2005										54.8	
Intermediate	MWA-54I	MWA-54I-071205	7/12/2005										< 136 U	
Intermediate	MWA-54I	MWA-54I-081505	8/15/2005										< 4.55 U	
Intermediate	MWA-54I	MWA-54I-090805	9/8/2005								5,540,000			
Intermediate	MWA-54I	MWA-54I-092305	9/23/2005										6.34 J	
Intermediate	MWA-54I	MWA-54I-120705	12/7/2005										7.20 J	
Intermediate	MWA-54I	MWA-54I-011106	1/11/2006										11.3	
Intermediate	MWA-54I	MWA-54I-020906	2/9/2006										11.3	
Intermediate	MWA-54I	MWA-54I-07506	7/25/2006										17.5 J	
Intermediate	MWA-54I	MWA-54I-040307	4/3/2007		< 0.0962 U		< 0.0962 U		< 0.0962 U	< 0.0962 UA	3,090,000	9	14.4	< 40.0 U
Intermediate	MWA-54I	MWA-54I-081909	8/19/2009		0.0380 J		0.00781 J		0.0103 J	0.0561	2,750,000	7	210 J	< 40 U
Intermediate	MWA-64I	MWA-64I	8/1/2005		0.207		< 0.0500 U		0.309	0.516 T		2,320		
Intermediate	MWA-64I	MWA-64I-040407	4/4/2007		0.0563 J		< 0.0966 U		< 0.0966 U	0.0563 JA	1,910,000	17,500		< 400 U
Intermediate	MWA-64I	MWA-64I-080609	8/6/2009		0.0290 J		< 0.0952 U		0.0319 J	0.0609 JA	1,590,000	2,070		< 40 U
Intermediate	MWA-66I	MWA-66I	8/2/2005		< 0.500 UJ		< 0.500 UJ		< 0.500 UJ	< 0.5 UJT		12,900		
Intermediate	MWA-66I	MWA-66I-041707	4/17/2007		< 0.0957 U		< 0.0957 U		< 0.0957 U	< 0.0957 UA	1,890,000	8,160		39.0 J
Intermediate	MWA-66I	MWA-66I-081109	8/11/2009		< 0.0340 U		< 0.00971 U		0.00620 J	0.0062 JA	1,720,000	7,780	< 25 UJ	1,240
Intermediate	MWA-70I	MWA-70I-B	4/19/2006								68,000	< 0.17 U	< 1.62 U	< 200 U
Intermediate	MWA-70I	MWA-70I-040307	4/3/2007								4,090,000		1.4 J	< 40.0 U
Intermediate	MWA-70I	MWA-70I-080509	8/5/2009								5,200,000		< 25 U	< 20 U
Deep	MWA-11I(D)	GWG004	12/7/1998									49		
Deep	MWA-11I(D)	GW019916	1/29/1999		< 0.04 U		< 0.04 U		0.2	0.2 T	612,000	2.5		
Deep	MWA-11I(D)	GW029905	4/27/1999		0.19		< 0.04 U		0.08	0.27 T	637,000	< 0.5 UJ		
Deep	MWA-11I(D)	GW039916	8/26/1999		0.12		< 0.04 U		0.05	0.17 T	802,000	< 0.5 U		
Deep	MWA-11I(D)	GW049914	11/17/1999		0.1 J		< 0.04 UJ		< 0.04 UJ	0.1 JT	963,000	< 1 U		
Deep	MWA-11I(D)	GW010118	3/30/2001		0.25		< 0.1 U		0.7	0.95 T	768,000 J	< 0.5 U		
Deep	MWA-11I(D)	GW020119	6/15/2001		0.25		0.01 J		0.48	0.74 JT	773,000	< 0.5 U		
Deep	MWA-11I(D)	GW04110204	4/11/2002		< 0.16 U		< 0.0097 U		< 0.085 U	< 0.16 UT	833,000	< 1.4 U		
Deep	MWA-11I(D)	GW-061003-03	6/10/2003		1.2		< 0.0170 U		< 0.573 U	1.2 T	550,000	< 0.71 U		< 20 U
Deep	MWA-11I(D)	MWA-11	8/1/2005		0.593		< 0.0500 U		0.0829 J	0.6759 JT		0.810		

Appendix E
Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Deep	MWA-11I(D)	MWA-11I-041707	4/17/2007		0.0722 J		< 0.0971 U		0.0591 J	0.131 JA	1,210,000	1.92		< 8.0 U
Deep	MWA-11I(D)	MWA-11I-081909	8/19/2009		0.658		0.0459 J		0.0599 J	0.764 JA	1,090,000	< 0.780 U	40 J	< 4 U
Deep	MWA-31I(D)	GW04080205	4/8/2002		< 0.0097 U		< 0.0097 U		< 0.0097 U	< 0.0097 UT	39,100,000	< 0.5 U		
Deep	MWA-31I(D)	GW-060403-07	6/4/2003		< 0.0170 U		< 0.0170 U		< 0.0280 U	< 0.028 UT	61,100,000			4,700
Deep	MWA-31I(D)	MWA-31I-050605	5/6/2005								62,100,000		726	
Deep	MWA-31I(D)	MWA-31I-071805	7/18/2005										250	
Deep	MWA-31I(D)	MWA-31I-081705	8/17/2005										142	
Deep	MWA-31I(D)	MWA-31I-091405	9/14/2005								57,900,000		1,020	
Deep	MWA-31I(D)	MWA-31I-120905	12/9/2005										25.1	
Deep	MWA-31I(D)	MWA-31I-010906	1/9/2006										45.3	
Deep	MWA-31I(D)	MWA-31I-021006	2/10/2006										104	
Deep	MWA-31I(D)	MWA-31I-072606	7/26/2006										< 2 U	
Deep	MWA-31I(D)	MWA-31I(D)-040507	4/5/2007		< 0.0962 U		< 0.0962 U		< 0.0962 U	< 0.0962 UA	53,700,000	0.640	< 6 UJ	5,730
Deep	MWA-31I(D)	MWA-31I(D)-081009	8/10/2009		< 0.00952 U		< 0.00952 U		< 0.00952 U	< 0.00952 UA	54,300,000	< 2.50 UJ	9,300 J	1,840
Deep	MWA-56D	MWA-56D-050605	5/6/2005										< 4.55 U	
Deep	MWA-56D	MWA-56D-071405	7/14/2005										22.3	
Deep	MWA-56D	MWA-56D-081605	8/16/2005										< 4.55 U	
Deep	MWA-56D	MWA-56D-091305	9/13/2005								30,800,000		< 4.55 U	
Deep	MWA-56D	MWA-56D-120905	12/9/2005										< 4.55 UJ	
Deep	MWA-56D	MWA-56D-010906	1/9/2006										< 4.55 U	
Deep	MWA-56D	MWA-56D-021306	2/13/2006										< 4.55 U	
Deep	MWA-56D	MWA-56D-072606	7/26/2006										< 2 U	
Deep	MWA-56D	MWA-56D-041107	4/11/2007		< 0.0971 U		< 0.0971 U		< 0.0971 U	< 0.0971 UA	27,900,000	< 2.50 U	< 2 UJ	2,430
Deep	MWA-56D	MWA-56D-081009	8/10/2009		< 0.00976 U		< 0.00976 U		0.00690 J	0.0069 JA	22,800,000	< 5.00 U	< 25 UJ	2,140
Deep	MWA-58D	MWA-58D-050605	5/6/2005										< 4.55 U	
Deep	MWA-58D	MWA-58D-071405	7/14/2005										< 4.55 U	
Deep	MWA-58D	MWA-58D-081705	8/17/2005										< 4.55 U	
Deep	MWA-58D	MWA-58D-091305	9/13/2005								60,700,000		< 4.55 U	
Deep	MWA-58D	MWA-58D-120905	12/9/2005										< 4.55 UJ	
Deep	MWA-58D	MWA-58D-010906	1/9/2006										< 4.55 U	

Appendix E
Historical Data Table
Arkema Quarter 4, 2025, Groundwater Monitoring Report
Arkema Inc. Facility
Portland, Oregon

Aquifer	Well ID	Sample ID	Date	2,4'-DDD	4,4'-DDD	2,4'-DDE	4,4'-DDE	2,4'-DDT	4,4'-DDT	Total of 2,4' and 4,4'-DDD, -DDE, - DDT	Chloride	Chlorobenzene	Chromium (VI)	Perchlorate
				µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L	µg / L
Deep	MWA-58D	MWA-58D-021006	2/10/2006										< 4.55 U	
Deep	MWA-58D	MWA-58D-072606	7/26/2006										< 2 U	
Deep	MWA-58D	MWA-58D-040907	4/9/2007		< 0.0962 U		< 0.0962 U		< 0.0962 U	< 0.0962 UA	53,600,000	< 2.50 U	57.5	59,600
Deep	MWA-58D	MWA-58D-081009	8/10/2009		< 0.00943 U		< 0.00943 U		0.0286	0.0286 A	33,600,000	2.00 J	< 25 UJ	128,000

Notes:
Bolded values indicate concentrations above the Reportable Detection Limit.
< = Compound not detected. Reportable detection limit shown.
µg/L = micrograms per liter
DDD = Dichlorodiphenyldichloroethane
DDE = Dichlorodiphenyldichloroethylene
DDT = Dichlorodiphenyltrichloroethane

Qualifiers:
A = Total value based on limited number of analytes.
j = The analyte was positively identified; associated numerical value is the approximate concentration of the analyte in the sample.
J = The analyte was positively identified; associated numerical value is the approximate concentration of the analyte in the sample.
J+ = The concentration of the sample is considered to be biased high, as the associated QC results exceed the upper control limits.
J- = The concentration of the sample is considered to be biased low, as the associated QC results are outside the lower control limits.
T = Sample temperature did not meet quality control criteria.
U = Compound not detected based on quality assurance review.
UJ = Analyte was analyzed for, but not detected. The detection limit is a quantitative estimate.
R = Rejected. Quality control indicates that the data are unusable (compound may or not be present).



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