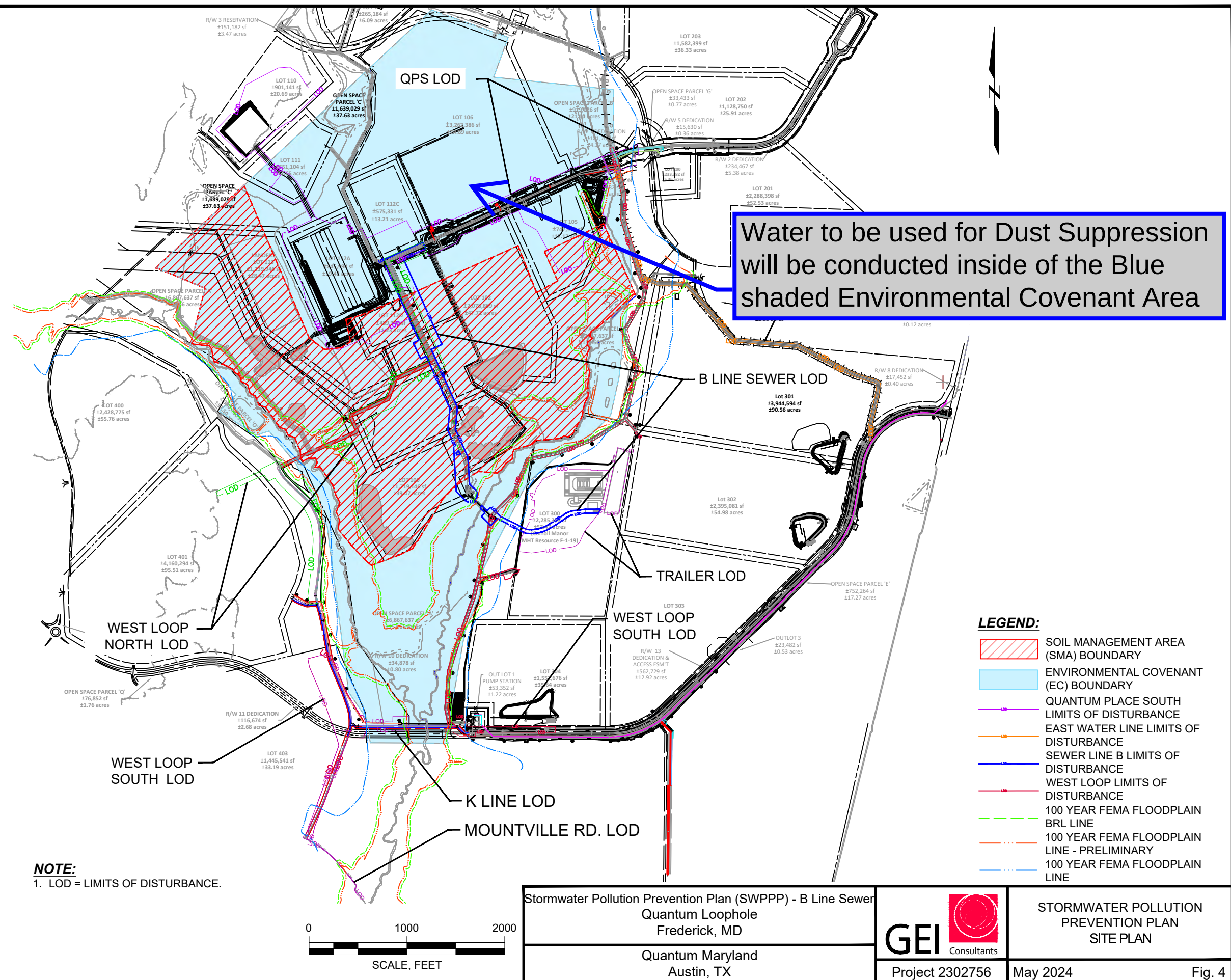


Client Name: Tetra Tech Inc - Germantown Lab: Eurofins Lancaster							
Analyte	Results Basis	MDGW	AWQCFA	MCL	410-208327-2 QL-F05392-20250218	410-209779-2 QM-A4712-20250227	410-209779-3 QM-A4719-20250227
1,1,1-Trichloroethane	Total	200	NC	200	<0.080	<0.080	<0.080
1,1,2,2-Tetrachloroethane	Total	0.076	NC	NC	<0.10	<0.10	<0.10
1,1,2-Trichloroethane	Total	5	NC	5	<0.080	<0.080	<0.080
1,1,2-Trichlorotrifluoroethane	Total	NC	NC	NC	<0.080	<0.080	<0.080
1,1-Dichloroethane	Total	2.8	NC	NC	<0.10	<0.10	<0.10
1,1-Dichloroethene	Total	7	NC	7	<0.10	<0.10	<0.10
1,2,4-Trichlorobenzene	Total	70	NC	70	<0.070	<0.070	<0.070
1,2-Dibromo-3-Chloropropane	Total	0.2	NC	0.2	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	Total	600	NC	600	<0.070	<0.070	<0.070
1,2-Dichloroethane	Total	5	NC	5	<0.070	<0.070	<0.070
1,2-Dichloropropane	Total	5	NC	5	<0.10	<0.10	<0.10
1,3-Dichlorobenzene	Total	NC	NC	NC	<0.070	<0.070	<0.070
1,4-Dichlorobenzene	Total	75	NC	75	<0.070	<0.070	<0.070
2-Butanone	Total	560	NC	NC	<1.0	<1.0	<1.0
2-Hexanone	Total	NC	NC	NC	<2.0	<2.0	<2.0
4-Methyl-2-pentanone	Total	630	NC	NC	<1.0	<1.0	<1.0
Acenaphthene	Total	53	NC	NC	<0.011	<0.011	<0.011
Acenaphthylene	Total	NC	NC	NC	<0.011	<0.011	<0.011
Acetone	Total	1400	NC	NC	<1.5	<1.5	<1.5
Aluminum	Total Recoverable	2000	1100	NC	310	320	650
Anthracene	Total	180	NC	NC	<0.011	<0.011	<0.011
Antimony	Total Recoverable	6	NC	6	<0.20	<0.20	<0.20
Arsenic	Total Recoverable	10	340	10	<0.68	<0.68	<0.68
Barium	Total Recoverable	2000	NC	2000	41	39	38
Benzene	Total	5	NC	5	<0.10	<0.10	<0.10
Benzo[a]anthracene	Total	0.03	NC	0.1	<0.011	<0.011	<0.011
Benzo[a]pyrene	Total	0.2	NC	0.2	<0.011	<0.011	<0.011
Benzo[b]fluoranthene	Total	0.25	NC	0.2	<0.051	<0.050	<0.050
Benzo[g,h,i]perylene	Total	NC	NC	NC	<0.011	<0.011	<0.011
Benzo[k]fluoranthene	Total	2.5	NC	0.2	<0.011	<0.011	<0.011
Beryllium	Total Recoverable	4	NC	4	<0.12	<0.12	<0.12
Bromodichloromethane	Total	80	NC	NC	<0.080	<0.080	<0.080
Bromoform	Total	80	NC	NC	<0.30	<0.30	<0.30
Bromomethane	Total	0.75	NC	NC	<0.10	<0.10	<0.10
Cadmium	Total Recoverable	5	1.8	5	<0.15	<0.15	<0.15
Calcium	Total Recoverable	NC	NC	NC	77000	74000	55000
Carbon disulfide	Total	81	NC	NC	<0.10	<0.10	<0.10
Carbon tetrachloride	Total	5	NC	5	<0.10	<0.10	<0.10
Chlorobenzene	Total	100	NC	100	<0.070	<0.070	<0.070
Chloroethane	Total	2100	NC	NC	<0.10	<0.10	<0.10
Chloroform	Total	80	NC	NC	<0.090	<0.090	0.19
Chloromethane	Total	19	NC	NC	<0.10	<0.10	<0.10
Chromium	Total Recoverable	100	16	100	0.57	<0.55	0.58
Chrysene	Total	25	NC	0.2	<0.027	<0.027	<0.027
cis-1,2-Dichloroethene	Total	70	NC	70	<0.080	<0.080	<0.080
cis-1,3-Dichloropropene	Total	NC	NC	NC	<0.10	<0.10	<0.10
Cobalt	Total Recoverable	NC	NC	NC	0.35	0.26	0.32
Copper	Total Recoverable	1300	NC	1300	1.1	1.2	1.9
Corrosivity	Total	NC	NC	NC	no	no	no
Cyanide, Free	Total	0.2	0.022	0.2	<0.0050	<0.0050	<0.0050
Cyclohexane	Total	NC	NC	NC	<0.10	<0.10	<0.10
Dibenz(a,h)anthracene	Total	0.025	NC	0.3	<0.022	<0.021	<0.021
Dibromochloromethane	Total	80	NC	NC	<0.080	<0.080	<0.080
Dichlorodifluoromethane	Total	NC	NC	NC	<0.10	<0.10	<0.10
DRO (C10-C28)	Total	47	NC	NC	<47	<48	<47

Gray shaded value indicates non-detect lab concentration above criteria

Client Name: Tetra Tech Inc - Germantown Lab: Eurofins Lancaster							
Analyte	Results Basis	MDGW	AWQCFA	MCL	410-208327-2 QL-F05392-20250218	410-209779-2 QM-A4712-20250227	410-209779-3 QM-A4719-20250227
Ethylbenzene	Total	700	NC	700	<0.080	<0.080	<0.080
Ethylene Dibromide	Total	0.05	NC	0.05	<0.0094	<0.0094	<0.0095
Fluoranthene	Total	80	NC	NC	<0.025	<0.024	<0.024
Fluorene	Total	29	NC	NC	<0.011	<0.011	<0.011
Fluoride	Total	NC	NC	4	0.28	0.31	0.40
GRO	Total	47	NC	NC	<23	<23	<23
Indeno[1,2,3-cd]pyrene	Total	0.25	NC	0.4	<0.022	<0.021	<0.021
Iron	Total Recoverable	1400	NC	NC	370	350	530
Isopropylbenzene	Total	45	NC	NC	<0.080	<0.080	<0.080
Lead	Total Recoverable	15	65	15	0.21	0.16	0.23
Magnesium	Total Recoverable	NC	NC	NC	9100	8700	6900
Manganese	Total Recoverable	43	NC	43	32	28	8.8
Mercury	Total	2	1.4	2	1.0	<0.079	<0.079
Methyl acetate	Total	NC	NC	NC	<0.20	<0.20	<0.20
Methyl tertiary butyl ether	Total	20	NC	NC	<0.080	<0.080	<0.080
Methylcyclohexane	Total	NC	NC	NC	<0.10	<0.10	<0.10
Methylene Chloride	Total	5	NC	5	<0.20	<0.20	<0.20
Naphthalene	Total	0.17	NC	NC	<0.074	<0.072	<0.072
Nickel	Total Recoverable	39	470	NC	1.3	1.3	1.2
PCB-1016	Total	0.14	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1016	Total	0.14	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1221	Total	0.0047	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1221	Total	0.0047	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1232	Total	0.0047	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1232	Total	0.0047	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1242	Total	0.0078	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1242	Total	0.0078	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1248	Total	0.0078	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1248	Total	0.0078	0.014*	0.5**	<0.0083	<0.0076	<0.0076
PCB-1254	Total	0.0078	0.014*	0.5**	<0.0052	<0.0047	<0.0048
PCB-1254	Total	0.0078	0.014*	0.5**	<0.0052	<0.0047	<0.0048
PCB-1260	Total	0.0078	0.014*	0.5**	<0.0052	<0.0047	<0.0048
PCB-1260	Total	0.0078	0.014*	0.5**	<0.0052	<0.0047	<0.0048
pH	Total	NC	6.5-8.5	NC	7.6	7.6	7.0
Phenanthrene	Total	12	NC	NC	<0.033	<0.032	<0.032
Polychlorinated biphenyls, Total	Total	0.5			<0.0083	<0.0076	<0.0076
Potassium	Total Recoverable	NC	NC	NC	4200	6500	6900
Pyrene	Total	12	NC	NC	<0.023	<0.022	<0.022
Selenium	Total Recoverable	50	NC	50	<0.28	<0.28	<0.28
Silver	Total Recoverable	9.4	3.2	9.4	<0.10	<0.10	<0.10
Sodium	Total Recoverable	NC	NC	NC	8000	9400	8300
Styrene	Total	100	NC	100	<0.070	<0.070	<0.070
Temperature	Total	NC	NC	NC	22.2	17.8	16.7
Tetrachloroethene	Total	5	NC	5	<0.20	<0.20	<0.20
Thallium	Total Recoverable	2	NC	2	<0.13	<0.13	<0.13
Toluene	Total	1000	NC	1000	<0.080	<0.080	<0.080
trans-1,2-Dichloroethene	Total	100	NC	100	<0.10	<0.10	<0.10
trans-1,3-Dichloropropene	Total	NC	NC	NC	<0.080	<0.080	<0.080
Trichloroethene	Total	5	NC	5	<0.080	<0.080	<0.080
Trichlorofluoromethane	Total	NC	NC	NC	<0.10	<0.10	<0.10
Vanadium	Total Recoverable	8.6	NC	NC	1.4	1.1	1.6
Vinyl chloride	Total	2	NC	2	<0.10	<0.10	<0.10
Xylenes, Total	Total	10,000	NC	10000	<0.070	<0.070	<0.070
Zinc	Total Recoverable	600	120	NC	4.2	<4.0	<4.0

Gray shaded value indicates non-detect lab concentration above criteria



EPA Identification Number		NPDES Permit Number		Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026	
Form 2C NPDES			U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS				
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(G)(1))							
Outfall Location	<u>1.1</u>	Provide information on each of the facility's outfalls in the table below.					
		Outfall Number	Receiving Water Name	Latitude		Longitude	
		FT F05392	Groundwater	Multiple - see map		Multiple - see map	
SECTION 2. LINE DRAWING (40 CFR 122.21(G)(2))							
Line Drawing	<u>2.1</u>	Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C-1 at end of instructions for example.) ☐ Yes					
SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(G)(3))							
Average Flows and Treatment	<u>3.1</u>	For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.					
		Outfall Number _____					
		Operations Contributing to Flow					
		Operation			Average Flow		
		Outfall A (inside EC and outside of EC)			mgd		
					mgd		
					mgd		
					mgd		
		Treatment Units					
		Description (include size, flow rate through each treatment unit, retention time, etc.)		Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge	

EPA Identification Number		NPDES Permit Number		Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026			
Average Flows and Treatment Continued	3.1 cont.	**Outfall Number** _____							
		Operations Contributing to Flow							
		Operation			Average Flow				
					mgd				
					mgd				
					mgd				
					mgd				
		Treatment Units							
		Description (include size, flow rate through each treatment unit, retention time, etc.)			Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge		
		Outfall Number _____							
		Operations Contributing to Flow							
		Operation			Average Flow				
					mgd				
					mgd				
					mgd				
					mgd				
		Treatment Units							
		Description (include size, flow rate through each treatment unit, retention time, etc.)			Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge		
		System Users	3.2	Are you applying for an NPDES permit to operate a privately owned treatment works? ☐ Yes ☒ No → SKIP to Section 4.					
			3.3	Have you attached a list that identifies each user of the treatment works? ☐ Yes					

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SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(G)(4))								
Intermittent Flows	4.1	Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal? ☐ Yes ☒ No → SKIP to Section 5.						
	4.2	Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.						
		Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
				Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
SECTION 5. PRODUCTION (40 CFR 122.21(G)(5))								
Applicable ELGs	5.1	Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility? ☐ Yes ☒ No → SKIP to Section 6.						
	5.2	Provide the following information on applicable ELGs.						
		ELG Category	ELG Subcategory				Regulatory Citation	
Production-Based Limitations	5.3	Are any of the applicable ELGs expressed in terms of production (or other measure of operation)? ☐ Yes ☒ No → SKIP to Section 6.						
	5.4	Provide an actual measure of daily production expressed in terms and units of applicable ELGs.						
		Outfall Number	Operation, Product, or Material			Quantity per Day	Unit of Measure	

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	OMB No. 2040-0004 Expires 07/31/2026	
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	5.5	Are you requesting alternative limits based on an anticipated increase in the actual production during the next permit term? (Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)		
		☐ Yes ☐ No		

SECTION 6. IMPROVEMENTS (40 CFR 122.21(G)(6))

Upgrades and Improvements	6.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?			
		☐ Yes ☒ No → SKIP to Item 6.3.			
	6.2	Briefly identify each applicable project in the table below.			
		Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates
					Required Projected
	6.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (<i>optional item</i>)			
		☐ Yes ☐ No ☒ Not applicable			

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(G)(7))

Effluent and Intake Characteristics	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.			
	Table A. Conventional and Non-Conventional Pollutants			
	7.1	Are you requesting a waiver from your NPDES permitting authority for any Table A pollutants for any of your outfalls?		
		☐ Yes ☒ No → SKIP to Item 7.3.		
	7.2	If yes, indicate the applicable outfalls below or check the appropriate box to indicate that you are requesting a waiver for all outfalls. Attach waiver request and other required information to the application.		
		Outfall number _____ Outfall number _____ Outfall number _____ ☐ I am requesting a waiver for some pollutants at all outfalls. ☐ I am requesting a waiver for all pollutants at all outfalls → SKIP to Item 7.4.		
	7.3	Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?		
		☐ Yes		
Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants				
7.4	Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)			
	☐ Yes ☒ No → SKIP to Item 7.8.			
7.5	Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?			
	☐ Yes			

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	7.6	List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.						
		Primary Industry Category			Required GC/MS Fraction(s) (check applicable boxes)			
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
Effluent and Intake Characteristics Continued	7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☐ Yes						
	7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☐ Yes						
	7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☐ Yes						
	7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? ☐ Yes → Note that you qualify at the top of Table B, then SKIP to Item 7.12. ☒ No						
	7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☒ Yes						
	Table C. Certain Conventional and Non-Conventional Pollutants							
	7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table C for all outfalls? ☒ Yes						
	7.13	Have you completed Table C by providing quantitative data for those pollutants that are limited either directly or indirectly in an ELG? You must provide quantitative data even if the pollutant is "Believed Absent." ☐ Yes ☒ Not applicable						
	7.14	Have you completed Table C by providing quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☒ Yes						
	Table D. Certain Hazardous Substances and Asbestos							
	7.15	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☒ Yes						
	7.16	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) providing quantitative data, if available? ☒ Yes ☐ No						
	Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)							
7.17	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes → Complete Table E. ☒ No → SKIP to Section 8.							
7.18	Have you completed Table E by reporting <i>qualitative</i> data for TCDD? ☐ Yes							

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SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(G)(9))

Used or Manufactured Toxics	<u>8.1</u>	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☒ No → SKIP to Section 9.		
	<u>8.2</u>	List the pollutants below. Attach additional sheets, if necessary.		
	1.	4.	7.	
	2.	5.	8.	
	3.	6.	9.	

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(G)(11))

Biological Toxicity Tests	<u>9.1</u>	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) a receiving water in relation to your discharge? ☐ Yes ☒ No → SKIP to Section 10.		
	<u>9.2</u>	Identify the tests and their purposes below.		
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?
				☐ Yes ☐ No
				☐ Yes ☐ No
			☐ Yes ☐ No	

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(G)(12))

Contract Analyses	<u>10.1</u>	Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm? ☒ Yes ☐ No → SKIP to Section 11.		
	<u>10.2</u>	Provide information for each contract laboratory or consulting firm below.		
			Laboratory Number 1	Laboratory Number 2
		Name of laboratory/firm	Eurofins Lancaster Laboratories Environment Testing, LLC	
		Laboratory address	2425 New Holland Pike, Lancaster, PA	
		Phone number	(412) 525-0071	
	Pollutant(s) analyzed	VOCs, SVOCs, GRO/DRO, PCBs, Anions, Metals/Mercury, pH, free cyanide		

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SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(G)(13))							
Additional Information	<u>11.1</u>	Has the NPDES permitting authority requested additional information? ☐ Yes ☒ No → SKIP to Section 12.					
	<u>11.2</u>	List the information requested and attach it to this application.					
	1.						4.
	2.						5.
	3.						6.
SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))							
Checklist and Certification Statement	<u>12.1</u>	In Column 1 below, mark the sections of Form 2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.					
		Column 1		Column 2			
	☒	Section 1: Outfall Location		☒ w/ attachments			
	☐	Section 2: Line Drawing		☐ w/ line drawing		☐ w/ additional attachments	
	☐	Section 3: Average Flows and Treatment		☐ w/ attachments		☐ w/ list of each user of privately owned treatment works	
	☐	Section 4: Intermittent Flows		☐ w/ attachments			
	☐	Section 5: Production		☐ w/ attachments			
	☐	Section 6: Improvements		☐ w/ attachments		☐ w/ optional additional sheets describing any additional pollution control plans	
	☒	Section 7: Effluent and Intake Characteristics		☒ w/ request for a waiver and supporting information ☐ w/ small business exemption request ☒ w/ Table A ☒ w/ Table C ☒ w/ Table E		☐ w/ explanation for identical outfalls ☐ w/ other attachments ☒ w/ Table B ☒ w/ Table D ☒ w/ analytical results as an attachment	
	☐	Section 8: Used or Manufactured Toxics		☐ w/ attachments			
	☐	Section 9: Biological Toxicity Tests		☐ w/ attachments			
	☒	Section 10: Contract Analyses		☐ w/ attachments			
	☐	Section 11: Additional Information		☐ w/ attachments			
	☒	Section 12: Checklist and Certification Statement		☐ w/ attachments			

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		Quantum Frederick

OMB No. 2040-0004
Expires 07/31/2026

SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d)) (Continued)

Checklist and Certification Statement	<u>12.2</u>	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
		Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
		Name (print or type first and last name)	Official title
		Joshua Mullis	Project Manager
		Signature	Date signed
			3/24/2025

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
		Quantum Frederick	Frac Tank F05392

TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))¹

Pollutant	Waiver Requested (if applicable)	Units (specify)	Effluent				Intake (optional)	
			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☒ Check here if you have applied to your NPDES permitting authority for a waiver for all of the pollutants listed on this table for the noted outfall.								
1. Biochemical oxygen demand (BOD ₅)	☐	Concentration						
		Mass						
2. Chemical oxygen demand (COD)	☐	Concentration						
		Mass						
3. Total organic carbon (TOC)	☐	Concentration						
		Mass						
4. Total suspended solids (TSS)	☐	Concentration						
		Mass						
5. Ammonia (as N)	☐	Concentration						
		Mass						
6. Flow	☐	Rate						
7. Temperature (winter)	☐	°C						
Temperature (summer)	☐	°C	22.2					
pH (minimum)	☒	Standard units	7.6					
pH (maximum)	☒	Standard units	7.6					

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
☐ Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.										
Section 1. Toxic Metals, Cyanide, and Total Phenols										
1.1 Antimony, total (7440-36-0)	☐	☐	☒	Concentration Mass	ug/L	0.2 U				
1.2 Arsenic, total (7440-38-2)	☒	☒	☐	Concentration Mass	ug/L	0.68 U				
1.3 Beryllium, total (7440-41-7)	☐	☐	☒	Concentration Mass	ug/L	0.12 U				
1.4 Cadmium, total (7440-43-9)	☒	☐	☒	Concentration Mass	ug/L	0.15 U				
1.5 Chromium, total (7440-47-3)	☒	☒	☐	Concentration Mass	ug/L	0.57				
1.6 Copper, total (7440-50-8)	☒	☒	☐	Concentration Mass	ug/L	1.10				
1.7 Lead, total (7439-92-1)	☒	☒	☐	Concentration Mass	ug/L	0.21				
1.8 Mercury, total (7439-97-6)	☐	☐	☒	Concentration Mass	ug/L	1.0				
1.9 Nickel, total (7440-02-0)	☒	☒	☐	Concentration Mass	ug/L	1.3				
1.10 Selenium, total (7782-49-2)	☐	☐	☒	Concentration Mass	ug/L	0.28 U				
1.11 Silver, total (7440-22-4)	☐	☐	☒	Concentration Mass		0.1 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v)) ¹											
Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
1.12 Thallium, total (7440-28-0)	☐	☐	☒	Concentration	ug/L	0.13 U					
1.13 Zinc, total (7440-66-6)	☐	☐	☒	Concentration	ug/L	4.2					
				Mass							
1.14 Cyanide, total (57-12-5)	☒	☐	☐	Concentration	mg/L	0.005 U	free cyanide				
				Mass							
1.15 Phenols, total	☐	☐	☒	Concentration							
				Mass							
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)											
2.1 Acrolein (107-02-8)	☐	☐	☒	Concentration							
2.2 Acrylonitrile (107-13-1)	☐	☐	☒	Mass							
				Concentration							
2.3 Benzene (71-43-2)	☐	☐	☒	Mass							
				Concentration	ug/L	0.1 U					
2.4 Bromoform (75-25-2)	☐	☐	☒	Mass							
				Concentration	ug/L	0.3 U					
2.5 Carbon tetrachloride (56-23-5)	☐	☐	☒	Mass							
				Concentration	ug/L	0.1 U					
2.6 Chlorobenzene (108-90-7)	☒	☐	☒	Mass							
				Concentration	ug/L	0.07 U					
2.7 Chlorodibromomethane (124-48-1)	☐	☐	☒	Mass							
				Concentration	ug/L	0.08 U					
2.8 Chloroethane (75-00-3)	☐	☐	☒	Mass							
				Concentration	ug/L	0.1 U					

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number Frac Tank F05392	OMB No. 2040-0004 Expires 07/31/2026
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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.9 2-chloroethylvinyl ether (110-75-8)	☐	☐	☒	Concentration Mass						
2.10 Chloroform (67-66-3)	☐	☐	☒	Concentration Mass	ug/L	0.09 U				
2.11 Dichlorobromomethane (75-27-4)	☐	☐	☒	Concentration Mass						
2.12 1,1-dichloroethane (75-34-3)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				
2.13 1,2-dichloroethane (107-06-2)	☐	☐	☒	Concentration Mass	ug/L	0.07 U				
2.14 1,1-dichloroethylene (75-35-4)	☐	☐	☒	Concentration Mass						
2.15 1,2-dichloropropane (78-87-5)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				
2.16 1,3-dichloropropylene (542-75-6)	☐	☐	☒	Concentration Mass						
2.17 Ethylbenzene (100-41-4)	☐	☐	☒	Concentration Mass	ug/L	0.08 U				
2.18 Methyl bromide (74-83-9)	☐	☐	☒	Concentration Mass						
2.19 Methyl chloride (74-87-3)	☐	☐	☒	Concentration Mass						
2.20 Methylene chloride (75-09-2)	☐	☐	☒	Concentration Mass	ug/L	0.2 U				
2.21 1,1,2,2- tetrachloroethane (79-34-5)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v)) ¹										
Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.22 Tetrachloroethylene (127-18-4)	☐	☐	☒	Concentration Mass						
2.23 Toluene (108-88-3)	☐	☐	☒	Concentration Mass	0.08 U					
2.24 1,2-trans-dichloroethylene (156-60-5)	☐	☐	☒	Concentration Mass						
2.25 1,1,1-trichloroethane (71-55-6)	☐	☐	☒	Concentration Mass	0.08 U					
2.26 1,1,2-trichloroethane (79-00-5)	☐	☐	☒	Concentration Mass	0.08 U					
2.27 Trichloroethylene (79-01-6)	☐	☐	☒	Concentration Mass						
2.28 Vinyl chloride (75-01-4)	☐	☐	☒	Concentration Mass	0.1 U					
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)										
3.1 2-chlorophenol (95-57-8)	☐	☐	☒	Concentration Mass						
3.2 2,4-dichlorophenol (120-83-2)	☐	☐	☒	Concentration Mass						
3.3 2,4-dimethylphenol (105-67-9)	☐	☐	☒	Concentration Mass						
3.4 4,6-dinitro-o-cresol (534-52-1)	☐	☐	☒	Concentration Mass						
3.5 2,4-dinitrophenol (51-28-5)	☐	☐	☒	Concentration Mass						

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
3.6 2-nitrophenol (88-75-5)	☐	☐	☒	Concentration Mass						
3.7 4-nitrophenol (100-02-7)	☐	☐	☒	Concentration Mass						
3.8 p-chloro-m-cresol (59-50-7)	☐	☐	☒	Concentration Mass						
3.9 Pentachlorophenol (87-86-5)	☐	☐	☒	Concentration Mass						
3.10 Phenol (108-95-2)	☐	☐	☒	Concentration Mass						
3.11 2,4,6-trichlorophenol (88-05-2)	☐	☐	☒	Concentration Mass						

Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)

4.1 Acenaphthene (83-32-9)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.2 Acenaphthylene (208-96-8)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.3 Anthracene (120-12-7)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.4 Benzidine (92-87-5)	☐	☐	☒	Concentration Mass						
4.5 Benzo (a) anthracene (56-55-3)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.6 Benzo (a) pyrene (50-32-8)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.7 3,4-benzofluoranthene (205-99-2)	☐	☐	☒	Concentration Mass						
4.8 Benzo (ghi) perylene (191-24-2)	☐	☐	☒	Concentration Mass						
4.9 Benzo (k) fluoranthene (207-08-9)	☐	☐	☒	Concentration Mass						
4.10 Bis (2-chloroethoxy) methane (111-91-1)	☐	☐	☒	Concentration Mass						
4.11 Bis (2-chloroethyl) ether (111-44-4)	☐	☐	☒	Concentration Mass						
4.12 Bis (2-chloroisopropyl) ether (102-80-1)	☐	☐	☒	Concentration Mass						
4.13 Bis (2-ethylhexyl) phthalate (117-81-7)	☐	☐	☒	Concentration Mass						
4.14 4-bromophenyl phenyl ether (101-55-3)	☐	☐	☒	Concentration Mass						
4.15 Butyl benzyl phthalate (85-68-7)	☐	☐	☒	Concentration Mass						
4.16 2-chloronaphthalene (91-58-7)	☐	☐	☒	Concentration Mass						
4.17 4-chlorophenyl phenyl ether (7005-72-3)	☐	☐	☒	Concentration Mass						
4.18 Chrysene (218-01-9)	☒	☒	☐	Concentration Mass	ug/L	0.027 U				
4.19 Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☒	Concentration Mass	ug/L	0.022 U				

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number	OMB No. 2040-0004 Expires 07/31/2026
		Quantum Frederick	Frac Tank F05392	

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)		Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)		
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses	
4.20	1,2-dichlorobenzene (95-50-1)	☐	☐	☒	Concentration	ug/L	0.07 U						
4.21	1,3-dichlorobenzene (541-73-1)	☐	☐	☒	Concentration	ug/L	0.07 U						
4.22	1,4-dichlorobenzene (106-46-7)	☐	☐	☒	Concentration	ug/L	0.07 U						
4.23	3,3-dichlorobenzidine (91-94-1)	☐	☐	☒	Concentration								
4.24	Diethyl phthalate (84-66-2)	☐	☐	☒	Concentration								
4.25	Dimethyl phthalate (131-11-3)	☐	☐	☒	Concentration								
4.26	Di-n-butyl phthalate (84-74-2)	☐	☐	☒	Concentration								
4.27	2,4-dinitrotoluene (121-14-2)	☐	☐	☒	Concentration								
4.28	2,6-dinitrotoluene (606-20-2)	☐	☐	☒	Concentration								
4.29	Di-n-octyl phthalate (117-84-0)	☐	☐	☒	Concentration								
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☐	☐	☒	Concentration								
4.31	Fluoranthene (206-44-0)	☐	☐	☒	Concentration	ug/L	0.025 U						
4.32	Fluorene (86-73-7)	☐	☐	☒	Concentration	ug/L	0.011 U						

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number	OMB No. 2040-0004 Expires 07/31/2026
		Quantum Frederick	Frac Tank F05392	

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.33 Hexachlorobenzene (118-74-1)	☐	☐	☒	Concentration Mass						
4.34 Hexachlorobutadiene (87-68-3)	☐	☐	☒	Concentration Mass						
4.35 Hexachlorocyclopentadiene (77-47-4)	☐	☐	☒	Concentration Mass						
4.36 Hexachloroethane (67-72-1)	☐	☐	☒	Concentration Mass						
4.37 Indeno (1,2,3-cd) pyrene (193-39-5)	☐	☐	☒	Concentration Mass	ug/L	0.022 U				
4.38 Isophorone (78-59-1)	☐	☐	☒	Concentration Mass						
4.39 Naphthalene (91-20-3)	☒	☐	☒	Concentration Mass	ug/L	0.074 U				
4.40 Nitrobenzene (98-95-3)	☐	☐	☒	Concentration Mass						
4.41 N-nitrosodimethylamine (62-75-9)	☐	☐	☒	Concentration Mass						
4.42 N-nitrosodi-n-propylamine (621-64-7)	☐	☐	☒	Concentration Mass						
4.43 N-nitrosodiphenylamine (86-30-6)	☐	☐	☒	Concentration Mass						
4.44 Phenanthrene (85-01-8)	☐	☐	☒	Concentration Mass	ug/L	0.033 U				
4.45 Pyrene (129-00-0)	☒	☒	☐	Concentration Mass	ug/L	0.023U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses		
4.46 1,2,4-trichlorobenzene (120-82-1)	☐	☐	☒	Concentration	ug/L	0.07 U					
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)											
5.1 Aldrin (309-00-2)	☐	☐	☒	Concentration							
5.2 α -BHC (319-84-6)	☐	☐	☒	Concentration							
5.3 β -BHC (319-85-7)	☐	☐	☒	Concentration							
5.4 γ -BHC (58-89-9)	☐	☐	☒	Concentration							
5.5 δ -BHC (319-86-8)	☐	☐	☒	Concentration							
5.6 Chlordane (57-74-9)	☐	☐	☒	Concentration							
5.7 4,4'-DDT (50-29-3)	☐	☐	☒	Concentration							
5.8 4,4'-DDE (72-55-9)	☐	☐	☒	Concentration							
5.9 4,4'-DDD (72-54-8)	☐	☐	☒	Concentration							
5.10 Dieldrin (60-57-1)	☐	☐	☒	Concentration							
5.11 α -endosulfan (115-29-7)	☐	☐	☒	Concentration							

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.12 β-endosulfan (115-29-7)	☐	☐	☒	Concentration Mass						
5.13 Endosulfan sulfate (1031-07-8)	☐	☐	☒	Concentration Mass						
5.14 Endrin (72-20-8)	☐	☐	☒	Concentration Mass						
5.15 Endrin aldehyde (7421-93-4)	☐	☐	☒	Concentration Mass						
5.16 Heptachlor (76-44-8)	☐	☐	☒	Concentration Mass						
5.17 Heptachlor epoxide (1024-57-3)	☐	☐	☒	Concentration Mass						
5.18 PCB-1242 (53469-21-9)	☒	☐	☒	Concentration Mass	0.0083 U					
5.19 PCB-1254 (11097-69-1)	☒	☐	☒	Concentration Mass	0.0083 U					
5.20 PCB-1221 (11104-28-2)	☒	☐	☒	Concentration Mass	0.0083 U					
5.21 PCB-1232 (11141-16-5)	☒	☐	☒	Concentration Mass	0.0083 U					
5.22 PCB-1248 (12672-29-6)	☒	☐	☒	Concentration Mass	0.0083 U					
5.23 PCB-1260 (11096-82-5)	☒	☒	☐	Concentration Mass	0.0052 U					
5.24 PCB-1016 (12674-11-2)	☒	☐	☒	Concentration Mass	0.0052 U					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v)) ¹										
Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.25 Toxaphene (8001-35-2)	☐	☐	☒	Concentration						
				Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐ Check here if you believe all pollutants in Table C to be present in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.										
☐ Check here if you believe all pollutants in Table C to be absent in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.										
1.	Bromide (24959-67-9)	☐	☒	Concentration Mass						
2.	Chlorine, total residual	☐	☒	Concentration Mass						
3.	Color	☐	☒	Concentration Mass						
4.	Fecal coliform	☐	☒	Concentration Mass						
5.	Fluoride (16984-48-8)	☒	☐	Concentration Mass	mg/L	0.28				
6	Nitrate-nitrite	☐	☒	Concentration Mass						
7.	Nitrogen, total organic (as N)	☐	☒	Concentration Mass						
8.	Oil and grease	☐	☒	Concentration Mass						
9.	Phosphorus (as P), total (7723-14-0)	☐	☒	Concentration Mass						
10.	Sulfate (as SO ₄) (14808-79-8)	☐	☒	Concentration Mass						
11.	Sulfide (as S)	☐	☒	Concentration Mass						

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12. Sulfite (as SO ₃) (14265-45-3)	☐	☒	Concentration Mass						
13. Surfactants	☐	☒	Concentration Mass						
14. Aluminum, total (7429-90-5)	☒	☐	Concentration Mass	ug/L	310.0				
15. Barium, total (7440-39-3)	☒	☐	Concentration Mass	ug/L	41				
16. Boron, total (7440-42-8)	☐	☒	Concentration Mass						
17. Cobalt, total (7440-48-4)	☒	☐	Concentration Mass	ug/L	0.35				
18. Iron, total (7439-89-6)	☒	☐	Concentration Mass	ug/L	370.0				
19. Magnesium, total (7439-95-4)	☒	☐	Concentration Mass	ug/L	9100				
20. Molybdenum, total (7439-98-7)	☐	☒	Concentration Mass						
21. Manganese, total (7439-96-5)	☒	☐	Concentration Mass	ug/L	32				
22. Tin, total (7440-31-5)	☐	☒	Concentration Mass						
23. Titanium, total (7440-32-6)	☐	☒	Concentration Mass						

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24. Radioactivity									
Alpha, total	☐	☒	Concentration Mass						
Beta, total	☐	☒	Concentration Mass						
Radium, total	☐	☒	Concentration Mass						
Radium 226, total	☐	☒	Concentration Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number Frac Tank F05392	OMB No. 2040-0004 Expires 07/31/2026
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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) ¹				
Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
1. Asbestos	☐	☒		
2. Acetaldehyde	☐	☒		
3. Allyl alcohol	☐	☒		
4. Allyl chloride	☐	☒		
5. Amyl acetate	☐	☒		
6. Aniline	☐	☒		
7. Benzotrile	☐	☒		
8. Benzyl chloride	☐	☒		
9. Butyl acetate	☐	☒		
10. Butylamine	☐	☒		
11. Captan	☐	☒		
12. Carbaryl	☐	☒		
13. Carbofuran	☐	☒		
14. Carbon disulfide	☐	☒		
15. Chlorpyrifos	☐	☒		
16. Coumaphos	☐	☒		
17. Cresol	☐	☒		
18. Crotonaldehyde	☐	☒		
19. Cyclohexane	☐	☒		0.1 ug/L U

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) ¹				
Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
20. 2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☒		
21. Diazinon	☐	☒		
22. Dicamba	☐	☒		
23. Dichlobenil	☐	☒		
24. Diclhone	☐	☒		
25. 2,2-dichloropropionic acid	☐	☒		
26. Dichlorvos	☐	☒		
27. Diethyl amine	☐	☒		
28. Dimethyl amine	☐	☒		
29. Dintrobenezene	☐	☒		
30. Diquat	☐	☒		
31. Disulfoton	☐	☒		
32. Diuron	☐	☒		
33. Epichlorohydrin	☐	☒		
34. Ethion	☐	☒		
35. Ethylene diamine	☐	☒		
36. Ethylene dibromide	☐	☒		
37. Formaldehyde	☐	☒		
38. Furfural	☐	☒		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) ¹				
Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
39. Guthion	☐	☒		
40. Isoprene	☐	☒		
41. Isopropanolamine	☐	☒		
42. Kelthane	☐	☒		
43. Kepone	☐	☒		
44. Malathion	☐	☒		
45. Mercaptodimethur	☐	☒		
46. Methoxychlor	☐	☒		
47. Methyl mercaptan	☐	☒		
48. Methyl methacrylate	☐	☒		
49. Methyl parathion	☐	☒		
50. Mevinphos	☐	☒		
51. Mexacarbate	☐	☒		
52. Monoethyl amine	☐	☒		
53. Monomethyl amine	☐	☒		
54. Naled	☐	☒		
55. Naphthenic acid	☐	☒		
56. Nitrotoluene	☐	☒		
57. Parathion	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
58. Phenolsulfonate	☐	☒		
59. Phosgene	☐	☒		
60. Propargite	☐	☒		
61. Propylene oxide	☐	☒		
62. Pyrethrins	☐	☒		
63. Quinoline	☐	☒		
64. Resorcinol	☐	☒		
65. Strontium	☐	☒		
66. Strychnine	☐	☒		
67. Styrene	☐	☒		0.07 ug/L U
68. 2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☒		
69. TDE (tetrachlorodiphenyl ethane)	☐	☒		
70. 2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☒		
71. Trichlorofon	☐	☒		
72. Triethanolamine	☐	☒		
73. Triethylamine	☐	☒		
74. Trimethylamine	☐	☒		
75. Uranium	☐	☒		
76. Vanadium	☐	☒		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) ¹				
Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
77. Vinyl acetate	☐	☒		
78. Xylene	☐	☒		
79. Xylenol	☐	☒		
80. Zirconium	☐	☒		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))				
Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☒	

EPA Identification Number		NPDES Permit Number	Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026
Form 2C NPDES			U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS		
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(G)(1))					
Outfall Location	<u>1.1</u>	Provide information on each of the facility's outfalls in the table below.			
		Outfall Number	Receiving Water Name	Latitude	Longitude
		FT F05392	Groundwater	Multiple - see map	Multiple - see map
SECTION 2. LINE DRAWING (40 CFR 122.21(G)(2))					
Line Drawing	<u>2.1</u>	Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C-1 at end of instructions for example.) ☐ Yes			
SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(G)(3))					
Average Flows and Treatment	<u>3.1</u>	For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.			
		Outfall Number _____			
		Operations Contributing to Flow			
		Operation	Average Flow		
		Outfall A (INSIDE and Outside EC)	mgd		
			mgd		
			mgd		
			mgd		
		Treatment Units			
		Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Exhibit 2C-2	Final Disposal of Solid or Liquid Wastes Other Than by Discharge	

EPA Identification Number		NPDES Permit Number		Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026	
Average Flows and Treatment Continued	3.1 cont.	**Outfall Number** _____					
		Operations Contributing to Flow					
		Operation			Average Flow		
					mgd		
					mgd		
					mgd		
					mgd		
		Treatment Units					
		Description (include size, flow rate through each treatment unit, retention time, etc.)			Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge
		Outfall Number _____					
		Operations Contributing to Flow					
		Operation			Average Flow		
					mgd		
					mgd		
					mgd		
					mgd		
		Treatment Units					
		Description (include size, flow rate through each treatment unit, retention time, etc.)			Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge
System Users	3.2	Are you applying for an NPDES permit to operate a privately owned treatment works? ☐ Yes ☒ No → SKIP to Section 4.					
	3.3	Have you attached a list that identifies each user of the treatment works? ☐ Yes					

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SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(G)(4))								
Intermittent Flows	4.1	Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal? ☐ Yes ☒ No → SKIP to Section 5.						
	4.2	Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.						
		Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
				Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
SECTION 5. PRODUCTION (40 CFR 122.21(G)(5))								
Applicable ELGs	5.1	Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility? ☐ Yes ☒ No → SKIP to Section 6.						
	5.2	Provide the following information on applicable ELGs.						
		ELG Category	ELG Subcategory				Regulatory Citation	
Production-Based Limitations	5.3	Are any of the applicable ELGs expressed in terms of production (or other measure of operation)? ☐ Yes ☒ No → SKIP to Section 6.						
	5.4	Provide an actual measure of daily production expressed in terms and units of applicable ELGs.						
		Outfall Number	Operation, Product, or Material			Quantity per Day	Unit of Measure	

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	OMB No. 2040-0004 Expires 07/31/2026	
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	5.5	Are you requesting alternative limits based on an anticipated increase in the actual production during the next permit term? (Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)		
		☐ Yes ☐ No		

SECTION 6. IMPROVEMENTS (40 CFR 122.21(G)(6))

Upgrades and Improvements	6.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?			
		☐ Yes ☒ No → SKIP to Item 6.3.			
	6.2	Briefly identify each applicable project in the table below.			
		Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates
					Required Projected
	6.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (<i>optional item</i>)			
		☐ Yes ☐ No ☒ Not applicable			

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(G)(7))

Effluent and Intake Characteristics	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.			
	Table A. Conventional and Non-Conventional Pollutants			
	7.1	Are you requesting a waiver from your NPDES permitting authority for any Table A pollutants for any of your outfalls?		
		☐ Yes ☒ No → SKIP to Item 7.3.		
	7.2	If yes, indicate the applicable outfalls below or check the appropriate box to indicate that you are requesting a waiver for all outfalls. Attach waiver request and other required information to the application.		
		Outfall number _____ Outfall number _____ Outfall number _____ ☐ I am requesting a waiver for some pollutants at all outfalls. ☐ I am requesting a waiver for all pollutants at all outfalls → SKIP to Item 7.4.		
	7.3	Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?		
		☐ Yes		
Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants				
7.4	Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)			
	☐ Yes ☒ No → SKIP to Item 7.8.			
7.5	Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?			
	☐ Yes			

EPA Identification Number		NPDES Permit Number		Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026		
	7.6	List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.						
		Primary Industry Category			Required GC/MS Fraction(s) (check applicable boxes)			
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
Effluent and Intake Characteristics Continued	7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☐ Yes						
	7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☐ Yes						
	7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☐ Yes						
	7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? ☐ Yes → Note that you qualify at the top of Table B, then SKIP to Item 7.12. ☒ No						
	7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☒ Yes						
	Table C. Certain Conventional and Non-Conventional Pollutants							
	7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table C for all outfalls? ☒ Yes						
	7.13	Have you completed Table C by providing quantitative data for those pollutants that are limited either directly or indirectly in an ELG? You must provide quantitative data even if the pollutant is "Believed Absent." ☐ Yes ☒ Not applicable						
	7.14	Have you completed Table C by providing quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☒ Yes						
	Table D. Certain Hazardous Substances and Asbestos							
	7.15	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☒ Yes						
	7.16	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) providing quantitative data, if available? ☒ Yes ☐ No						
	Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)							
7.17	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes → Complete Table E. ☒ No → SKIP to Section 8.							
7.18	Have you completed Table E by reporting <i>qualitative</i> data for TCDD? ☐ Yes							

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SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(G)(9))

Used or Manufactured Toxics	8.1	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☒ No → SKIP to Section 9.		
	8.2	List the pollutants below. Attach additional sheets, if necessary.		
	1.	4.	7.	
	2.	5.	8.	
	3.	6.	9.	

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(G)(11))

Biological Toxicity Tests	9.1	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) a receiving water in relation to your discharge? ☐ Yes ☒ No → SKIP to Section 10.			
	9.2	Identify the tests and their purposes below.			
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
				☐ Yes ☐ No	
				☐ Yes ☐ No	
			☐ Yes ☐ No		

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(G)(12))

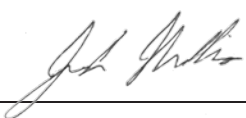
Contract Analyses	10.1	Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm? ☒ Yes ☐ No → SKIP to Section 11.		
	10.2	Provide information for each contract laboratory or consulting firm below.		
		Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
	Name of laboratory/firm	Eurofins Lancaster Laboratories Environment Testing, LLC		
	Laboratory address	2425 New Holland Pike, Lancaster, PA		
	Phone number	(412) 525-0071		
	Pollutant(s) analyzed	VOCs, SVOCs, GRO/DRO, PCBs, Anions, Metals/Mercury, pH, free cyanide		

EPA Identification Number		NPDES Permit Number		Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026	
SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(G)(13))							
Additional Information	<u>11.1</u>	Has the NPDES permitting authority requested additional information? ☐ Yes ☒ No → SKIP to Section 12.					
	<u>11.2</u>	List the information requested and attach it to this application.					
	1.						4.
	2.						5.
	3.						6.
SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))							
Checklist and Certification Statement	<u>12.1</u>	In Column 1 below, mark the sections of Form 2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.					
		Column 1		Column 2			
	☒	Section 1: Outfall Location		☒ w/ attachments			
	☐	Section 2: Line Drawing		☐ w/ line drawing		☐ w/ additional attachments	
	☐	Section 3: Average Flows and Treatment		☐ w/ attachments		☐ w/ list of each user of privately owned treatment works	
	☐	Section 4: Intermittent Flows		☐ w/ attachments			
	☐	Section 5: Production		☐ w/ attachments			
	☐	Section 6: Improvements		☐ w/ attachments		☐ w/ optional additional sheets describing any additional pollution control plans	
	☒	Section 7: Effluent and Intake Characteristics		☒ w/ request for a waiver and supporting information ☐ w/ small business exemption request ☒ w/ Table A ☒ w/ Table C ☒ w/ Table E		☐ w/ explanation for identical outfalls ☐ w/ other attachments ☒ w/ Table B ☒ w/ Table D ☒ w/ analytical results as an attachment	
	☐	Section 8: Used or Manufactured Toxics		☐ w/ attachments			
	☐	Section 9: Biological Toxicity Tests		☐ w/ attachments			
	☒	Section 10: Contract Analyses		☐ w/ attachments			
	☐	Section 11: Additional Information		☐ w/ attachments			
	☒	Section 12: Checklist and Certification Statement		☐ w/ attachments			

EPA Identification Number	NPDES Permit Number	Facility Name
		Quantum Frederick

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SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d)) (Continued)

Checklist and Certification Statement	12.2	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
		Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
		Name (print or type first and last name)	Official title
		Joshua Mullis	Project Manager
		Signature	Date signed
			3/24/2025

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number Frac Tank A4712
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OMB No. 2040-0004
Expires 07/31/2026

TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))¹

	Pollutant	Waiver Requested (if applicable)	Units (specify)	Effluent				Intake (optional)	
				Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☒	Check here if you have applied to your NPDES permitting authority for a waiver for <i>all</i> of the pollutants listed on this table for the noted outfall.								
1.	Biochemical oxygen demand (BOD ₅)	☐	Concentration						
			Mass						
2.	Chemical oxygen demand (COD)	☐	Concentration						
			Mass						
3.	Total organic carbon (TOC)	☐	Concentration						
			Mass						
4.	Total suspended solids (TSS)	☐	Concentration						
			Mass						
5.	Ammonia (as N)	☐	Concentration						
			Mass						
6.	Flow	☐	Rate						
7.	Temperature (winter)	☐	°C	°C					
	Temperature (summer)	☐	°C	°C	17.8				
8.	pH (minimum)	☒	Standard units	s.u.	7.6				
	pH (maximum)	☒	Standard units	s.u.	7.6				

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number Frac Tank A4712
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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses		
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.												
Section 1. Toxic Metals, Cyanide, and Total Phenols													
1.1	Antimony, total (7440-36-0)	☐	☐	☒	Concentration	ug/L	0.2 U						
					Mass								
1.2	Arsenic, total (7440-38-2)	☒	☒	☐	Concentration	ug/L	0.68 U						
					Mass								
1.3	Beryllium, total (7440-41-7)	☐	☐	☒	Concentration	ug/L	0.12 U						
					Mass								
1.4	Cadmium, total (7440-43-9)	☒	☐	☒	Concentration	ug/L	0.15 U						
					Mass								
1.5	Chromium, total (7440-47-3)	☒	☒	☐	Concentration	ug/L	0.55 U						
					Mass								
1.6	Copper, total (7440-50-8)	☒	☒	☐	Concentration	ug/L	1.2						
					Mass								
1.7	Lead, total (7439-92-1)	☒	☒	☐	Concentration	ug/L	0.16						
					Mass								
1.8	Mercury, total (7439-97-6)	☐	☐	☒	Concentration	ug/L	0.79 U						
					Mass								
1.9	Nickel, total (7440-02-0)	☒	☒	☐	Concentration	ug/L	1.3						
					Mass								
1.10	Selenium, total (7782-49-2)	☐	☐	☒	Concentration	ug/L	0.28 U						
					Mass								
1.11	Silver, total (7440-22-4)	☐	☐	☒	Concentration		0.1 U						
					Mass								

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☐	☐	☒	Concentration	ug/L	0.13 U					
					Mass							
1.13	Zinc, total (7440-66-6)	☐	☐	☐	Concentration	ug/L	4.0 U					
					Mass							
1.14	Cyanide, total (57-12-5)	☒	☐	☐	Concentration	mg/L	0.005 U	free cyanide				
					Mass							
1.15	Phenols, total	☐	☐	☒	Concentration							
					Mass							
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☐	☐	☒	Concentration							
					Mass							
2.2	Acrylonitrile (107-13-1)	☐	☐	☒	Concentration							
					Mass							
2.3	Benzene (71-43-2)	☐	☐	☒	Concentration	ug/L	0.1 U					
					Mass							
2.4	Bromoform (75-25-2)	☐	☐	☒	Concentration	ug/L	0.3 U					
					Mass							
2.5	Carbon tetrachloride (56-23-5)	☐	☐	☒	Concentration	ug/L	0.1 U					
					Mass							
2.6	Chlorobenzene (108-90-7)	☒	☐	☒	Concentration	ug/L	0.07 U					
					Mass							
2.7	Chlorodibromomethane (124-48-1)	☐	☐	☒	Concentration	ug/L	0.08 U					
					Mass							
2.8	Chloroethane (75-00-3)	☐	☐	☒	Concentration	ug/L	0.1 U					
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☐	☐	☒	Concentration						
					Mass						
2.10	Chloroform (67-66-3)	☐	☐	☒	Concentration	ug/L	0.09 U				
					Mass						
2.11	Dichlorobromomethane (75-27-4)	☐	☐	☒	Concentration						
					Mass						
2.12	1,1-dichloroethane (75-34-3)	☐	☐	☒	Concentration	ug/L	0.1 U				
					Mass						
2.13	1,2-dichloroethane (107-06-2)	☐	☐	☒	Concentration	ug/L	0.07 U				
					Mass						
2.14	1,1-dichloroethylene (75-35-4)	☐	☐	☒	Concentration						
					Mass						
2.15	1,2-dichloropropane (78-87-5)	☐	☐	☒	Concentration	ug/L	0.1 U				
					Mass						
2.16	1,3-dichloropropylene (542-75-6)	☐	☐	☒	Concentration						
					Mass						
2.17	Ethylbenzene (100-41-4)	☐	☐	☒	Concentration	ug/L	0.08 U				
					Mass						
2.18	Methyl bromide (74-83-9)	☐	☐	☒	Concentration						
					Mass						
2.19	Methyl chloride (74-87-3)	☐	☐	☒	Concentration						
					Mass						
2.20	Methylene chloride (75-09-2)	☐	☐	☒	Concentration	ug/L	0.2 U				
					Mass						
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☐	☐	☒	Concentration	ug/L	0.1 U				
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☐	☐	☒	Concentration						
					Mass						
2.23	Toluene (108-88-3)	☐	☐	☒	Concentration	ug/L	0.08 U				
					Mass						
2.24	1,2-trans-dichloroethylene (156-60-5)	☐	☐	☒	Concentration						
					Mass						
2.25	1,1,1-trichloroethane (71-55-6)	☐	☐	☒	Concentration	ug/L	0.08 U				
					Mass						
2.26	1,1,2-trichloroethane (79-00-5)	☐	☐	☒	Concentration	ug/L	0.08 U				
					Mass						
2.27	Trichloroethylene (79-01-6)	☐	☐	☒	Concentration						
					Mass						
2.28	Vinyl chloride (75-01-4)	☐	☐	☒	Concentration	ug/L	0.1 U				
					Mass						
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)											
3.1	2-chlorophenol (95-57-8)	☐	☐	☒	Concentration						
					Mass						
3.2	2,4-dichlorophenol (120-83-2)	☐	☐	☒	Concentration						
					Mass						
3.3	2,4-dimethylphenol (105-67-9)	☐	☐	☒	Concentration						
					Mass						
3.4	4,6-dinitro-o-cresol (534-52-1)	☐	☐	☒	Concentration						
					Mass						
3.5	2,4-dinitrophenol (51-28-5)	☐	☐	☒	Concentration						
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☐	☐	☒	Concentration						
					Mass						
3.7	4-nitrophenol (100-02-7)	☐	☐	☒	Concentration						
					Mass						
3.8	p-chloro-m-cresol (59-50-7)	☐	☐	☒	Concentration						
					Mass						
3.9	Pentachlorophenol (87-86-5)	☐	☐	☒	Concentration						
					Mass						
3.10	Phenol (108-95-2)	☐	☐	☒	Concentration						
					Mass						
3.11	2,4,6-trichlorophenol (88-05-2)	☐	☐	☒	Concentration						
					Mass						
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)											
4.1	Acenaphthene (83-32-9)	☒	☐	☒	Concentration	ug/L	0.011 U				
					Mass						
4.2	Acenaphthylene (208-96-8)	☒	☐	☒	Concentration	ug/L	0.011 U				
					Mass						
4.3	Anthracene (120-12-7)	☒	☐	☒	Concentration	ug/L	0.011 U				
					Mass						
4.4	Benzidine (92-87-5)	☐	☐	☒	Concentration						
					Mass						
4.5	Benzo (a) anthracene (56-55-3)	☒	☐	☒	Concentration	ug/L	0.0.11 U				
					Mass						
4.6	Benzo (a) pyrene (50-32-8)	☒	☐	☒	Concentration	ug/L	0.011 U				
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☐	☐	☒	Concentration						
					Mass						
4.8	Benzo (ghi) perylene (191-24-2)	☐	☐	☒	Concentration						
					Mass						
4.9	Benzo (k) fluoranthene (207-08-9)	☐	☐	☒	Concentration						
					Mass						
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☐	☐	☒	Concentration						
					Mass						
4.11	Bis (2-chloroethyl) ether (111-44-4)	☐	☐	☒	Concentration						
					Mass						
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☐	☐	☒	Concentration						
					Mass						
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☐	☐	☒	Concentration						
					Mass						
4.14	4-bromophenyl phenyl ether (101-55-3)	☐	☐	☒	Concentration						
					Mass						
4.15	Butyl benzyl phthalate (85-68-7)	☐	☐	☒	Concentration						
					Mass						
4.16	2-chloronaphthalene (91-58-7)	☐	☐	☒	Concentration						
					Mass						
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☐	☐	☒	Concentration						
					Mass						
4.18	Chrysene (218-01-9)	☒	☒	☐	Concentration	ug/L	0.027 U				
					Mass						
4.19	Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☒	Concentration	ug/L	0.022 U				
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☐	☐	☒	Concentration	ug/L	0.07 U					
					Mass							
4.21	1,3-dichlorobenzene (541-73-1)	☐	☐	☒	Concentration	ug/L	0.07 U					
					Mass							
4.22	1,4-dichlorobenzene (106-46-7)	☐	☐	☒	Concentration	ug/L	0.07 U					
					Mass							
4.23	3,3-dichlorobenzidine (91-94-1)	☐	☐	☒	Concentration							
					Mass							
4.24	Diethyl phthalate (84-66-2)	☐	☐	☒	Concentration							
					Mass							
4.25	Dimethyl phthalate (131-11-3)	☐	☐	☒	Concentration							
					Mass							
4.26	Di-n-butyl phthalate (84-74-2)	☐	☐	☒	Concentration							
					Mass							
4.27	2,4-dinitrotoluene (121-14-2)	☐	☐	☒	Concentration							
					Mass							
4.28	2,6-dinitrotoluene (606-20-2)	☐	☐	☒	Concentration							
					Mass							
4.29	Di-n-octyl phthalate (117-84-0)	☐	☐	☒	Concentration							
					Mass							
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☐	☐	☒	Concentration							
					Mass							
4.31	Fluoranthene (206-44-0)	☐	☐	☒	Concentration	ug/L	0.025 U					
					Mass							
4.32	Fluorene (86-73-7)	☐	☐	☒	Concentration	ug/L	0.011 U					
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☐	☐	☒	Concentration						
					Mass						
4.34	Hexachlorobutadiene (87-68-3)	☐	☐	☒	Concentration						
					Mass						
4.35	Hexachlorocyclopentadiene (77-47-4)	☐	☐	☒	Concentration						
					Mass						
4.36	Hexachloroethane (67-72-1)	☐	☐	☒	Concentration						
					Mass						
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☐	☐	☒	Concentration	ug/L	0.021 U				
					Mass						
4.38	Isophorone (78-59-1)	☐	☐	☒	Concentration						
					Mass						
4.39	Naphthalene (91-20-3)	☒	☐	☒	Concentration	ug/L	0.072 U				
					Mass						
4.40	Nitrobenzene (98-95-3)	☐	☐	☒	Concentration						
					Mass						
4.41	N-nitrosodimethylamine (62-75-9)	☐	☐	☒	Concentration						
					Mass						
4.42	N-nitrosodi-n-propylamine (621-64-7)	☐	☐	☒	Concentration						
					Mass						
4.43	N-nitrosodiphenylamine (86-30-6)	☐	☐	☒	Concentration						
					Mass						
4.44	Phenanthrene (85-01-8)	☐	☐	☒	Concentration	ug/L	0.032 U				
					Mass						
4.45	Pyrene (129-00-0)	☒	☒	☐	Concentration	ug/L	0.022U				
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☐	☐	☒	Concentration	ug/L	0.07 U					
					Mass							
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☐	☐	☒	Concentration							
					Mass							
5.2	α-BHC (319-84-6)	☐	☐	☒	Concentration							
					Mass							
5.3	β-BHC (319-85-7)	☐	☐	☒	Concentration							
					Mass							
5.4	γ-BHC (58-89-9)	☐	☐	☒	Concentration							
					Mass							
5.5	δ-BHC (319-86-8)	☐	☐	☒	Concentration							
					Mass							
5.6	Chlordane (57-74-9)	☐	☐	☒	Concentration							
					Mass							
5.7	4,4'-DDT (50-29-3)	☐	☐	☒	Concentration							
					Mass							
5.8	4,4'-DDE (72-55-9)	☐	☐	☒	Concentration							
					Mass							
5.9	4,4'-DDD (72-54-8)	☐	☐	☒	Concentration							
					Mass							
5.10	Dieldrin (60-57-1)	☐	☐	☒	Concentration							
					Mass							
5.11	α-endosulfan (115-29-7)	☐	☐	☒	Concentration							
					Mass							

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
			Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☐	☐	☒	Concentration						
					Mass						
5.13	Endosulfan sulfate (1031-07-8)	☐	☐	☒	Concentration						
					Mass						
5.14	Endrin (72-20-8)	☐	☐	☒	Concentration						
					Mass						
5.15	Endrin aldehyde (7421-93-4)	☐	☐	☒	Concentration						
					Mass						
5.16	Heptachlor (76-44-8)	☐	☐	☒	Concentration						
					Mass						
5.17	Heptachlor epoxide (1024-57-3)	☐	☐	☒	Concentration						
					Mass						
5.18	PCB-1242 (53469-21-9)	☒	☐	☒	Concentration	ug/L	0.0076 U				
					Mass						
5.19	PCB-1254 (11097-69-1)	☒	☐	☒	Concentration	ug/L	0.0047 U				
					Mass						
5.20	PCB-1221 (11104-28-2)	☒	☐	☒	Concentration	ug/L	0.0076 U				
					Mass						
5.21	PCB-1232 (11141-16-5)	☒	☐	☒	Concentration	ug/L	0.0076 U				
					Mass						
5.22	PCB-1248 (12672-29-6)	☒	☐	☒	Concentration	ug/L	0.0076 U				
					Mass						
5.23	PCB-1260 (11096-82-5)	☒	☒	☐	Concentration	ug/L	0.0047 U				
					Mass						
5.24	PCB-1016 (12674-11-2)	☒	☐	☒	Concentration	ug/L	0.0076 U				
					Mass						

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☐	☐	☒	Concentration							
					Mass							

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)			
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses		
☐ Check here if you believe all pollutants in Table C to be present in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.												
☐ Check here if you believe all pollutants in Table C to be absent in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.												
1.	Bromide (24959-67-9)	☐	☒	Concentration								
				Mass								
2.	Chlorine, total residual	☐	☒	Concentration								
				Mass								
3.	Color	☐	☒	Concentration								
				Mass								
4.	Fecal coliform	☐	☒	Concentration								
				Mass								
5.	Fluoride (16984-48-8)	☒	☐	Concentration	mg/L	0.31						
				Mass								
6	Nitrate-nitrite	☐	☒	Concentration								
				Mass								
7.	Nitrogen, total organic (as N)	☐	☒	Concentration								
				Mass								
8.	Oil and grease	☐	☒	Concentration								
				Mass								
9.	Phosphorus (as P), total (7723-14-0)	☐	☒	Concentration								
				Mass								
10.	Sulfate (as SO ₄) (14808-79-8)	☐	☒	Concentration								
				Mass								
11.	Sulfide (as S)	☐	☒	Concentration								
				Mass								

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO ₃) (14265-45-3)	☐	☒	Concentration						
				Mass						
13.	Surfactants	☐	☒	Concentration						
				Mass						
14.	Aluminum, total (7429-90-5)	☒	☐	Concentration	ug/L	320.0				
				Mass						
15.	Barium, total (7440-39-3)	☒	☐	Concentration	ug/L	39				
				Mass						
16.	Boron, total (7440-42-8)	☐	☒	Concentration						
				Mass						
17.	Cobalt, total (7440-48-4)	☒	☐	Concentration	ug/L	0.26				
				Mass						
18.	Iron, total (7439-89-6)	☒	☐	Concentration	ug/L	350.0				
				Mass						
19.	Magnesium, total (7439-95-4)	☒	☐	Concentration	ug/L	8700				
				Mass						
20.	Molybdenum, total (7439-98-7)	☐	☒	Concentration						
				Mass						
21.	Manganese, total (7439-96-5)	☒	☐	Concentration	ug/L	28				
				Mass						
22.	Tin, total (7440-31-5)	☐	☒	Concentration						
				Mass						
23.	Titanium, total (7440-32-6)	☐	☒	Concentration						
				Mass						

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	Radioactivity										
	Alpha, total	☐	☒	Concentration							
				Mass							
	Beta, total	☐	☒	Concentration							
				Mass							
	Radium, total	☐	☒	Concentration							
				Mass							
	Radium 226, total	☐	☒	Concentration							
				Mass							

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☒		
2.	Acetaldehyde	☐	☒		
3.	Allyl alcohol	☐	☒		
4.	Allyl chloride	☐	☒		
5.	Amyl acetate	☐	☒		
6.	Aniline	☐	☒		
7.	Benzonitrile	☐	☒		
8.	Benzyl chloride	☐	☒		
9.	Butyl acetate	☐	☒		
10.	Butylamine	☐	☒		
11.	Captan	☐	☒		
12.	Carbaryl	☐	☒		
13.	Carbofuran	☐	☒		
14.	Carbon disulfide	☐	☒		
15.	Chlorpyrifos	☐	☒		
16.	Coumaphos	☐	☒		
17.	Cresol	☐	☒		
18.	Crotonaldehyde	☐	☒		
19.	Cyclohexane	☐	☒		0.1 ug/L U

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☒		
21.	Diazinon	☐	☒		
22.	Dicamba	☐	☒		
23.	Dichlobenil	☐	☒		
24.	Dichlone	☐	☒		
25.	2,2-dichloropropionic acid	☐	☒		
26.	Dichlorvos	☐	☒		
27.	Diethyl amine	☐	☒		
28.	Dimethyl amine	☐	☒		
29.	Dinitrobenzene	☐	☒		
30.	Diquat	☐	☒		
31.	Disulfoton	☐	☒		
32.	Diuron	☐	☒		
33.	Epichlorohydrin	☐	☒		
34.	Ethion	☐	☒		
35.	Ethylene diamine	☐	☒		
36.	Ethylene dibromide	☐	☒		
37.	Formaldehyde	☐	☒		
38.	Furfural	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☒		
40.	Isoprene	☐	☒		
41.	Isopropanolamine	☐	☒		
42.	Kelthane	☐	☒		
43.	Kepone	☐	☒		
44.	Malathion	☐	☒		
45.	Mercaptodimethur	☐	☒		
46.	Methoxychlor	☐	☒		
47.	Methyl mercaptan	☐	☒		
48.	Methyl methacrylate	☐	☒		
49.	Methyl parathion	☐	☒		
50.	Mevinphos	☐	☒		
51.	Mexacarbate	☐	☒		
52.	Monoethyl amine	☐	☒		
53.	Monomethyl amine	☐	☒		
54.	Naled	☐	☒		
55.	Naphthenic acid	☐	☒		
56.	Nitrotoluene	☐	☒		
57.	Parathion	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☒		
59.	Phosgene	☐	☒		
60.	Propargite	☐	☒		
61.	Propylene oxide	☐	☒		
62.	Pyrethrins	☐	☒		
63.	Quinoline	☐	☒		
64.	Resorcinol	☐	☒		
65.	Strontium	☐	☒		
66.	Strychnine	☐	☒		
67.	Styrene	☐	☒		0.07 ug/L U
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☒		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☒		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☒		
71.	Trichlorofon	☐	☒		
72.	Triethanolamine	☐	☒		
73.	Triethylamine	☐	☒		
74.	Trimethylamine	☐	☒		
75.	Uranium	☐	☒		
76.	Vanadium	☐	☒		

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☒		
78.	Xylene	☐	☒		
79.	Xylenol	☐	☒		
80.	Zirconium	☐	☒		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☒	

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Form 2C NPDES			U.S. Environmental Protection Agency Application for NPDES Permit to Discharge Wastewater EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS				
SECTION 1. OUTFALL LOCATION (40 CFR 122.21(G)(1))							
Outfall Location	<u>1.1</u>	Provide information on each of the facility's outfalls in the table below.					
		Outfall Number	Receiving Water Name	Latitude		Longitude	
		FT F05392	Groundwater	Multiple - see map		Multiple - see map	
SECTION 2. LINE DRAWING (40 CFR 122.21(G)(2))							
Line Drawing	<u>2.1</u>	Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C-1 at end of instructions for example.) ☐ Yes					
SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(G)(3))							
Average Flows and Treatment	<u>3.1</u>	For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.					
		Outfall Number _____					
		Operations Contributing to Flow					
		Operation			Average Flow		
		Outfall A (inside and outside of EC)			mgd		
					mgd		
					mgd		
					mgd		
		Treatment Units					
		Description (include size, flow rate through each treatment unit, retention time, etc.)		Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge	

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Average Flows and Treatment Continued	3.1 cont.	**Outfall Number** _____							
		Operations Contributing to Flow							
		Operation			Average Flow				
					mgd				
					mgd				
					mgd				
					mgd				
		Treatment Units							
		Description (include size, flow rate through each treatment unit, retention time, etc.)			Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge		
		Outfall Number _____							
		Operations Contributing to Flow							
		Operation			Average Flow				
					mgd				
					mgd				
					mgd				
					mgd				
		Treatment Units							
		Description (include size, flow rate through each treatment unit, retention time, etc.)			Code from Exhibit 2C-2		Final Disposal of Solid or Liquid Wastes Other Than by Discharge		
		System Users	3.2	Are you applying for an NPDES permit to operate a privately owned treatment works? ☐ Yes ☒ No → SKIP to Section 4.					
			3.3	Have you attached a list that identifies each user of the treatment works? ☐ Yes					

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SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(G)(4))								
Intermittent Flows	4.1	Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal? ☐ Yes ☒ No → SKIP to Section 5.						
	4.2	Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.						
		Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
				Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
				days/week	months/year	mgd	mgd	days
SECTION 5. PRODUCTION (40 CFR 122.21(G)(5))								
Applicable ELGs	5.1	Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility? ☐ Yes ☒ No → SKIP to Section 6.						
	5.2	Provide the following information on applicable ELGs.						
		ELG Category	ELG Subcategory				Regulatory Citation	
Production-Based Limitations	5.3	Are any of the applicable ELGs expressed in terms of production (or other measure of operation)? ☐ Yes ☒ No → SKIP to Section 6.						
	5.4	Provide an actual measure of daily production expressed in terms and units of applicable ELGs.						
		Outfall Number	Operation, Product, or Material			Quantity per Day	Unit of Measure	

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	5.5	Are you requesting alternative limits based on an anticipated increase in the actual production during the next permit term? (Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)		
		☐ Yes ☐ No		

SECTION 6. IMPROVEMENTS (40 CFR 122.21(G)(6))

Upgrades and Improvements	6.1	Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?			
		☐ Yes ☒ No → SKIP to Item 6.3.			
	6.2	Briefly identify each applicable project in the table below.			
		Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates
					Required Projected
	6.3	Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? (<i>optional item</i>)			
		☐ Yes ☐ No ☒ Not applicable			

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(G)(7))

Effluent and Intake Characteristics	See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.			
	Table A. Conventional and Non-Conventional Pollutants			
	7.1	Are you requesting a waiver from your NPDES permitting authority for any Table A pollutants for any of your outfalls?		
		☐ Yes ☒ No → SKIP to Item 7.3.		
	7.2	If yes, indicate the applicable outfalls below or check the appropriate box to indicate that you are requesting a waiver for all outfalls. Attach waiver request and other required information to the application.		
		Outfall number _____ Outfall number _____ Outfall number _____ ☐ I am requesting a waiver for some pollutants at all outfalls. ☐ I am requesting a waiver for all pollutants at all outfalls → SKIP to Item 7.4.		
	7.3	Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?		
		☐ Yes		
Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants				
7.4	Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)			
	☐ Yes ☒ No → SKIP to Item 7.8.			
7.5	Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?			
	☐ Yes			

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	7.6	List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.						
		Primary Industry Category			Required GC/MS Fraction(s) (check applicable boxes)			
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
					☐ Volatile	☐ Acid	☐ Base/neutral	☐ Pesticide
Effluent and Intake Characteristics Continued	7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☐ Yes						
	7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☐ Yes						
	7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☐ Yes						
	7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? ☐ Yes → Note that you qualify at the top of Table B, then SKIP to Item 7.12. ☒ No						
	7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☒ Yes						
	Table C. Certain Conventional and Non-Conventional Pollutants							
	7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table C for all outfalls? ☒ Yes						
	7.13	Have you completed Table C by providing quantitative data for those pollutants that are limited either directly or indirectly in an ELG? You must provide quantitative data even if the pollutant is "Believed Absent." ☐ Yes ☒ Not applicable						
	7.14	Have you completed Table C by providing quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☒ Yes						
	Table D. Certain Hazardous Substances and Asbestos							
	7.15	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☒ Yes						
	7.16	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) providing quantitative data, if available? ☒ Yes ☐ No						
	Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)							
7.17	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes → Complete Table E. ☒ No → SKIP to Section 8.							
7.18	Have you completed Table E by reporting <i>qualitative</i> data for TCDD? ☐ Yes							

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SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(G)(9))

Used or Manufactured Toxics	<u>8.1</u>	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☒ No → SKIP to Section 9.		
	<u>8.2</u>	List the pollutants below. Attach additional sheets, if necessary.		
	1.	4.	7.	
	2.	5.	8.	
	3.	6.	9.	

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(G)(11))

Biological Toxicity Tests	<u>9.1</u>	Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) a receiving water in relation to your discharge? ☐ Yes ☒ No → SKIP to Section 10.		
	<u>9.2</u>	Identify the tests and their purposes below.		
		Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?
				☐ Yes ☐ No
				☐ Yes ☐ No
			☐ Yes ☐ No	

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(G)(12))

Contract Analyses	<u>10.1</u>	Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm? ☒ Yes ☐ No → SKIP to Section 11.			
	<u>10.2</u>	Provide information for each contract laboratory or consulting firm below.			
			Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
	Name of laboratory/firm	Eurofins Lancaster Laboratories Environment Testing, LLC			
	Laboratory address	2425 New Holland Pike, Lancaster, PA			
	Phone number	(412) 525-0071			
	Pollutant(s) analyzed	VOCs, SVOCs, GRO/DRO, PCBs, Anions, Metals/Mercury, pH, free cyanide			

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SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(G)(13))							
Additional Information	<u>11.1</u>	Has the NPDES permitting authority requested additional information? ☐ Yes ☒ No → SKIP to Section 12.					
	<u>11.2</u>	List the information requested and attach it to this application.					
	1.						4.
	2.						5.
	3.						6.
SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))							
Checklist and Certification Statement	<u>12.1</u>	In Column 1 below, mark the sections of Form 2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.					
		Column 1		Column 2			
	☒	Section 1: Outfall Location		☒ w/ attachments			
	☐	Section 2: Line Drawing		☐ w/ line drawing		☐ w/ additional attachments	
	☐	Section 3: Average Flows and Treatment		☐ w/ attachments		☐ w/ list of each user of privately owned treatment works	
	☐	Section 4: Intermittent Flows		☐ w/ attachments			
	☐	Section 5: Production		☐ w/ attachments			
	☐	Section 6: Improvements		☐ w/ attachments		☐ w/ optional additional sheets describing any additional pollution control plans	
	☒	Section 7: Effluent and Intake Characteristics		☒ w/ request for a waiver and supporting information ☐ w/ small business exemption request ☒ w/ Table A ☒ w/ Table C ☒ w/ Table E		☐ w/ explanation for identical outfalls ☐ w/ other attachments ☒ w/ Table B ☒ w/ Table D ☒ w/ analytical results as an attachment	
	☐	Section 8: Used or Manufactured Toxics		☐ w/ attachments			
	☐	Section 9: Biological Toxicity Tests		☐ w/ attachments			
	☒	Section 10: Contract Analyses		☐ w/ attachments			
	☐	Section 11: Additional Information		☐ w/ attachments			
	☒	Section 12: Checklist and Certification Statement		☐ w/ attachments			

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		Quantum Frederick

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SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d)) (Continued)

Checklist and Certification Statement	<u>12.2</u>	Provide the following certification. (See instructions to determine the appropriate person to sign the application.)	
		Certification Statement <i>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
		Name (print or type first and last name)	Official title
		Joshua Mullis	Project Manager
		Signature	Date signed
			3/24/2025

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
		Quantum Frederick	Frac Tank A4719

TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))¹

TABLE 17. CONVENTIONAL POLLUTANT NON-CONVENTIONAL POLLUTANTS (18 OF 18) (SEE PAGE 9)									
Pollutant	Waiver Requested (if applicable)	Units (specify)	Effluent				Intake (optional)		
			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses	
☒	Check here if you have applied to your NPDES permitting authority for a waiver for all of the pollutants listed on this table for the noted outfall.								
1.	☐	Concentration							
		Mass							
2.	☐	Concentration							
		Mass							
3.	☐	Concentration							
		Mass							
4.	☐	Concentration							
		Mass							
5.	☐	Concentration							
		Mass							
6.	☐	Rate							
7.	☐	°C							
	☐	°C							
8.	☒	Standard units							
	☒	Standard units							

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
☐ Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.										
Section 1. Toxic Metals, Cyanide, and Total Phenols										
1.1 Antimony, total (7440-36-0)	☐	☐	☒	Concentration Mass	ug/L	0.2 U				
1.2 Arsenic, total (7440-38-2)	☒	☒	☐	Concentration Mass	ug/L	0.68 U				
1.3 Beryllium, total (7440-41-7)	☐	☐	☒	Concentration Mass	ug/L	0.12 U				
1.4 Cadmium, total (7440-43-9)	☒	☐	☒	Concentration Mass	ug/L	0.15 U				
1.5 Chromium, total (7440-47-3)	☒	☒	☐	Concentration Mass	ug/L	0.58				
1.6 Copper, total (7440-50-8)	☒	☒	☐	Concentration Mass	ug/L	1.9				
1.7 Lead, total (7439-92-1)	☒	☒	☐	Concentration Mass	ug/L	0.23				
1.8 Mercury, total (7439-97-6)	☐	☐	☒	Concentration Mass	ug/L	0.79 U				
1.9 Nickel, total (7440-02-0)	☒	☒	☐	Concentration Mass	ug/L	1.2				
1.10 Selenium, total (7782-49-2)	☐	☐	☒	Concentration Mass	ug/L	0.28 U				
1.11 Silver, total (7440-22-4)	☐	☐	☒	Concentration Mass		0.1 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
1.12 Thallium, total (7440-28-0)	☐	☐	☒	Concentration Mass	ug/L	0.13 U				
1.13 Zinc, total (7440-66-6)	☐	☐	☒	Concentration Mass	ug/L	4.0 U				
1.14 Cyanide, total (57-12-5)	☒	☐	☐	Concentration Mass	mg/L	0.005 U free cyanide				
1.15 Phenols, total	☐	☐	☒	Concentration Mass						
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)										
2.1 Acrolein (107-02-8)	☐	☐	☒	Concentration Mass						
2.2 Acrylonitrile (107-13-1)	☐	☐	☒	Concentration Mass						
2.3 Benzene (71-43-2)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				
2.4 Bromoform (75-25-2)	☐	☐	☒	Concentration Mass	ug/L	0.3 U				
2.5 Carbon tetrachloride (56-23-5)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				
2.6 Chlorobenzene (108-90-7)	☒	☐	☒	Concentration Mass	ug/L	0.07 U				
2.7 Chlorodibromomethane (124-48-1)	☐	☐	☒	Concentration Mass	ug/L	0.08 U				
2.8 Chloroethane (75-00-3)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.9 2-chloroethylvinyl ether (110-75-8)	☐	☐	☒	Concentration Mass						
2.10 Chloroform (67-66-3)	☐	☐	☒	Concentration Mass	ug/L	0.19				
2.11 Dichlorobromomethane (75-27-4)	☐	☐	☒	Concentration Mass						
2.12 1,1-dichloroethane (75-34-3)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				
2.13 1,2-dichloroethane (107-06-2)	☐	☐	☒	Concentration Mass	ug/L	0.07 U				
2.14 1,1-dichloroethylene (75-35-4)	☐	☐	☒	Concentration Mass						
2.15 1,2-dichloropropane (78-87-5)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				
2.16 1,3-dichloropropylene (542-75-6)	☐	☐	☒	Concentration Mass						
2.17 Ethylbenzene (100-41-4)	☐	☐	☒	Concentration Mass	ug/L	0.08 U				
2.18 Methyl bromide (74-83-9)	☐	☐	☒	Concentration Mass						
2.19 Methyl chloride (74-87-3)	☐	☐	☒	Concentration Mass						
2.20 Methylene chloride (75-09-2)	☐	☐	☒	Concentration Mass	ug/L	0.2 U				
2.21 1,1,2,2- tetrachloroethane (79-34-5)	☐	☐	☒	Concentration Mass	ug/L	0.1 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v)) ¹										
Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
2.22 Tetrachloroethylene (127-18-4)	☐	☐	☒	Concentration Mass						
2.23 Toluene (108-88-3)	☐	☐	☒	Concentration Mass	0.08 U					
2.24 1,2-trans-dichloroethylene (156-60-5)	☐	☐	☒	Concentration Mass						
2.25 1,1,1-trichloroethane (71-55-6)	☐	☐	☒	Concentration Mass	0.08 U					
2.26 1,1,1,2-trichloroethane (79-00-5)	☐	☐	☒	Concentration Mass	0.08 U					
2.27 Trichloroethylene (79-01-6)	☐	☐	☒	Concentration Mass						
2.28 Vinyl chloride (75-01-4)	☐	☐	☒	Concentration Mass	0.1 U					
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)										
3.1 2-chlorophenol (95-57-8)	☐	☐	☒	Concentration Mass						
3.2 2,4-dichlorophenol (120-83-2)	☐	☐	☒	Concentration Mass						
3.3 2,4-dimethylphenol (105-67-9)	☐	☐	☒	Concentration Mass						
3.4 4,6-dinitro-o-cresol (534-52-1)	☐	☐	☒	Concentration Mass						
3.5 2,4-dinitrophenol (51-28-5)	☐	☐	☒	Concentration Mass						

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
3.6 2-nitrophenol (88-75-5)	☐	☐	☒	Concentration Mass						
3.7 4-nitrophenol (100-02-7)	☐	☐	☒	Concentration Mass						
3.8 p-chloro-m-cresol (59-50-7)	☐	☐	☒	Concentration Mass						
3.9 Pentachlorophenol (87-86-5)	☐	☐	☒	Concentration Mass						
3.10 Phenol (108-95-2)	☐	☐	☒	Concentration Mass						
3.11 2,4,6-trichlorophenol (88-05-2)	☐	☐	☒	Concentration Mass						

Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)

4.1 Acenaphthene (83-32-9)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.2 Acenaphthylene (208-96-8)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.3 Anthracene (120-12-7)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.4 Benzidine (92-87-5)	☐	☐	☒	Concentration Mass						
4.5 Benzo (a) anthracene (56-55-3)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				
4.6 Benzo (a) pyrene (50-32-8)	☒	☐	☒	Concentration Mass	ug/L	0.011 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.7 3,4-benzofluoranthene (205-99-2)	☐	☐	☒	Concentration Mass						
4.8 Benzo (ghi) perylene (191-24-2)	☐	☐	☒	Concentration Mass						
4.9 Benzo (k) fluoranthene (207-08-9)	☐	☐	☒	Concentration Mass						
4.10 Bis (2-chloroethoxy) methane (111-91-1)	☐	☐	☒	Concentration Mass						
4.11 Bis (2-chloroethyl) ether (111-44-4)	☐	☐	☒	Concentration Mass						
4.12 Bis (2-chloroisopropyl) ether (102-80-1)	☐	☐	☒	Concentration Mass						
4.13 Bis (2-ethylhexyl) phthalate (117-81-7)	☐	☐	☒	Concentration Mass						
4.14 4-bromophenyl phenyl ether (101-55-3)	☐	☐	☒	Concentration Mass						
4.15 Butyl benzyl phthalate (85-68-7)	☐	☐	☒	Concentration Mass						
4.16 2-chloronaphthalene (91-58-7)	☐	☐	☒	Concentration Mass						
4.17 4-chlorophenyl phenyl ether (7005-72-3)	☐	☐	☒	Concentration Mass						
4.18 Chrysene (218-01-9)	☒	☒	☐	Concentration Mass	ug/L	0.027 U				
4.19 Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☒	Concentration Mass	ug/L	0.022 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)		Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)		
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses	
4.20	1,2-dichlorobenzene (95-50-1)	☐	☐	☒	Concentration	ug/L	0.07 U						
4.21	1,3-dichlorobenzene (541-73-1)	☐	☐	☒	Concentration	ug/L	0.07 U						
4.22	1,4-dichlorobenzene (106-46-7)	☐	☐	☒	Concentration	ug/L	0.07 U						
4.23	3,3-dichlorobenzidine (91-94-1)	☐	☐	☒	Concentration								
4.24	Diethyl phthalate (84-66-2)	☐	☐	☒	Concentration								
4.25	Dimethyl phthalate (131-11-3)	☐	☐	☒	Concentration								
4.26	Di-n-butyl phthalate (84-74-2)	☐	☐	☒	Concentration								
4.27	2,4-dinitrotoluene (121-14-2)	☐	☐	☒	Concentration								
4.28	2,6-dinitrotoluene (606-20-2)	☐	☐	☒	Concentration								
4.29	Di-n-octyl phthalate (117-84-0)	☐	☐	☒	Concentration								
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☐	☐	☒	Concentration								
4.31	Fluoranthene (206-44-0)	☐	☐	☒	Concentration	ug/L	0.024 U						
4.32	Fluorene (86-73-7)	☐	☐	☒	Concentration	ug/L	0.011 U						

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
4.33 Hexachlorobenzene (118-74-1)	☐	☐	☒	Concentration Mass						
4.34 Hexachlorobutadiene (87-68-3)	☐	☐	☒	Concentration Mass						
4.35 Hexachlorocyclopentadiene (77-47-4)	☐	☐	☒	Concentration Mass						
4.36 Hexachloroethane (67-72-1)	☐	☐	☒	Concentration Mass						
4.37 Indeno (1,2,3-cd) pyrene (193-39-5)	☐	☐	☒	Concentration Mass	ug/L	0.021 U				
4.38 Isophorone (78-59-1)	☐	☐	☒	Concentration Mass						
4.39 Naphthalene (91-20-3)	☒	☐	☒	Concentration Mass	ug/L	0.072 U				
4.40 Nitrobenzene (98-95-3)	☐	☐	☒	Concentration Mass						
4.41 N-nitrosodimethylamine (62-75-9)	☐	☐	☒	Concentration Mass						
4.42 N-nitrosodi-n-propylamine (621-64-7)	☐	☐	☒	Concentration Mass						
4.43 N-nitrosodiphenylamine (86-30-6)	☐	☐	☒	Concentration Mass						
4.44 Phenanthrene (85-01-8)	☐	☐	☒	Concentration Mass	ug/L	0.032 U				
4.45 Pyrene (129-00-0)	☒	☒	☐	Concentration Mass	ug/L	0.022 U				

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent							
4.46 1,2,4-trichlorobenzene (120-82-1)	☐	☐	☒	Concentration ug/L	Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)										
5.1 Aldrin (309-00-2)	☐	☐	☒	Concentration Mass						
5.2 α -BHC (319-84-6)	☐	☐	☒	Concentration Mass						
5.3 β -BHC (319-85-7)	☐	☐	☒	Concentration Mass						
5.4 γ -BHC (58-89-9)	☐	☐	☒	Concentration Mass						
5.5 δ -BHC (319-86-8)	☐	☐	☐	Concentration Mass						
5.6 Chlordane (57-74-9)	☐	☐	☒	Concentration Mass						
5.7 4,4'-DDT (50-29-3)	☐	☐	☒	Concentration Mass						
5.8 4,4'-DDE (72-55-9)	☐	☐	☒	Concentration Mass						
5.9 4,4'-DDD (72-54-8)	☐	☐	☒	Concentration Mass						
5.10 Dieldrin (60-57-1)	☐	☐	☒	Concentration Mass						
5.11 α -endosulfan (115-29-7)	☐	☐	☒	Concentration Mass						

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))¹

Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses
5.12 β-endosulfan (115-29-7)	☐	☐	☒	Concentration Mass						
5.13 Endosulfan sulfate (1031-07-8)	☐	☐	☒	Concentration Mass						
5.14 Endrin (72-20-8)	☐	☐	☒	Concentration Mass						
5.15 Endrin aldehyde (7421-93-4)	☐	☐	☒	Concentration Mass						
5.16 Heptachlor (76-44-8)	☐	☐	☒	Concentration Mass						
5.17 Heptachlor epoxide (1024-57-3)	☐	☐	☒	Concentration Mass						
5.18 PCB-1242 (53469-21-9)	☒	☐	☒	Concentration Mass	0.0076 U					
5.19 PCB-1254 (11097-69-1)	☒	☐	☒	Concentration Mass	0.0048 U					
5.20 PCB-1221 (11104-28-2)	☒	☐	☒	Concentration Mass	0.0076 U					
5.21 PCB-1232 (11141-16-5)	☒	☐	☒	Concentration Mass	0.0076 U					
5.22 PCB-1248 (12672-29-6)	☒	☐	☒	Concentration Mass	0.0076 U					
5.23 PCB-1260 (11096-82-5)	☒	☒	☐	Concentration Mass	0.0048 U					
5.24 PCB-1016 (12674-11-2)	☒	☐	☒	Concentration Mass	0.0076 U					

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v)) ¹											
Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)		
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long- Term Average Value	Number of Analyses	
Toxaphene (8001-35-2)	☐	☐	☒	Concentration							
				Mass							

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

	Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
		Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐ Check here if you believe all pollutants in Table C to be present in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.										
☐ Check here if you believe all pollutants in Table C to be absent in your discharge from the noted outfall. You need <i>not</i> complete the "Presence or Absence" column of Table C for each pollutant.										
1.	Bromide (24959-67-9)	☐	☒	Concentration Mass						
2.	Chlorine, total residual	☐	☒	Concentration Mass						
3.	Color	☐	☒	Concentration Mass						
4.	Fecal coliform	☐	☒	Concentration Mass						
5.	Fluoride (16984-48-8)	☒	☐	Concentration Mass	mg/L	0.40				
6	Nitrate-nitrite	☐	☒	Concentration Mass						
7.	Nitrogen, total organic (as N)	☐	☒	Concentration Mass						
8.	Oil and grease	☐	☒	Concentration Mass						
9.	Phosphorus (as P), total (7723-14-0)	☐	☒	Concentration Mass						
10.	Sulfate (as SO ₄) (14808-79-8)	☐	☒	Concentration Mass						
11.	Sulfide (as S)	☐	☒	Concentration Mass						

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))¹

Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12. Sulfite (as SO ₃) (14265-45-3)	☐	☒	Concentration Mass						
13. Surfactants	☐	☒	Concentration Mass						
14. Aluminum, total (7429-90-5)	☒	☐	Concentration Mass	ug/L	650.0				
15. Barium, total (7440-39-3)	☒	☐	Concentration Mass	ug/L	38				
16. Boron, total (7440-42-8)	☐	☒	Concentration Mass						
17. Cobalt, total (7440-48-4)	☒	☐	Concentration Mass	ug/L	0.32				
18. Iron, total (7439-89-6)	☒	☐	Concentration Mass	ug/L	530.0				
19. Magnesium, total (7439-95-4)	☒	☐	Concentration Mass	ug/L	6900				
20. Molybdenum, total (7439-98-7)	☐	☒	Concentration Mass						
21. Manganese, total (7439-96-5)	☒	☐	Concentration Mass	ug/L	8.8				
22. Tin, total (7440-31-5)	☐	☒	Concentration Mass						
23. Titanium, total (7440-32-6)	☐	☒	Concentration Mass						

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi)) ¹									
Pollutant	Presence or Absence (check one)		Units (specify)	Effluent				Intake (optional)	
	Believed Present	Believed Absent		Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24. Radioactivity									
Alpha, total	☐	☒	Concentration Mass						
Beta, total	☐	☒	Concentration Mass						
Radium, total	☐	☒	Concentration Mass						
Radium 226, total	☐	☒	Concentration Mass						

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) ¹				
Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
1. Asbestos	☐	☒		
2. Acetaldehyde	☐	☒		
3. Allyl alcohol	☐	☒		
4. Allyl chloride	☐	☒		
5. Amyl acetate	☐	☒		
6. Aniline	☐	☒		
7. Benzotrile	☐	☒		
8. Benzyl chloride	☐	☒		
9. Butyl acetate	☐	☒		
10. Butylamine	☐	☒		
11. Captan	☐	☒		
12. Carbaryl	☐	☒		
13. Carbofuran	☐	☒		
14. Carbon disulfide	☐	☒		
15. Chlorpyrifos	☐	☒		
16. Coumaphos	☐	☒		
17. Cresol	☐	☒		
18. Crotonaldehyde	☐	☒		
19. Cyclohexane	☐	☒		0.1 ug/L U

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
20. 2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☒		
21. Diazinon	☐	☒		
22. Dicamba	☐	☒		
23. Dichlobenil	☐	☒		
24. Diclhone	☐	☒		
25. 2,2-dichloropropionic acid	☐	☒		
26. Dichlorvos	☐	☒		
27. Diethyl amine	☐	☒		
28. Dimethyl amine	☐	☒		
29. Dinitrobenzene	☐	☒		
30. Diquat	☐	☒		
31. Disulfoton	☐	☒		
32. Diuron	☐	☒		
33. Epichlorohydrin	☐	☒		
34. Ethion	☐	☒		
35. Ethylene diamine	☐	☒		
36. Ethylene dibromide	☐	☒		
37. Formaldehyde	☐	☒		
38. Furfural	☐	☒		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) ¹				
Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
39. Guthion	☐	☒		
40. Isoprene	☐	☒		
41. Isopropanolamine	☐	☒		
42. Kelthane	☐	☒		
43. Kepone	☐	☒		
44. Malathion	☐	☒		
45. Mercaptodimethur	☐	☒		
46. Methoxychlor	☐	☒		
47. Methyl mercaptan	☐	☒		
48. Methyl methacrylate	☐	☒		
49. Methyl parathion	☐	☒		
50. Mevinphos	☐	☒		
51. Mexacarbate	☐	☒		
52. Monoethyl amine	☐	☒		
53. Monomethyl amine	☐	☒		
54. Naled	☐	☒		
55. Naphthenic acid	☐	☒		
56. Nitrotoluene	☐	☒		
57. Parathion	☐	☒		

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number Frac Tank 4719	OMB No. 2040-0004 Expires 07/31/2026
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TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))¹

Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
58. Phenolsulfonate	☐	☒		
59. Phosgene	☐	☒		
60. Propargite	☐	☒		
61. Propylene oxide	☐	☒		
62. Pyrethrins	☐	☒		
63. Quinoline	☐	☒		
64. Resorcinol	☐	☒		
65. Strontium	☐	☒		
66. Strychnine	☐	☒		
67. Styrene	☐	☒		0.07 ug/L U
68. 2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☒		
69. TDE (tetrachlorodiphenyl ethane)	☐	☒		
70. 2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☒		
71. Trichlorofon	☐	☒		
72. Triethanolamine	☐	☒		
73. Triethylamine	☐	☒		
74. Trimethylamine	☐	☒		
75. Uranium	☐	☒		
76. Vanadium	☐	☒		

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number Frac Tank 4719
---------------------------	---------------------	------------------------------------	----------------------------------

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii)) ¹				
Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
	Believed Present	Believed Absent		
77. Vinyl acetate	☐	☒		
78. Xylene	☐	☒		
79. Xylenol	☐	☒		
80. Zirconium	☐	☒		

¹ Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))				
Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☒	



ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Mullis
Tetra Tech Inc
20251 Century Blvd
Suite 200
Germantown, Maryland 20874

Generated 3/11/2025 10:20:03 AM

JOB DESCRIPTION

Soil and Water Analysis - QL Frederick

JOB NUMBER

410-209779-1

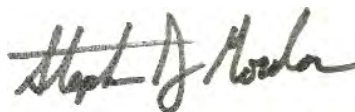
Eurofins Lancaster Laboratories Environment Testing, LLC

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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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3/11/2025 10:20:03 AM

Authorized for release by
Stephen Gordon, Senior Project Manager
Stephen.Gordon@et.eurofinsus.com
(412)525-0071

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
 - Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
 - Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
- Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

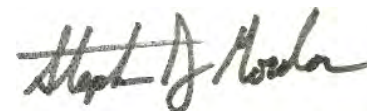


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Definitions/Glossary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
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
*1	LCS/LCSD RPD exceeds control limits.
cn	Refer to Case Narrative for further detail

Metals

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
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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

Case Narrative

Client: Tetra Tech Inc
Project: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Job ID: 410-209779-1

Eurofins Lancaster Laboratories Environment

Job Narrative 410-209779-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 2/27/2025 4:55 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 6.2°C.

GC/MS VOA

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-612089 recovered outside acceptance criteria, low biased, for Methyl acetate. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

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

GC/MS Semi VOA

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

Gasoline Range Organics

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

Diesel Range Organics

Method 8015D_DRO: The method blank for preparation batch 410-611785 contained DRO (C10-C28) above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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

GC Semi VOA

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

PCBs

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.

Metals

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.

Detection Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: TB-20250227

Lab Sample ID: 410-209779-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.13	J	1.0	0.10	ug/L	1		8260D	Total/NA

Client Sample ID: QM-A4712-20250227

Lab Sample ID: 410-209779-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.31		0.20	0.090	mg/L	1		EPA 300.0 R2.1	Total/NA
Aluminum	320		25	12	ug/L	1		6020B	Total Recoverable
Barium	39		2.0	0.75	ug/L	1		6020B	Total Recoverable
Calcium	74000		120	50	ug/L	1		6020B	Total Recoverable
Cobalt	0.26	J	0.50	0.16	ug/L	1		6020B	Total Recoverable
Copper	1.2		1.0	0.36	ug/L	1		6020B	Total Recoverable
Iron	350		50	20	ug/L	1		6020B	Total Recoverable
Lead	0.16	J	0.50	0.12	ug/L	1		6020B	Total Recoverable
Magnesium	8700		50	16	ug/L	1		6020B	Total Recoverable
Manganese	28		2.0	0.95	ug/L	1		6020B	Total Recoverable
Nickel	1.3		1.0	0.40	ug/L	1		6020B	Total Recoverable
Potassium	6500		200	65	ug/L	1		6020B	Total Recoverable
Sodium	9400		200	90	ug/L	1		6020B	Total Recoverable
Vanadium	1.1	J	4.0	0.79	ug/L	1		6020B	Total Recoverable
pH	7.6	HF	0.01	0.01	S.U.	1		9040C	Total/NA
Temperature	17.8	HF	0.01	0.01	Degrees C	1		9040C	Total/NA
Corrosivity	no	HF	0.01	0.01	NONE	1		9040C	Total/NA

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.19	J	0.50	0.090	ug/L	1		8260D	Total/NA
Fluoride	0.40		0.20	0.090	mg/L	1		EPA 300.0 R2.1	Total/NA
Aluminum	650		25	12	ug/L	1		6020B	Total Recoverable
Barium	38		2.0	0.75	ug/L	1		6020B	Total Recoverable
Calcium	55000		120	50	ug/L	1		6020B	Total Recoverable
Chromium	0.58	J	2.0	0.55	ug/L	1		6020B	Total Recoverable
Cobalt	0.32	J	0.50	0.16	ug/L	1		6020B	Total Recoverable
Copper	1.9		1.0	0.36	ug/L	1		6020B	Total Recoverable
Iron	530		50	20	ug/L	1		6020B	Total Recoverable
Lead	0.23	J	0.50	0.12	ug/L	1		6020B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Detection Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4719-20250227 (Continued)

Lab Sample ID: 410-209779-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	6900		50	16	ug/L	1		6020B	Total
									Recoverable
Manganese	8.8		2.0	0.95	ug/L	1		6020B	Total
									Recoverable
Nickel	1.2		1.0	0.40	ug/L	1		6020B	Total
									Recoverable
Potassium	6900		200	65	ug/L	1		6020B	Total
									Recoverable
Sodium	8300		200	90	ug/L	1		6020B	Total
									Recoverable
Vanadium	1.6	J	4.0	0.79	ug/L	1		6020B	Total
									Recoverable
pH	7.0	HF	0.01	0.01	S.U.	1		9040C	Total/NA
Temperature	16.7	HF	0.01	0.01	Degrees C	1		9040C	Total/NA
Corrosivity	no	HF	0.01	0.01	NONE	1		9040C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: TB-20250227

Lab Sample ID: 410-209779-1

Date Collected: 02/27/25 07:00

Matrix: Water

Date Received: 02/27/25 16:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:30	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:30	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			03/03/25 14:30	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:30	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:30	1
2-Butanone	<1.0		5.0	1.0	ug/L			03/03/25 14:30	1
2-Hexanone	<2.0		5.0	2.0	ug/L			03/03/25 14:30	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			03/03/25 14:30	1
Acetone	<1.5		5.0	1.5	ug/L			03/03/25 14:30	1
Benzene	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
Bromoform	<0.30		1.0	0.30	ug/L			03/03/25 14:30	1
Bromomethane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Carbon disulfide	0.13	J	1.0	0.10	ug/L			03/03/25 14:30	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:30	1
Chloroethane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Chloroform	<0.090		0.50	0.090	ug/L			03/03/25 14:30	1
Chloromethane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Cyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
Methyl acetate	<0.20	cn	1.0	0.20	ug/L			03/03/25 14:30	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			03/03/25 14:30	1
Styrene	<0.070		0.50	0.070	ug/L			03/03/25 14:30	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			03/03/25 14:30	1
Toluene	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
Trichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 14:30	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			03/03/25 14:30	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			03/03/25 14:30	1

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: TB-20250227

Lab Sample ID: 410-209779-1

Date Collected: 02/27/25 07:00

Matrix: Water

Date Received: 02/27/25 16:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		03/03/25 14:30	1
4-Bromofluorobenzene (Surr)	95		80 - 120		03/03/25 14:30	1
Dibromofluoromethane (Surr)	103		80 - 120		03/03/25 14:30	1
Toluene-d8 (Surr)	97		80 - 120		03/03/25 14:30	1

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L			02/28/25 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	104		63 - 135		02/28/25 14:08	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.0095		0.028	0.0095	ug/L		03/03/25 00:12	03/04/25 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	89		46 - 136	03/03/25 00:12	03/04/25 08:18	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	89		46 - 136	03/03/25 00:12	03/04/25 08:18	1

Client Sample ID: QM-A4712-20250227

Lab Sample ID: 410-209779-2

Date Collected: 02/27/25 09:30

Matrix: Water

Date Received: 02/27/25 16:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:14	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:14	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			03/03/25 15:14	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:14	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:14	1
2-Butanone	<1.0		5.0	1.0	ug/L			03/03/25 15:14	1
2-Hexanone	<2.0		5.0	2.0	ug/L			03/03/25 15:14	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			03/03/25 15:14	1
Acetone	<1.5		5.0	1.5	ug/L			03/03/25 15:14	1
Benzene	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
Bromoform	<0.30		1.0	0.30	ug/L			03/03/25 15:14	1
Bromomethane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			03/03/25 15:14	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:14	1
Chloroethane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4712-20250227

Lab Sample ID: 410-209779-2

Date Collected: 02/27/25 09:30

Matrix: Water

Date Received: 02/27/25 16:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	<0.090		0.50	0.090	ug/L			03/03/25 15:14	1
Chloromethane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Cyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
Methyl acetate	<0.20	cn	1.0	0.20	ug/L			03/03/25 15:14	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			03/03/25 15:14	1
Styrene	<0.070		0.50	0.070	ug/L			03/03/25 15:14	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			03/03/25 15:14	1
Toluene	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
Trichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 15:14	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			03/03/25 15:14	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			03/03/25 15:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		03/03/25 15:14	1
4-Bromofluorobenzene (Surr)	93		80 - 120		03/03/25 15:14	1
Dibromofluoromethane (Surr)	108		80 - 120		03/03/25 15:14	1
Toluene-d8 (Surr)	97		80 - 120		03/03/25 15:14	1

Method: SW846 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Acenaphthylene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Anthracene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Benzo[a]anthracene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Benzo[a]pyrene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Benzo[b]fluoranthene	<0.050		0.053	0.050	ug/L		03/03/25 07:41	03/03/25 22:40	1
Benzo[g,h,i]perylene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Benzo[k]fluoranthene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Chrysene	<0.027		0.053	0.027	ug/L		03/03/25 07:41	03/03/25 22:40	1
Dibenz(a,h)anthracene	<0.021		0.053	0.021	ug/L		03/03/25 07:41	03/03/25 22:40	1
Fluoranthene	<0.024		0.053	0.024	ug/L		03/03/25 07:41	03/03/25 22:40	1
Fluorene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 22:40	1
Indeno[1,2,3-cd]pyrene	<0.021		0.053	0.021	ug/L		03/03/25 07:41	03/03/25 22:40	1
Naphthalene	<0.072		0.074	0.072	ug/L		03/03/25 07:41	03/03/25 22:40	1
Phenanthrene	<0.032		0.074	0.032	ug/L		03/03/25 07:41	03/03/25 22:40	1
Pyrene	<0.022		0.053	0.022	ug/L		03/03/25 07:41	03/03/25 22:40	1

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4712-20250227

Lab Sample ID: 410-209779-2

Date Collected: 02/27/25 09:30

Matrix: Water

Date Received: 02/27/25 16:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	77		10 - 136	03/03/25 07:41	03/03/25 22:40	1
1-Methylnaphthalene-d10 (Surr)	94		20 - 144	03/03/25 07:41	03/03/25 22:40	1
Fluoranthene-d10 (Surr)	92		29 - 153	03/03/25 07:41	03/03/25 22:40	1

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L	-		02/28/25 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	105		63 - 135		02/28/25 20:05	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.0094		0.028	0.0094	ug/L	-	03/03/25 00:12	03/04/25 08:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	91		46 - 136	03/03/25 00:12	03/04/25 08:35	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	93		46 - 136	03/03/25 00:12	03/04/25 08:35	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	<48	*1 cn	110	48	ug/L	-	03/02/25 16:03	03/03/25 20:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	85		32 - 125	03/02/25 16:03	03/03/25 20:21	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0076		0.0095	0.0076	ug/L	-	03/06/25 10:11	03/06/25 20:26	1
PCB-1221 (1C)	<0.0076		0.0095	0.0076	ug/L	-	03/06/25 10:11	03/06/25 20:26	1
PCB-1232 (1C)	<0.0076		0.0095	0.0076	ug/L	-	03/06/25 10:11	03/06/25 20:26	1
PCB-1242 (1C)	<0.0076		0.0095	0.0076	ug/L	-	03/06/25 10:11	03/06/25 20:26	1
PCB-1248 (1C)	<0.0076		0.0095	0.0076	ug/L	-	03/06/25 10:11	03/06/25 20:26	1
PCB-1254 (1C)	<0.0047		0.0095	0.0047	ug/L	-	03/06/25 10:11	03/06/25 20:26	1
PCB-1260 (1C)	<0.0047		0.0095	0.0047	ug/L	-	03/06/25 10:11	03/06/25 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	112		46 - 161	03/06/25 10:11	03/06/25 20:26	1
DCB Decachlorobiphenyl (Surr) (2C)	111		46 - 161	03/06/25 10:11	03/06/25 20:26	1
Tetrachloro-m-xylene (1C)	69		41 - 146	03/06/25 10:11	03/06/25 20:26	1
Tetrachloro-m-xylene (2C)	71		41 - 146	03/06/25 10:11	03/06/25 20:26	1

Method: TAL SOP PCB - Total PCB Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0076		0.0095	0.0076	ug/L	-		03/06/25 20:26	1
PCB-1221	<0.0076		0.0095	0.0076	ug/L	-		03/06/25 20:26	1
PCB-1232	<0.0076		0.0095	0.0076	ug/L	-		03/06/25 20:26	1
PCB-1242	<0.0076		0.0095	0.0076	ug/L	-		03/06/25 20:26	1
PCB-1248	<0.0076		0.0095	0.0076	ug/L	-		03/06/25 20:26	1
PCB-1254	<0.0047		0.0095	0.0047	ug/L	-		03/06/25 20:26	1
PCB-1260	<0.0047		0.0095	0.0047	ug/L	-		03/06/25 20:26	1
Polychlorinated biphenyls, Total	<0.0076		0.0095	0.0076	ug/L	-		03/06/25 20:26	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4712-20250227

Lab Sample ID: 410-209779-2

Date Collected: 02/27/25 09:30

Matrix: Water

Date Received: 02/27/25 16:55

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.31		0.20	0.090	mg/L			03/01/25 02:36	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	320		25	12	ug/L		03/03/25 21:00	03/04/25 12:39	1
Antimony	<0.20		1.0	0.20	ug/L		03/03/25 21:00	03/04/25 12:39	1
Arsenic	<0.68		2.0	0.68	ug/L		03/03/25 21:00	03/04/25 12:39	1
Barium	39		2.0	0.75	ug/L		03/03/25 21:00	03/04/25 12:39	1
Beryllium	<0.12		0.50	0.12	ug/L		03/03/25 21:00	03/04/25 12:39	1
Cadmium	<0.15		0.50	0.15	ug/L		03/03/25 21:00	03/04/25 12:39	1
Calcium	74000		120	50	ug/L		03/03/25 21:00	03/04/25 12:39	1
Chromium	<0.55		2.0	0.55	ug/L		03/03/25 21:00	03/04/25 12:39	1
Cobalt	0.26	J	0.50	0.16	ug/L		03/03/25 21:00	03/04/25 12:39	1
Copper	1.2		1.0	0.36	ug/L		03/03/25 21:00	03/04/25 12:39	1
Iron	350		50	20	ug/L		03/03/25 21:00	03/04/25 12:39	1
Lead	0.16	J	0.50	0.12	ug/L		03/03/25 21:00	03/04/25 12:39	1
Magnesium	8700		50	16	ug/L		03/03/25 21:00	03/04/25 12:39	1
Manganese	28		2.0	0.95	ug/L		03/03/25 21:00	03/04/25 12:39	1
Nickel	1.3		1.0	0.40	ug/L		03/03/25 21:00	03/04/25 12:39	1
Potassium	6500		200	65	ug/L		03/03/25 21:00	03/04/25 12:39	1
Selenium	<0.28		1.0	0.28	ug/L		03/03/25 21:00	03/04/25 12:39	1
Silver	<0.10		0.50	0.10	ug/L		03/03/25 21:00	03/04/25 12:39	1
Sodium	9400		200	90	ug/L		03/03/25 21:00	03/04/25 12:39	1
Thallium	<0.13		0.50	0.13	ug/L		03/03/25 21:00	03/04/25 12:39	1
Zinc	<4.0		10	4.0	ug/L		03/03/25 21:00	03/04/25 12:39	1
Vanadium	1.1	J	4.0	0.79	ug/L		03/03/25 21:00	03/04/25 12:39	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.079		0.20	0.079	ug/L		03/03/25 07:30	03/04/25 21:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.6	HF	0.01	0.01	S.U.			02/28/25 13:15	1
Temperature (SW846 9040C)	17.8	HF	0.01	0.01	Degrees C			02/28/25 13:15	1
Corrosivity (SW846 9040C)	no	HF	0.01	0.01	NONE			02/28/25 13:15	1
Cyanide, Free (OI CORP OIA-1677)	<0.0050		0.0060	0.0050	mg/L			02/28/25 12:19	1

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Date Collected: 02/27/25 10:15

Matrix: Water

Date Received: 02/27/25 16:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:36	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Date Collected: 02/27/25 10:15

Matrix: Water

Date Received: 02/27/25 16:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:36	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			03/03/25 15:36	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:36	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:36	1
2-Butanone	<1.0		5.0	1.0	ug/L			03/03/25 15:36	1
2-Hexanone	<2.0		5.0	2.0	ug/L			03/03/25 15:36	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			03/03/25 15:36	1
Acetone	<1.5		5.0	1.5	ug/L			03/03/25 15:36	1
Benzene	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
Bromoform	<0.30		1.0	0.30	ug/L			03/03/25 15:36	1
Bromomethane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			03/03/25 15:36	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 15:36	1
Chloroethane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Chloroform	0.19	J	0.50	0.090	ug/L			03/03/25 15:36	1
Chloromethane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Cyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
Methyl acetate	<0.20	cn	1.0	0.20	ug/L			03/03/25 15:36	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			03/03/25 15:36	1
Styrene	<0.070		0.50	0.070	ug/L			03/03/25 15:36	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			03/03/25 15:36	1
Toluene	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
Trichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 15:36	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			03/03/25 15:36	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			03/03/25 15:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		03/03/25 15:36	1
4-Bromofluorobenzene (Surr)	92		80 - 120		03/03/25 15:36	1
Dibromofluoromethane (Surr)	107		80 - 120		03/03/25 15:36	1
Toluene-d8 (Surr)	97		80 - 120		03/03/25 15:36	1

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Date Collected: 02/27/25 10:15

Matrix: Water

Date Received: 02/27/25 16:55

Method: SW846 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Acenaphthylene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Anthracene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Benzo[a]anthracene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Benzo[a]pyrene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Benzo[b]fluoranthene	<0.050		0.053	0.050	ug/L		03/03/25 07:41	03/03/25 23:04	1
Benzo[g,h,i]perylene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Benzo[k]fluoranthene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Chrysene	<0.027		0.053	0.027	ug/L		03/03/25 07:41	03/03/25 23:04	1
Dibenz(a,h)anthracene	<0.021		0.053	0.021	ug/L		03/03/25 07:41	03/03/25 23:04	1
Fluoranthene	<0.024		0.053	0.024	ug/L		03/03/25 07:41	03/03/25 23:04	1
Fluorene	<0.011		0.053	0.011	ug/L		03/03/25 07:41	03/03/25 23:04	1
Indeno[1,2,3-cd]pyrene	<0.021		0.053	0.021	ug/L		03/03/25 07:41	03/03/25 23:04	1
Naphthalene	<0.072		0.074	0.072	ug/L		03/03/25 07:41	03/03/25 23:04	1
Phenanthrene	<0.032		0.074	0.032	ug/L		03/03/25 07:41	03/03/25 23:04	1
Pyrene	<0.022		0.053	0.022	ug/L		03/03/25 07:41	03/03/25 23:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	71		10 - 136				03/03/25 07:41	03/03/25 23:04	1
1-Methylnaphthalene-d10 (Surr)	83		20 - 144				03/03/25 07:41	03/03/25 23:04	1
Fluoranthene-d10 (Surr)	86		29 - 153				03/03/25 07:41	03/03/25 23:04	1

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L			02/28/25 20:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	104		63 - 135					02/28/25 20:30	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.0095		0.028	0.0095	ug/L		03/03/25 00:12	03/04/25 08:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	88		46 - 136				03/03/25 00:12	03/04/25 08:52	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	87		46 - 136				03/03/25 00:12	03/04/25 08:52	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	<47	*1 cn	100	47	ug/L		03/02/25 16:03	03/03/25 20:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	85		32 - 125				03/02/25 16:03	03/03/25 20:44	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0076		0.0095	0.0076	ug/L		03/06/25 10:11	03/06/25 20:39	1
PCB-1221 (1C)	<0.0076		0.0095	0.0076	ug/L		03/06/25 10:11	03/06/25 20:39	1
PCB-1232 (1C)	<0.0076		0.0095	0.0076	ug/L		03/06/25 10:11	03/06/25 20:39	1
PCB-1242 (1C)	<0.0076		0.0095	0.0076	ug/L		03/06/25 10:11	03/06/25 20:39	1
PCB-1248 (1C)	<0.0076		0.0095	0.0076	ug/L		03/06/25 10:11	03/06/25 20:39	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Date Collected: 02/27/25 10:15

Matrix: Water

Date Received: 02/27/25 16:55

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254 (1C)	<0.0048		0.0095	0.0048	ug/L		03/06/25 10:11	03/06/25 20:39	1
PCB-1260 (1C)	<0.0048		0.0095	0.0048	ug/L		03/06/25 10:11	03/06/25 20:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	97		46 - 161				03/06/25 10:11	03/06/25 20:39	1
DCB Decachlorobiphenyl (Surr) (2C)	100		46 - 161				03/06/25 10:11	03/06/25 20:39	1
Tetrachloro-m-xylene (1C)	64		41 - 146				03/06/25 10:11	03/06/25 20:39	1
Tetrachloro-m-xylene (2C)	67		41 - 146				03/06/25 10:11	03/06/25 20:39	1

Method: TAL SOP PCB - Total PCB Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0076		0.0095	0.0076	ug/L			03/06/25 20:39	1
PCB-1221	<0.0076		0.0095	0.0076	ug/L			03/06/25 20:39	1
PCB-1232	<0.0076		0.0095	0.0076	ug/L			03/06/25 20:39	1
PCB-1242	<0.0076		0.0095	0.0076	ug/L			03/06/25 20:39	1
PCB-1248	<0.0076		0.0095	0.0076	ug/L			03/06/25 20:39	1
PCB-1254	<0.0048		0.0095	0.0048	ug/L			03/06/25 20:39	1
PCB-1260	<0.0048		0.0095	0.0048	ug/L			03/06/25 20:39	1
Polychlorinated biphenyls, Total	<0.0076		0.0095	0.0076	ug/L			03/06/25 20:39	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.40		0.20	0.090	mg/L			03/01/25 02:44	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	650		25	12	ug/L		03/03/25 21:00	03/04/25 12:37	1
Antimony	<0.20		1.0	0.20	ug/L		03/03/25 21:00	03/04/25 12:37	1
Arsenic	<0.68		2.0	0.68	ug/L		03/03/25 21:00	03/04/25 12:37	1
Barium	38		2.0	0.75	ug/L		03/03/25 21:00	03/04/25 12:37	1
Beryllium	<0.12		0.50	0.12	ug/L		03/03/25 21:00	03/04/25 12:37	1
Cadmium	<0.15		0.50	0.15	ug/L		03/03/25 21:00	03/04/25 12:37	1
Calcium	55000		120	50	ug/L		03/03/25 21:00	03/04/25 12:37	1
Chromium	0.58 J		2.0	0.55	ug/L		03/03/25 21:00	03/04/25 12:37	1
Cobalt	0.32 J		0.50	0.16	ug/L		03/03/25 21:00	03/04/25 12:37	1
Copper	1.9		1.0	0.36	ug/L		03/03/25 21:00	03/04/25 12:37	1
Iron	530		50	20	ug/L		03/03/25 21:00	03/04/25 12:37	1
Lead	0.23 J		0.50	0.12	ug/L		03/03/25 21:00	03/04/25 12:37	1
Magnesium	6900		50	16	ug/L		03/03/25 21:00	03/04/25 12:37	1
Manganese	8.8		2.0	0.95	ug/L		03/03/25 21:00	03/04/25 12:37	1
Nickel	1.2		1.0	0.40	ug/L		03/03/25 21:00	03/04/25 12:37	1
Potassium	6900		200	65	ug/L		03/03/25 21:00	03/04/25 12:37	1
Selenium	<0.28		1.0	0.28	ug/L		03/03/25 21:00	03/04/25 12:37	1
Silver	<0.10		0.50	0.10	ug/L		03/03/25 21:00	03/04/25 12:37	1
Sodium	8300		200	90	ug/L		03/03/25 21:00	03/04/25 12:37	1
Thallium	<0.13		0.50	0.13	ug/L		03/03/25 21:00	03/04/25 12:37	1
Zinc	<4.0		10	4.0	ug/L		03/03/25 21:00	03/04/25 12:37	1
Vanadium	1.6 J		4.0	0.79	ug/L		03/03/25 21:00	03/04/25 12:37	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Date Collected: 02/27/25 10:15

Matrix: Water

Date Received: 02/27/25 16:55

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.079		0.20	0.079	ug/L		03/03/25 07:30	03/04/25 21:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.0	HF	0.01	0.01	S.U.			02/28/25 13:15	1
Temperature (SW846 9040C)	16.7	HF	0.01	0.01	Degrees C			02/28/25 13:15	1
Corrosivity (SW846 9040C)	no	HF	0.01	0.01	NONE			02/28/25 13:15	1
Cyanide, Free (OI CORP OIA-1677)	<0.0050		0.0060	0.0050	mg/L			02/28/25 12:22	1

Surrogate Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-209779-1	TB-20250227	101	95	103	97
410-209779-2	QM-A4712-20250227	106	93	108	97
410-209779-3	QM-A4719-20250227	100	92	107	97
LCS 410-612089/4	Lab Control Sample	99	101	103	101
MB 410-612089/6	Method Blank	104	95	106	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BAPd12 (10-136)	MNPd10 (20-144)	FLN10 (29-153)
410-209779-2	QM-A4712-20250227	77	94	92
410-209779-3	QM-A4719-20250227	71	83	86
LCS 410-611894/2-A	Lab Control Sample	102	76	102
LCSD 410-611894/3-A	Lab Control Sample Dup	98	67	97
MB 410-611894/1-A	Method Blank	94	78	97

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)

MNPd10 = 1-Methylnaphthalene-d10 (Surr)

FLN10 = Fluoranthene-d10 (Surr)

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		TFT-F1					
Lab Sample ID	Client Sample ID	(63-135)					
410-209779-1	TB-20250227	104					
410-209779-2	QM-A4712-20250227	105					
410-209779-3	QM-A4719-20250227	104					
LCS 410-611359/6	Lab Control Sample	96					
LCSD 410-611359/7	Lab Control Sample Dup	96					
MB 410-611359/5	Method Blank	105					

Surrogate Legend

TFT-F = a,a,a-Trifluorotoluene (fid)

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1122TCA1 (46-136)	1122TCA2 (46-136)
410-209779-1	TB-20250227	89	89

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1122TCA1	1122TCA2
		(46-136)	(46-136)
410-209779-2	QM-A4712-20250227	91	93
410-209779-3	QM-A4719-20250227	88	87
LCS 410-611817/2-A	Lab Control Sample	105	104
LCSD 410-611817/3-A	Lab Control Sample Dup	89	91
MB 410-611817/1-A	Method Blank	92	93
Surrogate Legend			
1122TCA = 1,1,2,2-Tetrachloroethane (Surr)			

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	OTP	
		(32-125)	
410-209779-2	QM-A4712-20250227	85	
410-209779-3	QM-A4719-20250227	85	
LCS 410-611785/2-A	Lab Control Sample	79	
LCSD 410-611785/3-A	Lab Control Sample Dup	65	
MB 410-611785/1-A	Method Blank	79	
Surrogate Legend			
OTP = o- terphenyl (Surr)			

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCB1	DCB2	TCX1	TCX2
		(46-161)	(46-161)	(41-146)	(41-146)
410-209779-2	QM-A4712-20250227	112	111	69	71
410-209779-3	QM-A4719-20250227	97	100	64	67
LCS 410-613684/2-A	Lab Control Sample	141	132	52	55
LCSD 410-613684/3-A	Lab Control Sample Dup	144	147	52	55
MB 410-613684/1-A	Method Blank	130	130	41	42
Surrogate Legend					
DCB = DCB Decachlorobiphenyl (Surr)					
TCX = Tetrachloro-m-xylene					

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

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

Lab Sample ID: MB 410-612089/6

Matrix: Water

Analysis Batch: 612089

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:07	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:07	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			03/03/25 14:07	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:07	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:07	1
2-Butanone	<1.0		5.0	1.0	ug/L			03/03/25 14:07	1
2-Hexanone	<2.0		5.0	2.0	ug/L			03/03/25 14:07	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			03/03/25 14:07	1
Acetone	<1.5		5.0	1.5	ug/L			03/03/25 14:07	1
Benzene	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
Bromoform	<0.30		1.0	0.30	ug/L			03/03/25 14:07	1
Bromomethane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			03/03/25 14:07	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			03/03/25 14:07	1
Chloroethane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Chloroform	<0.090		0.50	0.090	ug/L			03/03/25 14:07	1
Chloromethane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Cyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
Methyl acetate	<0.20		1.0	0.20	ug/L			03/03/25 14:07	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			03/03/25 14:07	1
Styrene	<0.070		0.50	0.070	ug/L			03/03/25 14:07	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			03/03/25 14:07	1
Toluene	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
Trichloroethene	<0.080		0.50	0.080	ug/L			03/03/25 14:07	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			03/03/25 14:07	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			03/03/25 14:07	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

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

Lab Sample ID: MB 410-612089/6

Matrix: Water

Analysis Batch: 612089

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		03/03/25 14:07	1
4-Bromofluorobenzene (Surr)	95		80 - 120		03/03/25 14:07	1
Dibromofluoromethane (Surr)	106		80 - 120		03/03/25 14:07	1
Toluene-d8 (Surr)	98		80 - 120		03/03/25 14:07	1

Lab Sample ID: LCS 410-612089/4

Matrix: Water

Analysis Batch: 612089

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	5.00	5.15		ug/L		103	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.62		ug/L		92	75 - 123
1,1,2-Trichloroethane	5.00	4.91		ug/L		98	80 - 120
1,1-Dichloroethane	5.00	5.25		ug/L		105	74 - 120
1,1-Dichloroethene	5.00	5.45		ug/L		109	80 - 131
1,2,4-Trichlorobenzene	5.00	5.12		ug/L		102	68 - 122
1,2-Dibromo-3-Chloropropane	5.00	4.36		ug/L		87	75 - 124
1,2-Dibromoethane	5.00	4.94		ug/L		99	80 - 120
1,2-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 120
1,2-Dichloroethane	5.00	5.15		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	5.02		ug/L		100	80 - 120
1,3-Dichlorobenzene	5.00	4.80		ug/L		96	80 - 120
1,4-Dichlorobenzene	5.00	4.74		ug/L		95	80 - 120
2-Butanone	62.5	60.0		ug/L		96	59 - 141
2-Hexanone	62.5	56.4		ug/L		90	52 - 140
4-Methyl-2-pentanone	62.5	59.4		ug/L		95	55 - 140
Acetone	62.5	59.3		ug/L		95	60 - 146
Benzene	5.00	4.88		ug/L		98	80 - 120
Bromodichloromethane	5.00	4.97		ug/L		99	80 - 123
Bromoform	5.00	4.59		ug/L		92	75 - 126
Bromomethane	5.00	4.29		ug/L		86	63 - 120
Carbon disulfide	5.00	4.88		ug/L		98	67 - 130
Carbon tetrachloride	5.00	5.48		ug/L		110	64 - 141
Chlorobenzene	5.00	4.99		ug/L		100	80 - 120
Chloroethane	5.00	4.66		ug/L		93	63 - 120
Chloroform	5.00	5.15		ug/L		103	80 - 120
Chloromethane	5.00	3.73		ug/L		75	56 - 124
cis-1,2-Dichloroethene	5.00	4.99		ug/L		100	80 - 122
cis-1,3-Dichloropropene	5.00	4.44		ug/L		89	67 - 121
Cyclohexane	5.00	5.00		ug/L		100	69 - 120
Dibromochloromethane	5.00	4.96		ug/L		99	80 - 123
Dichlorodifluoromethane	5.00	4.20		ug/L		84	43 - 123
Ethylbenzene	5.00	4.94		ug/L		99	80 - 120
1,1,2-Trichlorotrifluoroethane	5.00	5.08		ug/L		102	67 - 124
Isopropylbenzene	5.00	5.78		ug/L		116	80 - 120
Methyl acetate	5.00	3.08		ug/L		62	59 - 143
Methyl tertiary butyl ether	5.00	4.60		ug/L		92	69 - 120
Methylcyclohexane	5.00	5.08		ug/L		102	80 - 120

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QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

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

Lab Sample ID: LCS 410-612089/4

Matrix: Water

Analysis Batch: 612089

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	5.00	5.13		ug/L		103	80 - 120
Styrene	5.00	5.26		ug/L		105	80 - 120
Tetrachloroethene	5.00	4.99		ug/L		100	80 - 120
Toluene	5.00	4.94		ug/L		99	80 - 120
trans-1,2-Dichloroethene	5.00	5.14		ug/L		103	80 - 122
trans-1,3-Dichloropropene	5.00	4.63		ug/L		93	61 - 129
Trichloroethene	5.00	4.99		ug/L		100	80 - 120
Trichlorofluoromethane	5.00	5.01		ug/L		100	53 - 136
Vinyl chloride	5.00	3.95		ug/L		79	60 - 125
Xylenes, Total	15.0	15.2		ug/L		102	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	101		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	101		80 - 120

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-611894/1-A

Matrix: Water

Analysis Batch: 612176

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 611894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Acenaphthylene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Anthracene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Benzo[a]anthracene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Benzo[a]pyrene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Benzo[b]fluoranthene	<0.047		0.050	0.047	ug/L		03/03/25 07:41	03/03/25 20:00	1
Benzo[g,h,i]perylene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Benzo[k]fluoranthene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Chrysene	<0.025		0.050	0.025	ug/L		03/03/25 07:41	03/03/25 20:00	1
Dibenz(a,h)anthracene	<0.020		0.050	0.020	ug/L		03/03/25 07:41	03/03/25 20:00	1
Fluoranthene	<0.023		0.050	0.023	ug/L		03/03/25 07:41	03/03/25 20:00	1
Fluorene	<0.010		0.050	0.010	ug/L		03/03/25 07:41	03/03/25 20:00	1
Indeno[1,2,3-cd]pyrene	<0.020		0.050	0.020	ug/L		03/03/25 07:41	03/03/25 20:00	1
Naphthalene	<0.068		0.070	0.068	ug/L		03/03/25 07:41	03/03/25 20:00	1
Phenanthrene	<0.030		0.070	0.030	ug/L		03/03/25 07:41	03/03/25 20:00	1
Pyrene	<0.021		0.050	0.021	ug/L		03/03/25 07:41	03/03/25 20:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	94		10 - 136	03/03/25 07:41	03/03/25 20:00	1
1-Methylnaphthalene-d10 (Surr)	78		20 - 144	03/03/25 07:41	03/03/25 20:00	1
Fluoranthene-d10 (Surr)	97		29 - 153	03/03/25 07:41	03/03/25 20:00	1

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCS 410-611894/2-A

Matrix: Water

Analysis Batch: 612176

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 611894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	1.00	0.898		ug/L		90	37 - 134
Acenaphthylene	1.00	0.980		ug/L		98	42 - 136
Anthracene	1.00	1.04		ug/L		104	49 - 137
Benzo[a]anthracene	1.00	0.994		ug/L		99	47 - 138
Benzo[a]pyrene	1.00	1.06		ug/L		106	51 - 147
Benzo[b]fluoranthene	1.00	1.04		ug/L		104	44 - 144
Benzo[g,h,i]perylene	1.00	1.12		ug/L		112	40 - 146
Benzo[k]fluoranthene	1.00	1.07		ug/L		107	46 - 158
Chrysene	1.00	0.879		ug/L		88	41 - 144
Dibenz(a,h)anthracene	1.00	1.08		ug/L		108	38 - 145
Fluoranthene	1.00	1.03		ug/L		103	44 - 141
Fluorene	1.00	0.940		ug/L		94	42 - 133
Indeno[1,2,3-cd]pyrene	1.00	1.12		ug/L		112	37 - 153
Naphthalene	1.00	0.935		ug/L		94	29 - 129
Phenanthrene	1.00	0.977		ug/L		98	44 - 136
Pyrene	1.00	0.930		ug/L		93	41 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	102		10 - 136
1-Methylnaphthalene-d10 (Surr)	76		20 - 144
Fluoranthene-d10 (Surr)	102		29 - 153

Lab Sample ID: LCSD 410-611894/3-A

Matrix: Water

Analysis Batch: 612176

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 611894

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Acenaphthene	1.00	0.833		ug/L		83	37 - 134	7	33
Acenaphthylene	1.00	0.911		ug/L		91	42 - 136	7	33
Anthracene	1.00	1.04		ug/L		104	49 - 137	0	30
Benzo[a]anthracene	1.00	0.990		ug/L		99	47 - 138	0	27
Benzo[a]pyrene	1.00	1.05		ug/L		105	51 - 147	2	27
Benzo[b]fluoranthene	1.00	1.03		ug/L		103	44 - 144	1	30
Benzo[g,h,i]perylene	1.00	1.12		ug/L		112	40 - 146	0	28
Benzo[k]fluoranthene	1.00	1.07		ug/L		107	46 - 158	0	28
Chrysene	1.00	0.871		ug/L		87	41 - 144	1	27
Dibenz(a,h)anthracene	1.00	1.08		ug/L		108	38 - 145	0	29
Fluoranthene	1.00	1.01		ug/L		101	44 - 141	3	29
Fluorene	1.00	0.890		ug/L		89	42 - 133	5	30
Indeno[1,2,3-cd]pyrene	1.00	1.11		ug/L		111	37 - 153	1	28
Naphthalene	1.00	0.884		ug/L		88	29 - 129	6	36
Phenanthrene	1.00	0.957		ug/L		96	44 - 136	2	29
Pyrene	1.00	0.959		ug/L		96	41 - 134	3	28

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	98		10 - 136
1-Methylnaphthalene-d10 (Surr)	67		20 - 144
Fluoranthene-d10 (Surr)	97		29 - 153

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 410-611359/5

Matrix: Water

Analysis Batch: 611359

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L			02/28/25 11:36	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	105		63 - 135					02/28/25 11:36	1

Lab Sample ID: LCS 410-611359/6

Matrix: Water

Analysis Batch: 611359

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline (Unleaded) (1C)	1100	1010		ug/L		92	66 - 128	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
a,a,a-Trifluorotoluene (fid) (1C)	96		63 - 135					

Lab Sample ID: LCSD 410-611359/7

Matrix: Water

Analysis Batch: 611359

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
Gasoline (Unleaded) (1C)	1100	1050		ug/L		96	66 - 128	4	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	96		63 - 135						

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-611817/1-A

Matrix: Water

Analysis Batch: 611954

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 611817

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.010		0.030	0.010	ug/L		03/03/25 00:12	03/04/25 02:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	92		46 - 136				03/03/25 00:12	03/04/25 02:08	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	93		46 - 136				03/03/25 00:12	03/04/25 02:08	1

Lab Sample ID: LCS 410-611817/2-A

Matrix: Water

Analysis Batch: 611954

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 611817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Ethylene Dibromide (1C)	0.129	0.146		ug/L		113	60 - 140	

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCS 410-611817/2-A

Matrix: Water

Analysis Batch: 611954

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 611817

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane (Surr) (1C)	105		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	104		46 - 136

Lab Sample ID: LCSD 410-611817/3-A

Matrix: Water

Analysis Batch: 611954

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 611817

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylene Dibromide (1C)		0.129	0.127		ug/L		98	60 - 140	14	20
Surrogate	LCSD	LCSD								
	%Recovery	Qualifier	Limits							
1,1,2,2-Tetrachloroethane (Surr) (1C)	89		46 - 136							
1,1,2,2-Tetrachloroethane (Surr) (2C)	91		46 - 136							

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 410-611785/1-A

Matrix: Water

Analysis Batch: 612180

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 611785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	184		100	45	ug/L		03/02/25 16:03	03/03/25 18:27	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o- terphenyl (Surr)	79		32 - 125				03/02/25 16:03	03/03/25 18:27	1

Lab Sample ID: LCS 410-611785/2-A

Matrix: Water

Analysis Batch: 612180

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 611785

Analyte		Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
DRO (C10-C28)		601	455		ug/L		76	20 - 115		
Surrogate	LCS	LCS								
	%Recovery	Qualifier	Limits							
o- terphenyl (Surr)	79		32 - 125							

Lab Sample ID: LCSD 410-611785/3-A

Matrix: Water

Analysis Batch: 612180

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 611785

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
DRO (C10-C28)		601	312	*1	ug/L		52	20 - 115	37	20

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 8015D - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 410-611785/3-A
Matrix: Water
Analysis Batch: 612180

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 611785

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
<i>o</i> -terphenyl (Surr)	65		32 - 125

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 410-613684/1-A
Matrix: Water
Analysis Batch: 613952

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 613684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0080		0.010	0.0080	ug/L		03/06/25 10:11	03/06/25 19:08	1
PCB-1221 (1C)	<0.0080		0.010	0.0080	ug/L		03/06/25 10:11	03/06/25 19:08	1
PCB-1232 (1C)	<0.0080		0.010	0.0080	ug/L		03/06/25 10:11	03/06/25 19:08	1
PCB-1242 (1C)	<0.0080		0.010	0.0080	ug/L		03/06/25 10:11	03/06/25 19:08	1
PCB-1248 (1C)	<0.0080		0.010	0.0080	ug/L		03/06/25 10:11	03/06/25 19:08	1
PCB-1254 (1C)	<0.0050		0.010	0.0050	ug/L		03/06/25 10:11	03/06/25 19:08	1
PCB-1260 (1C)	<0.0050		0.010	0.0050	ug/L		03/06/25 10:11	03/06/25 19:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	130		46 - 161	03/06/25 10:11	03/06/25 19:08	1
DCB Decachlorobiphenyl (Surr) (2C)	130		46 - 161	03/06/25 10:11	03/06/25 19:08	1
Tetrachloro-m-xylene (1C)	41		41 - 146	03/06/25 10:11	03/06/25 19:08	1
Tetrachloro-m-xylene (2C)	42		41 - 146	03/06/25 10:11	03/06/25 19:08	1

Lab Sample ID: LCS 410-613684/2-A
Matrix: Water
Analysis Batch: 613952

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 613684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016 (2C)	0.500	0.426		ug/L		85	60 - 117
PCB-1260 (2C)	0.500	0.520		ug/L		104	81 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	141		46 - 161
DCB Decachlorobiphenyl (Surr) (2C)	132		46 - 161
Tetrachloro-m-xylene (1C)	52		41 - 146
Tetrachloro-m-xylene (2C)	55		41 - 146

Lab Sample ID: LCSD 410-613684/3-A
Matrix: Water
Analysis Batch: 613952

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 613684

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016 (2C)	0.500	0.433		ug/L		87	60 - 117	2	30
PCB-1260 (2C)	0.500	0.540		ug/L		108	81 - 130	4	30

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCSD 410-613684/3-A

Matrix: Water

Analysis Batch: 613952

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 613684

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	144		46 - 161
DCB Decachlorobiphenyl (Surr) (2C)	147		46 - 161
Tetrachloro-m-xylene (1C)	52		41 - 146
Tetrachloro-m-xylene (2C)	55		41 - 146

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-611656/41

Matrix: Water

Analysis Batch: 611656

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.090		0.20	0.090	mg/L			03/01/25 05:10	1

Lab Sample ID: LCS 410-611656/39

Matrix: Water

Analysis Batch: 611656

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.750	0.754		mg/L		101	90 - 110

Lab Sample ID: LCSD 410-611656/40

Matrix: Water

Analysis Batch: 611656

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
Fluoride	0.750	0.753		mg/L		100	90 - 110	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-612010/1-A

Matrix: Water

Analysis Batch: 612659

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 612010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<12		25	12	ug/L		03/03/25 21:00	03/04/25 12:05	1
Antimony	<0.20		1.0	0.20	ug/L		03/03/25 21:00	03/04/25 12:05	1
Arsenic	<0.68		2.0	0.68	ug/L		03/03/25 21:00	03/04/25 12:05	1
Barium	<0.75		2.0	0.75	ug/L		03/03/25 21:00	03/04/25 12:05	1
Beryllium	<0.12		0.50	0.12	ug/L		03/03/25 21:00	03/04/25 12:05	1
Cadmium	<0.15		0.50	0.15	ug/L		03/03/25 21:00	03/04/25 12:05	1
Calcium	<50		120	50	ug/L		03/03/25 21:00	03/04/25 12:05	1
Chromium	<0.55		2.0	0.55	ug/L		03/03/25 21:00	03/04/25 12:05	1
Cobalt	<0.16		0.50	0.16	ug/L		03/03/25 21:00	03/04/25 12:05	1
Copper	<0.36		1.0	0.36	ug/L		03/03/25 21:00	03/04/25 12:05	1
Iron	<20		50	20	ug/L		03/03/25 21:00	03/04/25 12:05	1
Lead	<0.12		0.50	0.12	ug/L		03/03/25 21:00	03/04/25 12:05	1
Magnesium	<16		50	16	ug/L		03/03/25 21:00	03/04/25 12:05	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-612010/1-A

Matrix: Water

Analysis Batch: 612659

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 612010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	<0.95		2.0	0.95	ug/L		03/03/25 21:00	03/04/25 12:05	1
Nickel	<0.40		1.0	0.40	ug/L		03/03/25 21:00	03/04/25 12:05	1
Potassium	<65		200	65	ug/L		03/03/25 21:00	03/04/25 12:05	1
Selenium	<0.28		1.0	0.28	ug/L		03/03/25 21:00	03/04/25 12:05	1
Silver	<0.10		0.50	0.10	ug/L		03/03/25 21:00	03/04/25 12:05	1
Sodium	<90		200	90	ug/L		03/03/25 21:00	03/04/25 12:05	1
Thallium	<0.13		0.50	0.13	ug/L		03/03/25 21:00	03/04/25 12:05	1
Zinc	<4.0		10	4.0	ug/L		03/03/25 21:00	03/04/25 12:05	1
Vanadium	<0.79		4.0	0.79	ug/L		03/03/25 21:00	03/04/25 12:05	1

Lab Sample ID: LCS 410-612010/2-A

Matrix: Water

Analysis Batch: 612659

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 612010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	4950		ug/L		99	90 - 110
Antimony	100	99.0		ug/L		99	90 - 115
Arsenic	500	502		ug/L		100	90 - 109
Barium	500	505		ug/L		101	90 - 113
Beryllium	50.0	51.2		ug/L		102	82 - 120
Cadmium	50.0	50.6		ug/L		101	90 - 112
Calcium	5000	4870		ug/L		97	90 - 112
Chromium	500	496		ug/L		99	90 - 110
Cobalt	500	497		ug/L		99	90 - 110
Copper	500	508		ug/L		102	90 - 110
Iron	5000	5010		ug/L		100	90 - 111
Lead	50.0	51.4		ug/L		103	90 - 110
Magnesium	5000	5010		ug/L		100	90 - 110
Manganese	500	492		ug/L		98	90 - 111
Nickel	500	496		ug/L		99	90 - 109
Potassium	5000	4960		ug/L		99	90 - 110
Selenium	100	101		ug/L		101	90 - 110
Silver	50.0	52.3		ug/L		105	90 - 112
Sodium	5000	5010		ug/L		100	89 - 114
Thallium	100	101		ug/L		101	90 - 110
Zinc	500	499		ug/L		100	90 - 112
Vanadium	500	498		ug/L		100	90 - 109

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-611741/1-A

Matrix: Water

Analysis Batch: 612911

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 611741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.079		0.20	0.079	ug/L		03/03/25 07:30	03/04/25 20:58	1

QC Sample Results

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 410-611741/2-A
Matrix: Water
Analysis Batch: 612911

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611741

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.01		ug/L		101	80 - 118

Method: 9040C - pH

Lab Sample ID: LCS 410-611501/1
Matrix: Water
Analysis Batch: 611501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		S.U.		102	95 - 105

Lab Sample ID: 410-209779-3 DU
Matrix: Water
Analysis Batch: 611501

Client Sample ID: QM-A4719-20250227
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.0	HF	7.1		S.U.		1	4
Temperature	16.7	HF	16.9		Degrees C		1	4

Method: OIA-1677 - Cyanide, Free (Flow Injection)

Lab Sample ID: MB 410-611491/17
Matrix: Water
Analysis Batch: 611491

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	<0.0050		0.0060	0.0050	mg/L			02/28/25 11:52	1

Lab Sample ID: LCS 410-611491/16
Matrix: Water
Analysis Batch: 611491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Free	0.0500	0.0509		mg/L		102	82 - 132

QC Association Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

GC/MS VOA

Analysis Batch: 612089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-1	TB-20250227	Total/NA	Water	8260D	
410-209779-2	QM-A4712-20250227	Total/NA	Water	8260D	
410-209779-3	QM-A4719-20250227	Total/NA	Water	8260D	
MB 410-612089/6	Method Blank	Total/NA	Water	8260D	
LCS 410-612089/4	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 611894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	3510C	
410-209779-3	QM-A4719-20250227	Total/NA	Water	3510C	
MB 410-611894/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-611894/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-611894/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 612170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	8270D SIM	611894
410-209779-3	QM-A4719-20250227	Total/NA	Water	8270D SIM	611894

Analysis Batch: 612176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-611894/1-A	Method Blank	Total/NA	Water	8270D SIM	611894
LCS 410-611894/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	611894
LCSD 410-611894/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	611894

GC VOA

Analysis Batch: 611359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-1	TB-20250227	Total/NA	Water	8015D	
410-209779-2	QM-A4712-20250227	Total/NA	Water	8015D	
410-209779-3	QM-A4719-20250227	Total/NA	Water	8015D	
MB 410-611359/5	Method Blank	Total/NA	Water	8015D	
LCS 410-611359/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 410-611359/7	Lab Control Sample Dup	Total/NA	Water	8015D	

GC Semi VOA

Prep Batch: 611785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	3510C	
410-209779-3	QM-A4719-20250227	Total/NA	Water	3510C	
MB 410-611785/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-611785/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-611785/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 611817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-1	TB-20250227	Total/NA	Water	8011	
410-209779-2	QM-A4712-20250227	Total/NA	Water	8011	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

GC Semi VOA (Continued)

Prep Batch: 611817 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-3	QM-A4719-20250227	Total/NA	Water	8011	
MB 410-611817/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-611817/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-611817/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 611954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-1	TB-20250227	Total/NA	Water	8011	611817
410-209779-2	QM-A4712-20250227	Total/NA	Water	8011	611817
410-209779-3	QM-A4719-20250227	Total/NA	Water	8011	611817
MB 410-611817/1-A	Method Blank	Total/NA	Water	8011	611817
LCS 410-611817/2-A	Lab Control Sample	Total/NA	Water	8011	611817
LCSD 410-611817/3-A	Lab Control Sample Dup	Total/NA	Water	8011	611817

Analysis Batch: 612180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	8015D	611785
410-209779-3	QM-A4719-20250227	Total/NA	Water	8015D	611785
MB 410-611785/1-A	Method Blank	Total/NA	Water	8015D	611785
LCS 410-611785/2-A	Lab Control Sample	Total/NA	Water	8015D	611785
LCSD 410-611785/3-A	Lab Control Sample Dup	Total/NA	Water	8015D	611785

Prep Batch: 613684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	3510C	
410-209779-3	QM-A4719-20250227	Total/NA	Water	3510C	
MB 410-613684/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-613684/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-613684/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 613952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	8082A	613684
410-209779-3	QM-A4719-20250227	Total/NA	Water	8082A	613684
MB 410-613684/1-A	Method Blank	Total/NA	Water	8082A	613684
LCS 410-613684/2-A	Lab Control Sample	Total/NA	Water	8082A	613684
LCSD 410-613684/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	613684

Analysis Batch: 615439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	PCB	
410-209779-3	QM-A4719-20250227	Total/NA	Water	PCB	

HPLC/IC

Analysis Batch: 611656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	EPA 300.0 R2.1	
410-209779-3	QM-A4719-20250227	Total/NA	Water	EPA 300.0 R2.1	
MB 410-611656/41	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-611656/39	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

HPLC/IC (Continued)

Analysis Batch: 611656 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 410-611656/40	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 611741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	7470A	
410-209779-3	QM-A4719-20250227	Total/NA	Water	7470A	
MB 410-611741/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-611741/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 612010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total Recoverable	Water	3005A	
410-209779-3	QM-A4719-20250227	Total Recoverable	Water	3005A	
MB 410-612010/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-612010/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 612659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total Recoverable	Water	6020B	612010
410-209779-3	QM-A4719-20250227	Total Recoverable	Water	6020B	612010
MB 410-612010/1-A	Method Blank	Total Recoverable	Water	6020B	612010
LCS 410-612010/2-A	Lab Control Sample	Total Recoverable	Water	6020B	612010

Analysis Batch: 612911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	7470A	611741
410-209779-3	QM-A4719-20250227	Total/NA	Water	7470A	611741
MB 410-611741/1-A	Method Blank	Total/NA	Water	7470A	611741
LCS 410-611741/2-A	Lab Control Sample	Total/NA	Water	7470A	611741

General Chemistry

Analysis Batch: 611491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	OIA-1677	
410-209779-3	QM-A4719-20250227	Total/NA	Water	OIA-1677	
MB 410-611491/17	Method Blank	Total/NA	Water	OIA-1677	
LCS 410-611491/16	Lab Control Sample	Total/NA	Water	OIA-1677	

Analysis Batch: 611501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-209779-2	QM-A4712-20250227	Total/NA	Water	9040C	
410-209779-3	QM-A4719-20250227	Total/NA	Water	9040C	
LCS 410-611501/1	Lab Control Sample	Total/NA	Water	9040C	
410-209779-3 DU	QM-A4719-20250227	Total/NA	Water	9040C	

Lab Chronicle

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: TB-20250227

Lab Sample ID: 410-209779-1

Date Collected: 02/27/25 07:00

Matrix: Water

Date Received: 02/27/25 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	612089	DVW2	ELLE	03/03/25 14:30
Total/NA	Analysis	8015D		1	611359	P5AM	ELLE	02/28/25 14:08
Total/NA	Prep	8011			611817	USL7	ELLE	03/03/25 00:12
Total/NA	Analysis	8011		1	611954	URS0	ELLE	03/04/25 08:18

Client Sample ID: QM-A4712-20250227

Lab Sample ID: 410-209779-2

Date Collected: 02/27/25 09:30

Matrix: Water

Date Received: 02/27/25 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	612089	DVW2	ELLE	03/03/25 15:14
Total/NA	Prep	3510C			611894	QKX3	ELLE	03/03/25 07:41
Total/NA	Analysis	8270D SIM		1	612170	UJM0	ELLE	03/03/25 22:40
Total/NA	Analysis	8015D		1	611359	P5AM	ELLE	02/28/25 20:05
Total/NA	Prep	8011			611817	USL7	ELLE	03/03/25 00:12
Total/NA	Analysis	8011		1	611954	URS0	ELLE	03/04/25 08:35
Total/NA	Prep	3510C			611785	T9CY	ELLE	03/02/25 16:03
Total/NA	Analysis	8015D		1	612180	KP5X	ELLE	03/03/25 20:21
Total/NA	Prep	3510C			613684	K2IL	ELLE	03/06/25 10:11
Total/NA	Analysis	8082A		1	613952	A2VL	ELLE	03/06/25 20:26
Total/NA	Analysis	PCB		1	615439	URS0	ELLE	03/06/25 20:26
Total/NA	Analysis	EPA 300.0 R2.1		1	611656	L4QM	ELLE	03/01/25 02:36
Total Recoverable	Prep	3005A			612010	UAMX	ELLE	03/03/25 21:00
Total Recoverable	Analysis	6020B		1	612659	SAM2	ELLE	03/04/25 12:39
Total/NA	Prep	7470A			611741	UJL8	ELLE	03/03/25 07:30
Total/NA	Analysis	7470A		1	612911	IJ3I	ELLE	03/04/25 21:28
Total/NA	Analysis	9040C		1	611501	M98K	ELLE	02/28/25 13:15
Total/NA	Analysis	OIA-1677		1	611491	Q3HN	ELLE	02/28/25 12:19

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Date Collected: 02/27/25 10:15

Matrix: Water

Date Received: 02/27/25 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	612089	DVW2	ELLE	03/03/25 15:36
Total/NA	Prep	3510C			611894	QKX3	ELLE	03/03/25 07:41
Total/NA	Analysis	8270D SIM		1	612170	UJM0	ELLE	03/03/25 23:04
Total/NA	Analysis	8015D		1	611359	P5AM	ELLE	02/28/25 20:30
Total/NA	Prep	8011			611817	USL7	ELLE	03/03/25 00:12
Total/NA	Analysis	8011		1	611954	URS0	ELLE	03/04/25 08:52
Total/NA	Prep	3510C			611785	T9CY	ELLE	03/02/25 16:03
Total/NA	Analysis	8015D		1	612180	KP5X	ELLE	03/03/25 20:44
Total/NA	Prep	3510C			613684	K2IL	ELLE	03/06/25 10:11
Total/NA	Analysis	8082A		1	613952	A2VL	ELLE	03/06/25 20:39

Eurofins Lancaster Laboratories Environment Testing, LLC

Lab Chronicle

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Client Sample ID: QM-A4719-20250227

Lab Sample ID: 410-209779-3

Date Collected: 02/27/25 10:15

Matrix: Water

Date Received: 02/27/25 16:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	PCB		1	615439	URS0	ELLE	03/06/25 20:39
Total/NA	Analysis	EPA 300.0 R2.1		1	611656	L4QM	ELLE	03/01/25 02:44
Total Recoverable	Prep	3005A			612010	UAMX	ELLE	03/03/25 21:00
Total Recoverable	Analysis	6020B		1	612659	SAM2	ELLE	03/04/25 12:37
Total/NA	Prep	7470A			611741	UJL8	ELLE	03/03/25 07:30
Total/NA	Analysis	7470A		1	612911	IJ3I	ELLE	03/04/25 21:26
Total/NA	Analysis	9040C		1	611501	M98K	ELLE	02/28/25 13:15
Total/NA	Analysis	OIA-1677		1	611491	Q3HN	ELLE	02/28/25 12:22

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-25
Arizona	State	AZ0780	03-11-25
Arkansas DEQ	State	88-00660	08-09-25
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-25
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-25
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-25
Oregon	NELAP	PA200001	09-11-25
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-25 *
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-25
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-25
West Virginia (DW)	State	9906 C	01-31-26
West Virginia DEP	State	055	07-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Lancaster Laboratories Environment Testing, LLC

Accreditation/Certification Summary

Client: Tetra Tech Inc

Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Method Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
8015D	Gasoline Range Organics (GRO) (GC)	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
8015D	Diesel Range Organics (DRO) (GC)	SW846	ELLE
8082A	Polychlorinated Biphenyls (PCBs) (GC)	SW846	ELLE
PCB	Total PCB Calculation	TAL SOP	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
9040C	pH	SW846	ELLE
OIA-1677	Cyanide, Free (Flow Injection)	OI CORP	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

OI CORP = OI Corporation Instrument Manual.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech Inc
Project/Site: Soil and Water Analysis - QL Frederick

Job ID: 410-209779-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-209779-1	TB-20250227	Water	02/27/25 07:00	02/27/25 16:55
410-209779-2	QM-A4712-20250227	Water	02/27/25 09:30	02/27/25 16:55
410-209779-3	QM-A4719-20250227	Water	02/27/25 10:15	02/27/25 16:55

Login Sample Receipt Checklist

Client: Tetra Tech Inc

Job Number: 410-209779-1

Login Number: 209779

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Reynolds, Benjamin

Question	Answer	Comment
The cooler's custody seal is 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 acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	False	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	False	Headspace greater than 6mm in diameter in some but not all containers



ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Mullis
Tetra Tech Inc
20251 Century Blvd
Suite 200
Germantown, Maryland 20874

Generated 2/26/2025 12:19:15 PM

JOB DESCRIPTION

QM Frederick - Frac Tank

JOB NUMBER

410-208327-1

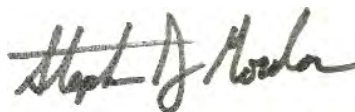
Eurofins Lancaster Laboratories Environment Testing, LLC

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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
Stephen Gordon, Senior Project Manager
Stephen.Gordon@et.eurofinsus.com
(412)525-0071

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

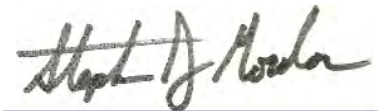


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Definitions/Glossary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

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/MS 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.

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.

Metals

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
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.

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

Case Narrative

Client: Tetra Tech Inc
Project: QM Frederick - Frac Tank

Job ID: 410-208327-1

Job ID: 410-208327-1

Eurofins Lancaster Laboratories Environment

Job Narrative 410-208327-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 2/18/2025 4:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.4°C and 4.2°C.

Receipt Exceptions

The container count for the following sample did not match what was listed on the Chain-of-Custody (COC): QL-TB-20250218 (410-208327-3).

The laboratory received 6 total containers, while the COC lists 9 total containers.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): QL-F05392-20250218 (410-208327-2). The container labels list QL-F05392-20250218, while the COC lists QL-F05382-20250218.

GC/MS VOA

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

GC/MS Semi VOA

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

Gasoline Range Organics

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

Diesel Range Organics

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

GC Semi VOA

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

PCBs

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.

Metals

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.

Detection Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-A3943-20250218

Lab Sample ID: 410-208327-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Ethylbenzene	0.084	J	0.50	0.080	ug/L	1			8260D	Total/NA
Toluene	0.13	J	0.50	0.080	ug/L	1			8260D	Total/NA
Xylenes, Total	0.35	J	1.0	0.070	ug/L	1			8260D	Total/NA
Benzo[a]anthracene	0.011	J	0.053	0.011	ug/L	1			8270D SIM	Total/NA
Fluoranthene	0.028	J	0.053	0.024	ug/L	1			8270D SIM	Total/NA
DRO (C10-C28)	60	J	110	48	ug/L	1			8015D	Total/NA
Fluoride	0.26		0.20	0.090	mg/L	1			EPA 300.0 R2.1	Total/NA
Aluminum	360		25	12	ug/L	1			6020B	Total
Barium	41		2.0	0.75	ug/L	1			6020B	Total
Calcium	82000		120	50	ug/L	1			6020B	Total
Chromium	0.90	J	2.0	0.55	ug/L	1			6020B	Total
Cobalt	0.33	J	0.50	0.16	ug/L	1			6020B	Total
Copper	1.1		1.0	0.36	ug/L	1			6020B	Total
Iron	410		50	20	ug/L	1			6020B	Total
Lead	0.28	J	0.50	0.12	ug/L	1			6020B	Total
Magnesium	9600		50	16	ug/L	1			6020B	Total
Manganese	26		2.0	0.95	ug/L	1			6020B	Total
Nickel	1.0		1.0	0.40	ug/L	1			6020B	Total
Potassium	3900		200	65	ug/L	1			6020B	Total
Sodium	8100		200	90	ug/L	1			6020B	Total
Zinc	6.5	J	10	4.0	ug/L	1			6020B	Total
Vanadium	1.5	J	4.0	0.79	ug/L	1			6020B	Total
pH	7.5	HF	0.01	0.01	S.U.	1			9040C	Total/NA
Temperature	22.5	HF	0.01	0.01	Degrees C	1			9040C	Total/NA
Corrosivity	NO	HF	0.01	0.01	NONE	1			9040C	Total/NA

Client Sample ID: QL-F05392-20250218

Lab Sample ID: 410-208327-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Fluoride	0.28		0.20	0.090	mg/L	1			EPA 300.0 R2.1	Total/NA
Aluminum	310		25	12	ug/L	1			6020B	Total
Barium	41		2.0	0.75	ug/L	1			6020B	Total
Calcium	77000		120	50	ug/L	1			6020B	Total
Chromium	0.57	J	2.0	0.55	ug/L	1			6020B	Total
Cobalt	0.35	J	0.50	0.16	ug/L	1			6020B	Total
Copper	1.1		1.0	0.36	ug/L	1			6020B	Total

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Detection Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-F05392-20250218 (Continued)

Lab Sample ID: 410-208327-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	370		50	20	ug/L	1		6020B	Total
									Recoverable
Lead	0.21	J	0.50	0.12	ug/L	1		6020B	Total
									Recoverable
Magnesium	9100		50	16	ug/L	1		6020B	Total
									Recoverable
Manganese	32		2.0	0.95	ug/L	1		6020B	Total
									Recoverable
Nickel	1.3		1.0	0.40	ug/L	1		6020B	Total
									Recoverable
Potassium	4200		200	65	ug/L	1		6020B	Total
									Recoverable
Sodium	8000		200	90	ug/L	1		6020B	Total
									Recoverable
Zinc	4.2	J	10	4.0	ug/L	1		6020B	Total
									Recoverable
Vanadium	1.4	J	4.0	0.79	ug/L	1		6020B	Total
									Recoverable
Mercury	1.0		0.20	0.079	ug/L	1		7470A	Total/NA
pH	7.6	HF	0.01	0.01	S.U.	1		9040C	Total/NA
Temperature	22.2	HF	0.01	0.01	Degrees C	1		9040C	Total/NA
Corrosivity	NO	HF	0.01	0.01	NONE	1		9040C	Total/NA

Client Sample ID: QL-TB-20250218

Lab Sample ID: 410-208327-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-A3943-20250218

Lab Sample ID: 410-208327-1

Date Collected: 02/18/25 10:15

Matrix: Water

Date Received: 02/18/25 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
1,1,1,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 19:49	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 19:49	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			02/23/25 19:49	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 19:49	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 19:49	1
2-Butanone	<1.0		5.0	1.0	ug/L			02/23/25 19:49	1
2-Hexanone	<2.0		5.0	2.0	ug/L			02/23/25 19:49	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			02/23/25 19:49	1
Acetone	<1.5		5.0	1.5	ug/L			02/23/25 19:49	1
Benzene	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
Bromoform	<0.30		1.0	0.30	ug/L			02/23/25 19:49	1
Bromomethane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			02/23/25 19:49	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 19:49	1
Chloroethane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Chloroform	<0.090		0.50	0.090	ug/L			02/23/25 19:49	1
Chloromethane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Cyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Ethylbenzene	0.084 J		0.50	0.080	ug/L			02/23/25 19:49	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
Methyl acetate	<0.20		1.0	0.20	ug/L			02/23/25 19:49	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			02/23/25 19:49	1
Styrene	<0.070		0.50	0.070	ug/L			02/23/25 19:49	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			02/23/25 19:49	1
Toluene	0.13 J		0.50	0.080	ug/L			02/23/25 19:49	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
Trichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 19:49	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			02/23/25 19:49	1
Xylenes, Total	0.35 J		1.0	0.070	ug/L			02/23/25 19:49	1

Eurolins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-A3943-20250218

Lab Sample ID: 410-208327-1

Date Collected: 02/18/25 10:15

Matrix: Water

Date Received: 02/18/25 16:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		02/23/25 19:49	1
4-Bromofluorobenzene (Surr)	93		80 - 120		02/23/25 19:49	1
Dibromofluoromethane (Surr)	108		80 - 120		02/23/25 19:49	1
Toluene-d8 (Surr)	100		80 - 120		02/23/25 19:49	1

Method: SW846 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.011		0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Acenaphthylene	<0.011		0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Anthracene	<0.011		0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Benzo[a]anthracene	0.011	J	0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Benzo[a]pyrene	<0.011		0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Benzo[b]fluoranthene	<0.050		0.053	0.050	ug/L		02/21/25 15:31	02/24/25 09:49	1
Benzo[g,h,i]perylene	<0.011		0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Benzo[k]fluoranthene	<0.011		0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Chrysene	<0.026		0.053	0.026	ug/L		02/21/25 15:31	02/24/25 09:49	1
Dibenz(a,h)anthracene	<0.021		0.053	0.021	ug/L		02/21/25 15:31	02/24/25 09:49	1
Fluoranthene	0.028	J	0.053	0.024	ug/L		02/21/25 15:31	02/24/25 09:49	1
Fluorene	<0.011		0.053	0.011	ug/L		02/21/25 15:31	02/24/25 09:49	1
Indeno[1,2,3-cd]pyrene	<0.021		0.053	0.021	ug/L		02/21/25 15:31	02/24/25 09:49	1
Naphthalene	<0.072		0.074	0.072	ug/L		02/21/25 15:31	02/24/25 09:49	1
Phenanthrene	<0.032		0.074	0.032	ug/L		02/21/25 15:31	02/24/25 09:49	1
Pyrene	<0.022		0.053	0.022	ug/L		02/21/25 15:31	02/24/25 09:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	62		10 - 136	02/21/25 15:31	02/24/25 09:49	1
1-Methylnaphthalene-d10 (Surr)	46		20 - 144	02/21/25 15:31	02/24/25 09:49	1
Fluoranthene-d10 (Surr)	71		29 - 153	02/21/25 15:31	02/24/25 09:49	1

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L			02/21/25 19:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	102		63 - 135		02/21/25 19:52	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.0094		0.028	0.0094	ug/L		02/19/25 23:30	02/20/25 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	92		46 - 136	02/19/25 23:30	02/20/25 21:50	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	91		46 - 136	02/19/25 23:30	02/20/25 21:50	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	60	J	110	48	ug/L		02/19/25 16:39	02/21/25 11:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	66		32 - 125	02/19/25 16:39	02/21/25 11:13	1

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-A3943-20250218

Lab Sample ID: 410-208327-1

Date Collected: 02/18/25 10:15

Matrix: Water

Date Received: 02/18/25 16:20

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0077		0.0096	0.0077	ug/L		02/24/25 10:00	02/24/25 22:19	1
PCB-1221 (1C)	<0.0077		0.0096	0.0077	ug/L		02/24/25 10:00	02/24/25 22:19	1
PCB-1232 (1C)	<0.0077		0.0096	0.0077	ug/L		02/24/25 10:00	02/24/25 22:19	1
PCB-1242 (1C)	<0.0077		0.0096	0.0077	ug/L		02/24/25 10:00	02/24/25 22:19	1
PCB-1248 (1C)	<0.0077		0.0096	0.0077	ug/L		02/24/25 10:00	02/24/25 22:19	1
PCB-1254 (1C)	<0.0048		0.0096	0.0048	ug/L		02/24/25 10:00	02/24/25 22:19	1
PCB-1260 (1C)	<0.0048		0.0096	0.0048	ug/L		02/24/25 10:00	02/24/25 22:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	114		46 - 161	02/24/25 10:00	02/24/25 22:19	1
DCB Decachlorobiphenyl (Surr) (2C)	107		46 - 161	02/24/25 10:00	02/24/25 22:19	1
Tetrachloro-m-xylene (1C)	75		41 - 146	02/24/25 10:00	02/24/25 22:19	1
Tetrachloro-m-xylene (2C)	77		41 - 146	02/24/25 10:00	02/24/25 22:19	1

Method: TAL SOP PCB - Total PCB Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0077		0.0096	0.0077	ug/L			02/24/25 22:19	1
PCB-1221	<0.0077		0.0096	0.0077	ug/L			02/24/25 22:19	1
PCB-1232	<0.0077		0.0096	0.0077	ug/L			02/24/25 22:19	1
PCB-1242	<0.0077		0.0096	0.0077	ug/L			02/24/25 22:19	1
PCB-1248	<0.0077		0.0096	0.0077	ug/L			02/24/25 22:19	1
PCB-1254	<0.0048		0.0096	0.0048	ug/L			02/24/25 22:19	1
PCB-1260	<0.0048		0.0096	0.0048	ug/L			02/24/25 22:19	1
Polychlorinated biphenyls, Total	<0.0077		0.0096	0.0077	ug/L			02/24/25 22:19	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.26		0.20	0.090	mg/L			02/21/25 12:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	360		25	12	ug/L		02/21/25 02:49	02/25/25 10:06	1
Antimony	<0.20		1.0	0.20	ug/L		02/21/25 02:49	02/25/25 10:06	1
Arsenic	<0.68		2.0	0.68	ug/L		02/21/25 02:49	02/25/25 10:06	1
Barium	41		2.0	0.75	ug/L		02/21/25 02:49	02/25/25 10:06	1
Beryllium	<0.12		0.50	0.12	ug/L		02/21/25 02:49	02/25/25 10:06	1
Cadmium	<0.15		0.50	0.15	ug/L		02/21/25 02:49	02/25/25 10:06	1
Calcium	82000		120	50	ug/L		02/21/25 02:49	02/25/25 10:06	1
Chromium	0.90 J		2.0	0.55	ug/L		02/21/25 02:49	02/25/25 10:06	1
Cobalt	0.33 J		0.50	0.16	ug/L		02/21/25 02:49	02/25/25 10:06	1
Copper	1.1		1.0	0.36	ug/L		02/21/25 02:49	02/25/25 10:06	1
Iron	410		50	20	ug/L		02/21/25 02:49	02/25/25 10:06	1
Lead	0.28 J		0.50	0.12	ug/L		02/21/25 02:49	02/25/25 10:06	1
Magnesium	9600		50	16	ug/L		02/21/25 02:49	02/25/25 10:06	1
Manganese	26		2.0	0.95	ug/L		02/21/25 02:49	02/25/25 10:06	1
Nickel	1.0		1.0	0.40	ug/L		02/21/25 02:49	02/25/25 10:06	1
Potassium	3900		200	65	ug/L		02/21/25 02:49	02/25/25 10:06	1
Selenium	<0.28		1.0	0.28	ug/L		02/21/25 02:49	02/25/25 10:06	1
Silver	<0.10		0.50	0.10	ug/L		02/21/25 02:49	02/25/25 10:06	1
Sodium	8100		200	90	ug/L		02/21/25 02:49	02/25/25 10:06	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-A3943-20250218

Lab Sample ID: 410-208327-1

Date Collected: 02/18/25 10:15

Matrix: Water

Date Received: 02/18/25 16:20

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.13		0.50	0.13	ug/L		02/21/25 02:49	02/25/25 10:06	1
Zinc	6.5	J	10	4.0	ug/L		02/21/25 02:49	02/25/25 10:06	1
Vanadium	1.5	J	4.0	0.79	ug/L		02/21/25 02:49	02/25/25 10:06	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.079		0.20	0.079	ug/L		02/25/25 07:59	02/25/25 17:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.5	HF	0.01	0.01	S.U.			02/20/25 14:39	1
Temperature (SW846 9040C)	22.5	HF	0.01	0.01	Degrees C			02/20/25 14:39	1
Corrosivity (SW846 9040C)	NO	HF	0.01	0.01	NONE			02/20/25 14:39	1
Cyanide, Free (OI CORP OIA-1677)	<0.0050		0.0060	0.0050	mg/L			02/21/25 13:50	1

Client Sample ID: QL-F05392-20250218

Lab Sample ID: 410-208327-2

Date Collected: 02/18/25 11:00

Matrix: Water

Date Received: 02/18/25 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 20:11	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 20:11	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			02/23/25 20:11	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 20:11	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 20:11	1
2-Butanone	<1.0		5.0	1.0	ug/L			02/23/25 20:11	1
2-Hexanone	<2.0		5.0	2.0	ug/L			02/23/25 20:11	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			02/23/25 20:11	1
Acetone	<1.5		5.0	1.5	ug/L			02/23/25 20:11	1
Benzene	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
Bromoform	<0.30		1.0	0.30	ug/L			02/23/25 20:11	1
Bromomethane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			02/23/25 20:11	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 20:11	1
Chloroethane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Chloroform	<0.090		0.50	0.090	ug/L			02/23/25 20:11	1
Chloromethane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-F05392-20250218

Lab Sample ID: 410-208327-2

Date Collected: 02/18/25 11:00

Matrix: Water

Date Received: 02/18/25 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
Methyl acetate	<0.20		1.0	0.20	ug/L			02/23/25 20:11	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			02/23/25 20:11	1
Styrene	<0.070		0.50	0.070	ug/L			02/23/25 20:11	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			02/23/25 20:11	1
Toluene	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
Trichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 20:11	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			02/23/25 20:11	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			02/23/25 20:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		02/23/25 20:11	1
4-Bromofluorobenzene (Surr)	92		80 - 120		02/23/25 20:11	1
Dibromofluoromethane (Surr)	108		80 - 120		02/23/25 20:11	1
Toluene-d8 (Surr)	99		80 - 120		02/23/25 20:11	1

Method: SW846 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Acenaphthylene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Anthracene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Benzo[a]anthracene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Benzo[a]pyrene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Benzo[b]fluoranthene	<0.051		0.055	0.051	ug/L		02/21/25 15:31	02/24/25 10:14	1
Benzo[g,h,i]perylene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Benzo[k]fluoranthene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Chrysene	<0.027		0.055	0.027	ug/L		02/21/25 15:31	02/24/25 10:14	1
Dibenz(a,h)anthracene	<0.022		0.055	0.022	ug/L		02/21/25 15:31	02/24/25 10:14	1
Fluoranthene	<0.025		0.055	0.025	ug/L		02/21/25 15:31	02/24/25 10:14	1
Fluorene	<0.011		0.055	0.011	ug/L		02/21/25 15:31	02/24/25 10:14	1
Indeno[1,2,3-cd]pyrene	<0.022		0.055	0.022	ug/L		02/21/25 15:31	02/24/25 10:14	1
Naphthalene	<0.074		0.076	0.074	ug/L		02/21/25 15:31	02/24/25 10:14	1
Phenanthrene	<0.033		0.076	0.033	ug/L		02/21/25 15:31	02/24/25 10:14	1
Pyrene	<0.023		0.055	0.023	ug/L		02/21/25 15:31	02/24/25 10:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	79		10 - 136	02/21/25 15:31	02/24/25 10:14	1
1-Methylnaphthalene-d10 (Surr)	100		20 - 144	02/21/25 15:31	02/24/25 10:14	1
Fluoranthene-d10 (Surr)	97		29 - 153	02/21/25 15:31	02/24/25 10:14	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-F05392-20250218

Lab Sample ID: 410-208327-2

Date Collected: 02/18/25 11:00

Matrix: Water

Date Received: 02/18/25 16:20

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L			02/21/25 20:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		63 - 135					02/21/25 20:17	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.0094		0.028	0.0094	ug/L		02/19/25 23:30	02/20/25 22:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	93		46 - 136				02/19/25 23:30	02/20/25 22:07	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	93		46 - 136				02/19/25 23:30	02/20/25 22:07	1

Method: SW846 8015D - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	<47		100	47	ug/L		02/19/25 16:39	02/21/25 11:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-terphenyl (Surr)	56		32 - 125				02/19/25 16:39	02/21/25 11:35	1

Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0083		0.010	0.0083	ug/L		02/24/25 10:00	02/24/25 22:31	1
PCB-1221 (1C)	<0.0083		0.010	0.0083	ug/L		02/24/25 10:00	02/24/25 22:31	1
PCB-1232 (1C)	<0.0083		0.010	0.0083	ug/L		02/24/25 10:00	02/24/25 22:31	1
PCB-1242 (1C)	<0.0083		0.010	0.0083	ug/L		02/24/25 10:00	02/24/25 22:31	1
PCB-1248 (1C)	<0.0083		0.010	0.0083	ug/L		02/24/25 10:00	02/24/25 22:31	1
PCB-1254 (1C)	<0.0052		0.010	0.0052	ug/L		02/24/25 10:00	02/24/25 22:31	1
PCB-1260 (1C)	<0.0052		0.010	0.0052	ug/L		02/24/25 10:00	02/24/25 22:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	116		46 - 161				02/24/25 10:00	02/24/25 22:31	1
DCB Decachlorobiphenyl (Surr) (2C)	126		46 - 161				02/24/25 10:00	02/24/25 22:31	1
Tetrachloro-m-xylene (1C)	75		41 - 146				02/24/25 10:00	02/24/25 22:31	1
Tetrachloro-m-xylene (2C)	79		41 - 146				02/24/25 10:00	02/24/25 22:31	1

Method: TAL SOP PCB - Total PCB Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0083		0.010	0.0083	ug/L			02/24/25 22:31	1
PCB-1221	<0.0083		0.010	0.0083	ug/L			02/24/25 22:31	1
PCB-1232	<0.0083		0.010	0.0083	ug/L			02/24/25 22:31	1
PCB-1242	<0.0083		0.010	0.0083	ug/L			02/24/25 22:31	1
PCB-1248	<0.0083		0.010	0.0083	ug/L			02/24/25 22:31	1
PCB-1254	<0.0052		0.010	0.0052	ug/L			02/24/25 22:31	1
PCB-1260	<0.0052		0.010	0.0052	ug/L			02/24/25 22:31	1
Polychlorinated biphenyls, Total	<0.0083		0.010	0.0083	ug/L			02/24/25 22:31	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.28		0.20	0.090	mg/L			02/21/25 13:03	1

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-F05392-20250218

Lab Sample ID: 410-208327-2

Date Collected: 02/18/25 11:00

Matrix: Water

Date Received: 02/18/25 16:20

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	310		25	12	ug/L		02/21/25 02:49	02/25/25 10:04	1
Antimony	<0.20		1.0	0.20	ug/L		02/21/25 02:49	02/25/25 10:04	1
Arsenic	<0.68		2.0	0.68	ug/L		02/21/25 02:49	02/25/25 10:04	1
Barium	41		2.0	0.75	ug/L		02/21/25 02:49	02/25/25 10:04	1
Beryllium	<0.12		0.50	0.12	ug/L		02/21/25 02:49	02/25/25 10:04	1
Cadmium	<0.15		0.50	0.15	ug/L		02/21/25 02:49	02/25/25 10:04	1
Calcium	77000		120	50	ug/L		02/21/25 02:49	02/25/25 10:04	1
Chromium	0.57	J	2.0	0.55	ug/L		02/21/25 02:49	02/25/25 10:04	1
Cobalt	0.35	J	0.50	0.16	ug/L		02/21/25 02:49	02/25/25 10:04	1
Copper	1.1		1.0	0.36	ug/L		02/21/25 02:49	02/25/25 10:04	1
Iron	370		50	20	ug/L		02/21/25 02:49	02/25/25 10:04	1
Lead	0.21	J	0.50	0.12	ug/L		02/21/25 02:49	02/25/25 10:04	1
Magnesium	9100		50	16	ug/L		02/21/25 02:49	02/25/25 10:04	1
Manganese	32		2.0	0.95	ug/L		02/21/25 02:49	02/25/25 10:04	1
Nickel	1.3		1.0	0.40	ug/L		02/21/25 02:49	02/25/25 10:04	1
Potassium	4200		200	65	ug/L		02/21/25 02:49	02/25/25 10:04	1
Selenium	<0.28		1.0	0.28	ug/L		02/21/25 02:49	02/25/25 10:04	1
Silver	<0.10		0.50	0.10	ug/L		02/21/25 02:49	02/25/25 10:04	1
Sodium	8000		200	90	ug/L		02/21/25 02:49	02/25/25 10:04	1
Thallium	<0.13		0.50	0.13	ug/L		02/21/25 02:49	02/25/25 10:04	1
Zinc	4.2	J	10	4.0	ug/L		02/21/25 02:49	02/25/25 10:04	1
Vanadium	1.4	J	4.0	0.79	ug/L		02/21/25 02:49	02/25/25 10:04	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.0		0.20	0.079	ug/L		02/25/25 07:59	02/25/25 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.6	HF	0.01	0.01	S.U.			02/20/25 14:39	1
Temperature (SW846 9040C)	22.2	HF	0.01	0.01	Degrees C			02/20/25 14:39	1
Corrosivity (SW846 9040C)	NO	HF	0.01	0.01	NONE			02/20/25 14:39	1
Cyanide, Free (OI CORP OIA-1677)	<0.0050		0.0060	0.0050	mg/L			02/21/25 13:53	1

Client Sample ID: QL-TB-20250218

Lab Sample ID: 410-208327-3

Date Collected: 02/18/25 07:00

Matrix: Water

Date Received: 02/18/25 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:30	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:30	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			02/23/25 13:30	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-TB-20250218

Lab Sample ID: 410-208327-3

Date Collected: 02/18/25 07:00

Matrix: Water

Date Received: 02/18/25 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:30	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:30	1
2-Butanone	<1.0		5.0	1.0	ug/L			02/23/25 13:30	1
2-Hexanone	<2.0		5.0	2.0	ug/L			02/23/25 13:30	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			02/23/25 13:30	1
Acetone	<1.5		5.0	1.5	ug/L			02/23/25 13:30	1
Benzene	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
Bromoform	<0.30		1.0	0.30	ug/L			02/23/25 13:30	1
Bromomethane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			02/23/25 13:30	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:30	1
Chloroethane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Chloroform	<0.090		0.50	0.090	ug/L			02/23/25 13:30	1
Chloromethane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Cyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
Methyl acetate	<0.20		1.0	0.20	ug/L			02/23/25 13:30	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			02/23/25 13:30	1
Styrene	<0.070		0.50	0.070	ug/L			02/23/25 13:30	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			02/23/25 13:30	1
Toluene	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
Trichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 13:30	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			02/23/25 13:30	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			02/23/25 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		02/23/25 13:30	1
4-Bromofluorobenzene (Surr)	91		80 - 120		02/23/25 13:30	1
Dibromofluoromethane (Surr)	107		80 - 120		02/23/25 13:30	1
Toluene-d8 (Surr)	99		80 - 120		02/23/25 13:30	1

Method: SW846 8015D - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L			02/21/25 13:29	1

Client Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-TB-20250218

Lab Sample ID: 410-208327-3

Date Collected: 02/18/25 07:00

Matrix: Water

Date Received: 02/18/25 16:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		63 - 135		02/21/25 13:29	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)						
Analyte	Result	Qualifier	RL	MDL	Unit	D
Ethylene Dibromide (1C)	<0.0094		0.028	0.0094	ug/L	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	95		46 - 136	02/19/25 23:30	02/20/25 22:24	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	99		46 - 136	02/19/25 23:30	02/20/25 22:24	1

Surrogate Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (80-120)	BFB (80-120)	DBFM (80-120)	TOL (80-120)
410-208327-1	QL-A3943-20250218	107	93	108	100
410-208327-2	QL-F05392-20250218	104	92	108	99
410-208327-3	QL-TB-20250218	105	91	107	99
LCS 410-609035/4	Lab Control Sample	102	98	104	103
LCSD 410-609035/5	Lab Control Sample Dup	103	98	104	103
MB 410-609035/7	Method Blank	106	92	107	99
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BAPd12 (10-136)	MNPd10 (20-144)	FLN10 (29-153)
410-208327-1	QL-A3943-20250218	62	46	71
410-208327-2	QL-F05392-20250218	79	100	97
LCS 410-608873/2-A	Lab Control Sample	99	77	104
MB 410-608873/1-A	Method Blank	61	58	68
Surrogate Legend				
BAPd12 = Benzo(a)pyrene-d12 (Surr)				
MNPd10 = 1-Methylnaphthalene-d10 (Surr)				
FLN10 = Fluoranthene-d10 (Surr)				

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	TFT-F1 (63-135)						
410-208327-1	QL-A3943-20250218	102						
410-208327-2	QL-F05392-20250218	101						
410-208327-3	QL-TB-20250218	101						
LCS 410-608679/6	Lab Control Sample	88						
LCSD 410-608679/7	Lab Control Sample Dup	89						
MB 410-608679/5	Method Blank	101						
Surrogate Legend								
TFT-F = a,a,a-Trifluorotoluene (fid)								

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1122TCA1 (46-136)	1122TCA2 (46-136)
410-208327-1	QL-A3943-20250218	92	91

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: Tetra Tech Inc

Job ID: 410-208327-1

Project/Site: QM Frederick - Frac Tank

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1122TCA1 (46-136)	1122TCA2 (46-136)
410-208327-2	QL-F05392-20250218	93	93
410-208327-3	QL-TB-20250218	95	99
LCS 410-608027/2-A	Lab Control Sample	90	89
LCSD 410-608027/3-A	Lab Control Sample Dup	92	95
MB 410-608027/1-A	Method Blank	89	89
Surrogate Legend			
1122TCA = 1,1,2,2-Tetrachloroethane (Surr)			

Method: 8015D - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	OTP (32-125)	
410-208327-1	QL-A3943-20250218	66	
410-208327-2	QL-F05392-20250218	56	
LCS 410-607911/2-A	Lab Control Sample	65	
MB 410-607911/1-A	Method Blank	76	
Surrogate Legend			
OTP = o- terphenyl (Surr)			

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCB1 (46-161)	DCB2 (46-161)	TCX1 (41-146)	TCX2 (41-146)
410-208327-1	QL-A3943-20250218	114	107	75	77
410-208327-2	QL-F05392-20250218	116	126	75	79
LCS 410-609279/2-A	Lab Control Sample	155	155	80	81
LCSD 410-609279/3-A	Lab Control Sample Dup	154	157	80	82
MB 410-609279/1-A	Method Blank	130	131	66	69
Surrogate Legend					
DCB = DCB Decachlorobiphenyl (Surr)					
TCX = Tetrachloro-m-xylene					

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

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

Lab Sample ID: MB 410-609035/7

Matrix: Water

Analysis Batch: 609035

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
1,1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:08	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:08	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			02/23/25 13:08	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:08	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:08	1
2-Butanone	<1.0		5.0	1.0	ug/L			02/23/25 13:08	1
2-Hexanone	<2.0		5.0	2.0	ug/L			02/23/25 13:08	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			02/23/25 13:08	1
Acetone	<1.5		5.0	1.5	ug/L			02/23/25 13:08	1
Benzene	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
Bromoform	<0.30		1.0	0.30	ug/L			02/23/25 13:08	1
Bromomethane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			02/23/25 13:08	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			02/23/25 13:08	1
Chloroethane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Chloroform	<0.090		0.50	0.090	ug/L			02/23/25 13:08	1
Chloromethane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Cyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
Methyl acetate	<0.20		1.0	0.20	ug/L			02/23/25 13:08	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			02/23/25 13:08	1
Styrene	<0.070		0.50	0.070	ug/L			02/23/25 13:08	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			02/23/25 13:08	1
Toluene	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
Trichloroethene	<0.080		0.50	0.080	ug/L			02/23/25 13:08	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			02/23/25 13:08	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			02/23/25 13:08	1

Eurolins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

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

Lab Sample ID: MB 410-609035/7

Matrix: Water

Analysis Batch: 609035

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		02/23/25 13:08	1
4-Bromofluorobenzene (Surr)	92		80 - 120		02/23/25 13:08	1
Dibromofluoromethane (Surr)	107		80 - 120		02/23/25 13:08	1
Toluene-d8 (Surr)	99		80 - 120		02/23/25 13:08	1

Lab Sample ID: LCS 410-609035/4

Matrix: Water

Analysis Batch: 609035

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	5.00	4.93		ug/L		99	78 - 126
1,1,1,2,2-Tetrachloroethane	5.00	5.11		ug/L		102	75 - 123
1,1,1,2-Trichloroethane	5.00	4.90		ug/L		98	80 - 120
1,1-Dichloroethane	5.00	4.87		ug/L		97	74 - 120
1,1-Dichloroethene	5.00	5.63		ug/L		113	80 - 131
1,2,4-Trichlorobenzene	5.00	4.74		ug/L		95	68 - 122
1,2-Dibromo-3-Chloropropane	5.00	4.68		ug/L		94	75 - 124
1,2-Dibromoethane	5.00	4.90		ug/L		98	80 - 120
1,2-Dichlorobenzene	5.00	4.93		ug/L		99	80 - 120
1,2-Dichloroethane	5.00	5.08		ug/L		102	69 - 122
1,2-Dichloropropane	5.00	4.86		ug/L		97	80 - 120
1,3-Dichlorobenzene	5.00	4.81		ug/L		96	80 - 120
1,4-Dichlorobenzene	5.00	4.84		ug/L		97	80 - 120
2-Butanone	62.5	67.5		ug/L		108	59 - 141
2-Hexanone	62.5	67.0		ug/L		107	52 - 140
4-Methyl-2-pentanone	62.5	65.9		ug/L		105	55 - 140
Acetone	62.5	75.0		ug/L		120	60 - 146
Benzene	5.00	4.76		ug/L		95	80 - 120
Bromodichloromethane	5.00	4.88		ug/L		98	80 - 123
Bromoform	5.00	4.54		ug/L		91	75 - 126
Bromomethane	5.00	5.52		ug/L		110	63 - 120
Carbon disulfide	5.00	4.55		ug/L		91	67 - 130
Carbon tetrachloride	5.00	5.08		ug/L		102	64 - 141
Chlorobenzene	5.00	4.98		ug/L		100	80 - 120
Chloroethane	5.00	5.68		ug/L		114	63 - 120
Chloroform	5.00	4.93		ug/L		99	80 - 120
Chloromethane	5.00	5.22		ug/L		104	56 - 124
cis-1,2-Dichloroethene	5.00	4.82		ug/L		96	80 - 122
cis-1,3-Dichloropropene	5.00	4.43		ug/L		89	67 - 121
Cyclohexane	5.00	4.53		ug/L		91	69 - 120
Dibromochloromethane	5.00	4.98		ug/L		100	80 - 123
Dichlorodifluoromethane	5.00	4.81		ug/L		96	43 - 123
Ethylbenzene	5.00	5.00		ug/L		100	80 - 120
1,1,2-Trichlorotrifluoroethane	5.00	5.33		ug/L		107	67 - 124
Isopropylbenzene	5.00	5.53		ug/L		111	80 - 120
Methyl acetate	5.00	5.08		ug/L		102	59 - 143
Methyl tertiary butyl ether	5.00	4.20		ug/L		84	69 - 120
Methylcyclohexane	5.00	4.73		ug/L		95	80 - 120

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

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

Lab Sample ID: LCS 410-609035/4

Matrix: Water

Analysis Batch: 609035

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylene Chloride	5.00	5.02		ug/L		100	80 - 120
Styrene	5.00	4.82		ug/L		96	80 - 120
Tetrachloroethene	5.00	4.74		ug/L		95	80 - 120
Toluene	5.00	4.85		ug/L		97	80 - 120
trans-1,2-Dichloroethene	5.00	4.92		ug/L		98	80 - 122
trans-1,3-Dichloropropene	5.00	4.60		ug/L		92	61 - 129
Trichloroethene	5.00	4.82		ug/L		96	80 - 120
Trichlorofluoromethane	5.00	5.36		ug/L		107	53 - 136
Vinyl chloride	5.00	5.32		ug/L		106	60 - 125
Xylenes, Total	15.0	14.6		ug/L		97	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: LCSD 410-609035/5

Matrix: Water

Analysis Batch: 609035

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
1,1,1-Trichloroethane	5.00	4.96		ug/L		99	78 - 126	1	30
1,1,2,2-Tetrachloroethane	5.00	5.23		ug/L		105	75 - 123	2	30
1,1,2-Trichloroethane	5.00	4.96		ug/L		99	80 - 120	1	30
1,1-Dichloroethane	5.00	5.03		ug/L		101	74 - 120	3	30
1,1-Dichloroethene	5.00	5.69		ug/L		114	80 - 131	1	30
1,2,4-Trichlorobenzene	5.00	4.58		ug/L		92	68 - 122	4	30
1,2-Dibromo-3-Chloropropane	5.00	4.69		ug/L		94	75 - 124	0	30
1,2-Dibromoethane	5.00	4.95		ug/L		99	80 - 120	1	30
1,2-Dichlorobenzene	5.00	4.92		ug/L		98	80 - 120	0	30
1,2-Dichloroethane	5.00	5.09		ug/L		102	69 - 122	0	30
1,2-Dichloropropane	5.00	4.85		ug/L		97	80 - 120	0	30
1,3-Dichlorobenzene	5.00	4.88		ug/L		98	80 - 120	1	30
1,4-Dichlorobenzene	5.00	4.88		ug/L		98	80 - 120	1	30
2-Butanone	62.5	67.2		ug/L		108	59 - 141	0	30
2-Hexanone	62.5	65.7		ug/L		105	52 - 140	2	30
4-Methyl-2-pentanone	62.5	64.0		ug/L		102	55 - 140	3	30
Acetone	62.5	77.3		ug/L		124	60 - 146	3	30
Benzene	5.00	4.76		ug/L		95	80 - 120	0	30
Bromodichloromethane	5.00	4.92		ug/L		98	80 - 123	1	30
Bromoform	5.00	4.68		ug/L		94	75 - 126	3	30
Bromomethane	5.00	5.47		ug/L		109	63 - 120	1	30
Carbon disulfide	5.00	4.55		ug/L		91	67 - 130	0	30
Carbon tetrachloride	5.00	5.10		ug/L		102	64 - 141	0	30
Chlorobenzene	5.00	5.01		ug/L		100	80 - 120	1	30
Chloroethane	5.00	5.60		ug/L		112	63 - 120	1	30
Chloroform	5.00	4.89		ug/L		98	80 - 120	1	30

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

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

Lab Sample ID: LCSD 410-609035/5

Matrix: Water

Analysis Batch: 609035

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
Chloromethane	5.00	5.23		ug/L		105	56 - 124	0	30
cis-1,2-Dichloroethene	5.00	4.71		ug/L		94	80 - 122	2	30
cis-1,3-Dichloropropene	5.00	4.47		ug/L		89	67 - 121	1	30
Cyclohexane	5.00	4.53		ug/L		91	69 - 120	0	30
Dibromochloromethane	5.00	4.97		ug/L		99	80 - 123	0	30
Dichlorodifluoromethane	5.00	4.74		ug/L		95	43 - 123	2	30
Ethylbenzene	5.00	5.00		ug/L		100	80 - 120	0	30
1,1,2-Trichlorotrifluoroethane	5.00	5.28		ug/L		106	67 - 124	1	30
Isopropylbenzene	5.00	5.55		ug/L		111	80 - 120	0	30
Methyl acetate	5.00	4.98		ug/L		100	59 - 143	2	30
Methyl tertiary butyl ether	5.00	4.24		ug/L		85	69 - 120	1	30
Methylcyclohexane	5.00	4.64		ug/L		93	80 - 120	2	30
Methylene Chloride	5.00	5.09		ug/L		102	80 - 120	1	30
Styrene	5.00	4.83		ug/L		97	80 - 120	0	30
Tetrachloroethene	5.00	4.70		ug/L		94	80 - 120	1	30
Toluene	5.00	4.88		ug/L		98	80 - 120	1	30
trans-1,2-Dichloroethene	5.00	4.88		ug/L		98	80 - 122	1	30
trans-1,3-Dichloropropene	5.00	4.79		ug/L		96	61 - 129	4	30
Trichloroethene	5.00	4.81		ug/L		96	80 - 120	0	30
Trichlorofluoromethane	5.00	5.27		ug/L		105	53 - 136	2	30
Vinyl chloride	5.00	5.16		ug/L		103	60 - 125	3	30
Xylenes, Total	15.0	14.7		ug/L		98	80 - 120	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	103		80 - 120

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-608873/1-A

Matrix: Water

Analysis Batch: 609094

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 608873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Acenaphthylene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Anthracene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Benzo[a]anthracene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Benzo[a]pyrene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Benzo[b]fluoranthene	<0.047		0.050	0.047	ug/L		02/21/25 15:31	02/24/25 04:36	1
Benzo[g,h,i]perylene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Benzo[k]fluoranthene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Chrysene	<0.025		0.050	0.025	ug/L		02/21/25 15:31	02/24/25 04:36	1
Dibenz(a,h)anthracene	<0.020		0.050	0.020	ug/L		02/21/25 15:31	02/24/25 04:36	1
Fluoranthene	<0.023		0.050	0.023	ug/L		02/21/25 15:31	02/24/25 04:36	1
Fluorene	<0.010		0.050	0.010	ug/L		02/21/25 15:31	02/24/25 04:36	1
Indeno[1,2,3-cd]pyrene	<0.020		0.050	0.020	ug/L		02/21/25 15:31	02/24/25 04:36	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Method: 8270D SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 410-608873/1-A

Matrix: Water

Analysis Batch: 609094

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 608873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.068		0.070	0.068	ug/L		02/21/25 15:31	02/24/25 04:36	1
Phenanthrene	<0.030		0.070	0.030	ug/L		02/21/25 15:31	02/24/25 04:36	1
Pyrene	<0.021		0.050	0.021	ug/L		02/21/25 15:31	02/24/25 04:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	61		10 - 136	02/21/25 15:31	02/24/25 04:36	1
1-Methylnaphthalene-d10 (Surr)	58		20 - 144	02/21/25 15:31	02/24/25 04:36	1
Fluoranthene-d10 (Surr)	68		29 - 153	02/21/25 15:31	02/24/25 04:36	1

Lab Sample ID: LCS 410-608873/2-A

Matrix: Water

Analysis Batch: 609094

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 608873

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1.00	0.996		ug/L		100	37 - 134
Acenaphthylene	1.00	1.11		ug/L		111	42 - 136
Anthracene	1.00	1.13		ug/L		113	49 - 137
Benzo[a]anthracene	1.00	0.970		ug/L		97	47 - 138
Benzo[a]pyrene	1.00	1.13		ug/L		113	51 - 147
Benzo[b]fluoranthene	1.00	0.954		ug/L		95	44 - 144
Benzo[g,h,i]perylene	1.00	1.15		ug/L		115	40 - 146
Benzo[k]fluoranthene	1.00	1.27		ug/L		127	46 - 158
Chrysene	1.00	0.993		ug/L		99	41 - 144
Dibenz(a,h)anthracene	1.00	1.12		ug/L		112	38 - 145
Fluoranthene	1.00	1.11		ug/L		111	44 - 141
Fluorene	1.00	1.03		ug/L		103	42 - 133
Indeno[1,2,3-cd]pyrene	1.00	1.07		ug/L		107	37 - 153
Naphthalene	1.00	0.922		ug/L		92	29 - 129
Phenanthrene	1.00	1.06		ug/L		106	44 - 136
Pyrene	1.00	1.04		ug/L		104	41 - 134

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	99		10 - 136
1-Methylnaphthalene-d10 (Surr)	77		20 - 144
Fluoranthene-d10 (Surr)	104		29 - 153

Method: 8015D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 410-608679/5

Matrix: Water

Analysis Batch: 608679

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
GRO (1C)	<23		50	23	ug/L			02/21/25 11:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	101		63 - 135		02/21/25 11:22	1

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Method: 8015D - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: LCS 410-608679/6

Matrix: Water

Analysis Batch: 608679

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline (Unleaded) (1C)			1100	1000		ug/L		91	66 - 128		
			LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)		88	63 - 135								

Lab Sample ID: LCSD 410-608679/7

Matrix: Water

Analysis Batch: 608679

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
Gasoline (Unleaded) (1C)			1100	991		ug/L		90	66 - 128	1	30
Surrogate	LCSD	LCSD									
	%Recovery	Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)	89		63 - 135								

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-608027/1-A

Matrix: Water

Analysis Batch: 608150

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 608027

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ethylene Dibromide (1C)	<0.010		0.030	0.010	ug/L		02/19/25 23:30	02/20/25 18:28	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
1,1,2,2-Tetrachloroethane (Surr) (1C)	89		46 - 136	02/19/25 23:30	02/20/25 18:28	1			
1,1,2,2-Tetrachloroethane (Surr) (2C)	89		46 - 136	02/19/25 23:30	02/20/25 18:28	1			

Lab Sample ID: LCS 410-608027/2-A

Matrix: Water

Analysis Batch: 608150

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 608027

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec	
			Added	Result	Qualifier			Limits		
Ethylene Dibromide (1C)			0.129	0.123		ug/L		95	60 - 140	
Surrogate	LCS	LCS								
	%Recovery	Qualifier	Limits							
1,1,2,2-Tetrachloroethane (Surr) (1C)	90		46 - 136							
1,1,2,2-Tetrachloroethane (Surr) (2C)	89		46 - 136							

Lab Sample ID: LCSD 410-608027/3-A

Matrix: Water

Analysis Batch: 608150

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 608027

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylene Dibromide (1C)	0.129	0.132		ug/L		102	60 - 140	7	20

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 410-608027/3-A

Matrix: Water

Analysis Batch: 608150

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 608027

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane (Surr) (1C)	92		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	95		46 - 136

Method: 8015D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 410-607911/1-A

Matrix: Water

Analysis Batch: 608554

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 607911

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	Result	Qualifier		45	ug/L		02/19/25 16:39	02/21/25 01:24	1
	<45		100						
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	%Recovery	Qualifier					02/19/25 16:39	02/21/25 01:24	1
	76		32 - 125						

Lab Sample ID: LCS 410-607911/2-A

Matrix: Water

Analysis Batch: 608554

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 607911

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
DRO (C10-C28)	Added	Result	Qualifier	ug/L		50	Limits
	601	298					20 - 115
Surrogate	LCS	LCS	Limits				
o- terphenyl (Surr)	%Recovery	Qualifier					
	65		32 - 125				

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC)

Lab Sample ID: MB 410-609279/1-A

Matrix: Water

Analysis Batch: 609536

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 609279

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	Result	Qualifier	0.010	0.0080	ug/L		02/24/25 10:00	02/24/25 21:40	1
PCB-1221 (1C)	<0.0080		0.010	0.0080	ug/L		02/24/25 10:00	02/24/25 21:40	1
PCB-1232 (1C)	<0.0080		0.010	0.0080	ug/L		02/24/25 10:00	02/24/25 21:40	1
PCB-1242 (1C)	<0.0080		0.010	0.0080	ug/L		02/24/25 10:00	02/24/25 21:40	1
PCB-1248 (1C)	<0.0080		0.010	0.0080	ug/L		02/24/25 10:00	02/24/25 21:40	1
PCB-1254 (1C)	<0.0050		0.010	0.0050	ug/L		02/24/25 10:00	02/24/25 21:40	1
PCB-1260 (1C)	<0.0050		0.010	0.0050	ug/L		02/24/25 10:00	02/24/25 21:40	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	%Recovery	Qualifier					02/24/25 10:00	02/24/25 21:40	1
DCB Decachlorobiphenyl (Surr) (2C)	130		46 - 161				02/24/25 10:00	02/24/25 21:40	1
Tetrachloro-m-xylene (1C)	131		46 - 161				02/24/25 10:00	02/24/25 21:40	1
Tetrachloro-m-xylene (2C)	66		41 - 146				02/24/25 10:00	02/24/25 21:40	1
	69		41 - 146				02/24/25 10:00	02/24/25 21:40	1

QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) (GC) (Continued)

Lab Sample ID: LCS 410-609279/2-A

Matrix: Water

Analysis Batch: 609536

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 609279

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016 (2C)	0.500	0.384		ug/L		77	60 - 117
PCB-1260 (2C)	0.500	0.468		ug/L		93	81 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	155		46 - 161
DCB Decachlorobiphenyl (Surr) (2C)	155		46 - 161
Tetrachloro-m-xylene (1C)	80		41 - 146
Tetrachloro-m-xylene (2C)	81		41 - 146

Lab Sample ID: LCSD 410-609279/3-A

Matrix: Water

Analysis Batch: 609536

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 609279

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
PCB-1016 (2C)	0.500	0.365		ug/L		73	60 - 117	5	30
PCB-1260 (2C)	0.500	0.443		ug/L		89	81 - 130	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	154		46 - 161
DCB Decachlorobiphenyl (Surr) (2C)	157		46 - 161
Tetrachloro-m-xylene (1C)	80		41 - 146
Tetrachloro-m-xylene (2C)	82		41 - 146

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 410-608483/52

Matrix: Water

Analysis Batch: 608483

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.090		0.20	0.090	mg/L			02/22/25 00:39	1

Lab Sample ID: LCS 410-608483/50

Matrix: Water

Analysis Batch: 608483

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	0.750	0.747		mg/L		100	90 - 110

Lab Sample ID: LCSD 410-608483/51

Matrix: Water

Analysis Batch: 608483

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
Fluoride	0.750	0.749		mg/L		100	90 - 110	0	20

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QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-608211/1-A
Matrix: Water
Analysis Batch: 609945

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 608211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<12		25	12	ug/L		02/21/25 02:49	02/25/25 09:08	1
Antimony	<0.20		1.0	0.20	ug/L		02/21/25 02:49	02/25/25 09:08	1
Arsenic	<0.68		2.0	0.68	ug/L		02/21/25 02:49	02/25/25 09:08	1
Barium	<0.75		2.0	0.75	ug/L		02/21/25 02:49	02/25/25 09:08	1
Beryllium	<0.12		0.50	0.12	ug/L		02/21/25 02:49	02/25/25 09:08	1
Cadmium	<0.15		0.50	0.15	ug/L		02/21/25 02:49	02/25/25 09:08	1
Calcium	<50		120	50	ug/L		02/21/25 02:49	02/25/25 09:08	1
Chromium	<0.55		2.0	0.55	ug/L		02/21/25 02:49	02/25/25 09:08	1
Cobalt	<0.16		0.50	0.16	ug/L		02/21/25 02:49	02/25/25 09:08	1
Copper	<0.36		1.0	0.36	ug/L		02/21/25 02:49	02/25/25 09:08	1
Iron	<20		50	20	ug/L		02/21/25 02:49	02/25/25 09:08	1
Lead	<0.12		0.50	0.12	ug/L		02/21/25 02:49	02/25/25 09:08	1
Magnesium	<16		50	16	ug/L		02/21/25 02:49	02/25/25 09:08	1
Manganese	<0.95		2.0	0.95	ug/L		02/21/25 02:49	02/25/25 09:08	1
Nickel	<0.40		1.0	0.40	ug/L		02/21/25 02:49	02/25/25 09:08	1
Potassium	<65		200	65	ug/L		02/21/25 02:49	02/25/25 09:08	1
Selenium	<0.28		1.0	0.28	ug/L		02/21/25 02:49	02/25/25 09:08	1
Silver	<0.10		0.50	0.10	ug/L		02/21/25 02:49	02/25/25 09:08	1
Sodium	<90		200	90	ug/L		02/21/25 02:49	02/25/25 09:08	1
Thallium	<0.13		0.50	0.13	ug/L		02/21/25 02:49	02/25/25 09:08	1
Zinc	<4.0		10	4.0	ug/L		02/21/25 02:49	02/25/25 09:08	1
Vanadium	<0.79		4.0	0.79	ug/L		02/21/25 02:49	02/25/25 09:08	1

Lab Sample ID: LCS 410-608211/2-A
Matrix: Water
Analysis Batch: 609945

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 608211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5110		ug/L		102	90 - 110
Antimony	100	97.4		ug/L		97	90 - 115
Arsenic	500	483		ug/L		97	90 - 109
Barium	500	494		ug/L		99	90 - 113
Beryllium	50.0	48.8		ug/L		98	82 - 120
Cadmium	50.0	50.1		ug/L		100	90 - 112
Calcium	5000	4980		ug/L		100	90 - 112
Chromium	500	507		ug/L		101	90 - 110
Cobalt	500	505		ug/L		101	90 - 110
Copper	500	483		ug/L		97	90 - 110
Iron	5000	4970		ug/L		99	90 - 111
Lead	50.0	49.4		ug/L		99	90 - 110
Magnesium	5000	5120		ug/L		102	90 - 110
Manganese	500	506		ug/L		101	90 - 111
Nickel	500	508		ug/L		102	90 - 109
Potassium	5000	5090		ug/L		102	90 - 110
Selenium	100	96.6		ug/L		97	90 - 110
Silver	50.0	50.3		ug/L		101	90 - 112
Sodium	5000	4870		ug/L		97	89 - 114
Thallium	100	97.1		ug/L		97	90 - 110
Zinc	500	483		ug/L		97	90 - 112

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QC Sample Results

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-608211/2-A

Matrix: Water

Analysis Batch: 609945

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 608211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vanadium	500	508		ug/L		102	90 - 109

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-609736/1-A

Matrix: Water

Analysis Batch: 610060

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 609736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.079		0.20	0.079	ug/L		02/25/25 07:59	02/25/25 17:24	1

Lab Sample ID: LCS 410-609736/2-A

Matrix: Water

Analysis Batch: 610060

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 609736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.05		ug/L		105	80 - 118

Method: 9040C - pH

Lab Sample ID: LCS 410-608414/1

Matrix: Water

Analysis Batch: 608414

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
pH	7.00	7.1		S.U.		101	95 - 105

Method: OIA-1677 - Cyanide, Free (Flow Injection)

Lab Sample ID: MB 410-608818/17

Matrix: Water

Analysis Batch: 608818

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	<0.0050		0.0060	0.0050	mg/L			02/21/25 13:20	1

Lab Sample ID: LCS 410-608818/16

Matrix: Water

Analysis Batch: 608818

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Free	0.0500	0.0517		mg/L		103	82 - 132

QC Association Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

GC/MS VOA

Analysis Batch: 609035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	8260D	
410-208327-2	QL-F05392-20250218	Total/NA	Water	8260D	
410-208327-3	QL-TB-20250218	Total/NA	Water	8260D	
MB 410-609035/7	Method Blank	Total/NA	Water	8260D	
LCS 410-609035/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-609035/5	Lab Control Sample Dup	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 608873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	3510C	
410-208327-2	QL-F05392-20250218	Total/NA	Water	3510C	
MB 410-608873/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-608873/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 609094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-608873/1-A	Method Blank	Total/NA	Water	8270D SIM	608873
LCS 410-608873/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	608873

Analysis Batch: 609097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	8270D SIM	608873
410-208327-2	QL-F05392-20250218	Total/NA	Water	8270D SIM	608873

GC VOA

Analysis Batch: 608679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	8015D	
410-208327-2	QL-F05392-20250218	Total/NA	Water	8015D	
410-208327-3	QL-TB-20250218	Total/NA	Water	8015D	
MB 410-608679/5	Method Blank	Total/NA	Water	8015D	
LCS 410-608679/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 410-608679/7	Lab Control Sample Dup	Total/NA	Water	8015D	

GC Semi VOA

Prep Batch: 607911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	3510C	
410-208327-2	QL-F05392-20250218	Total/NA	Water	3510C	
MB 410-607911/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-607911/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 608027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	8011	
410-208327-2	QL-F05392-20250218	Total/NA	Water	8011	
410-208327-3	QL-TB-20250218	Total/NA	Water	8011	
MB 410-608027/1-A	Method Blank	Total/NA	Water	8011	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

GC Semi VOA (Continued)

Prep Batch: 608027 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-608027/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-608027/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 608150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	8011	608027
410-208327-2	QL-F05392-20250218	Total/NA	Water	8011	608027
410-208327-3	QL-TB-20250218	Total/NA	Water	8011	608027
MB 410-608027/1-A	Method Blank	Total/NA	Water	8011	608027
LCS 410-608027/2-A	Lab Control Sample	Total/NA	Water	8011	608027
LCSD 410-608027/3-A	Lab Control Sample Dup	Total/NA	Water	8011	608027

Analysis Batch: 608554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	8015D	607911
410-208327-2	QL-F05392-20250218	Total/NA	Water	8015D	607911
MB 410-607911/1-A	Method Blank	Total/NA	Water	8015D	607911
LCS 410-607911/2-A	Lab Control Sample	Total/NA	Water	8015D	607911

Prep Batch: 609279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	3510C	
410-208327-2	QL-F05392-20250218	Total/NA	Water	3510C	
MB 410-609279/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-609279/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-609279/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 609536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	8082A	609279
410-208327-2	QL-F05392-20250218	Total/NA	Water	8082A	609279
MB 410-609279/1-A	Method Blank	Total/NA	Water	8082A	609279
LCS 410-609279/2-A	Lab Control Sample	Total/NA	Water	8082A	609279
LCSD 410-609279/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	609279

Analysis Batch: 609765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	PCB	
410-208327-2	QL-F05392-20250218	Total/NA	Water	PCB	

HPLC/IC

Analysis Batch: 608483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	EPA 300.0 R2.1	
410-208327-2	QL-F05392-20250218	Total/NA	Water	EPA 300.0 R2.1	
MB 410-608483/52	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-608483/50	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCSD 410-608483/51	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	

QC Association Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Metals

Prep Batch: 608211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total Recoverable	Water	3005A	608211
410-208327-2	QL-F05392-20250218	Total Recoverable	Water	3005A	
MB 410-608211/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-608211/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 609736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	7470A	609736
410-208327-2	QL-F05392-20250218	Total/NA	Water	7470A	
MB 410-609736/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-609736/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 609945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total Recoverable	Water	6020B	608211
410-208327-2	QL-F05392-20250218	Total Recoverable	Water	6020B	608211
MB 410-608211/1-A	Method Blank	Total Recoverable	Water	6020B	608211
LCS 410-608211/2-A	Lab Control Sample	Total Recoverable	Water	6020B	608211

Analysis Batch: 610060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	7470A	609736
410-208327-2	QL-F05392-20250218	Total/NA	Water	7470A	609736
MB 410-609736/1-A	Method Blank	Total/NA	Water	7470A	609736
LCS 410-609736/2-A	Lab Control Sample	Total/NA	Water	7470A	609736

General Chemistry

Analysis Batch: 608414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	9040C	608414
410-208327-2	QL-F05392-20250218	Total/NA	Water	9040C	
LCS 410-608414/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 608818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-208327-1	QL-A3943-20250218	Total/NA	Water	OIA-1677	608818
410-208327-2	QL-F05392-20250218	Total/NA	Water	OIA-1677	
MB 410-608818/17	Method Blank	Total/NA	Water	OIA-1677	
LCS 410-608818/16	Lab Control Sample	Total/NA	Water	OIA-1677	

Lab Chronicle

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-A3943-20250218

Lab Sample ID: 410-208327-1

Date Collected: 02/18/25 10:15

Matrix: Water

Date Received: 02/18/25 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	609035	DVW2	ELLE	02/23/25 19:49
Total/NA	Prep	3510C			608873	QJZ6	ELLE	02/21/25 15:31
Total/NA	Analysis	8270D SIM		1	609097	UJM0	ELLE	02/24/25 09:49
Total/NA	Analysis	8015D		1	608679	P5AM	ELLE	02/21/25 19:52
Total/NA	Prep	8011			608027	USL7	ELLE	02/19/25 23:30
Total/NA	Analysis	8011		1	608150	M6UH	ELLE	02/20/25 21:50
Total/NA	Prep	3510C			607911	QJZ6	ELLE	02/19/25 16:39
Total/NA	Analysis	8015D		1	608554	KP5X	ELLE	02/21/25 11:13
Total/NA	Prep	3510C			609279	K2IL	ELLE	02/24/25 10:00
Total/NA	Analysis	8082A		1	609536	URS0	ELLE	02/24/25 22:19
Total/NA	Analysis	PCB		1	609765	URS0	ELLE	02/24/25 22:19
Total/NA	Analysis	EPA 300.0 R2.1		1	608483	UJE2	ELLE	02/21/25 12:52
Total Recoverable	Prep	3005A			608211	UJL8	ELLE	02/21/25 02:49
Total Recoverable	Analysis	6020B		1	609945	SAM2	ELLE	02/25/25 10:06
Total/NA	Prep	7470A			609736	UJL8	ELLE	02/25/25 07:59
Total/NA	Analysis	7470A		1	610060	HNC4	ELLE	02/25/25 17:36
Total/NA	Analysis	9040C		1	608414	DI9Q	ELLE	02/20/25 14:39
Total/NA	Analysis	OIA-1677		1	608818	Q3HN	ELLE	02/21/25 13:50

Client Sample ID: QL-F05392-20250218

Lab Sample ID: 410-208327-2

Date Collected: 02/18/25 11:00

Matrix: Water

Date Received: 02/18/25 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	609035	DVW2	ELLE	02/23/25 20:11
Total/NA	Prep	3510C			608873	QJZ6	ELLE	02/21/25 15:31
Total/NA	Analysis	8270D SIM		1	609097	UJM0	ELLE	02/24/25 10:14
Total/NA	Analysis	8015D		1	608679	P5AM	ELLE	02/21/25 20:17
Total/NA	Prep	8011			608027	USL7	ELLE	02/19/25 23:30
Total/NA	Analysis	8011		1	608150	M6UH	ELLE	02/20/25 22:07
Total/NA	Prep	3510C			607911	QJZ6	ELLE	02/19/25 16:39
Total/NA	Analysis	8015D		1	608554	KP5X	ELLE	02/21/25 11:35
Total/NA	Prep	3510C			609279	K2IL	ELLE	02/24/25 10:00
Total/NA	Analysis	8082A		1	609536	URS0	ELLE	02/24/25 22:31
Total/NA	Analysis	PCB		1	609765	URS0	ELLE	02/24/25 22:31
Total/NA	Analysis	EPA 300.0 R2.1		1	608483	UJE2	ELLE	02/21/25 13:03
Total Recoverable	Prep	3005A			608211	UJL8	ELLE	02/21/25 02:49
Total Recoverable	Analysis	6020B		1	609945	SAM2	ELLE	02/25/25 10:04
Total/NA	Prep	7470A			609736	UJL8	ELLE	02/25/25 07:59
Total/NA	Analysis	7470A		1	610060	HNC4	ELLE	02/25/25 17:28
Total/NA	Analysis	9040C		1	608414	DI9Q	ELLE	02/20/25 14:39
Total/NA	Analysis	OIA-1677		1	608818	Q3HN	ELLE	02/21/25 13:53

Lab Chronicle

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Client Sample ID: QL-TB-20250218

Lab Sample ID: 410-208327-3

Date Collected: 02/18/25 07:00

Matrix: Water

Date Received: 02/18/25 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	609035	DVW2	ELLE	02/23/25 13:30
Total/NA	Analysis	8015D		1	608679	P5AM	ELLE	02/21/25 13:29
Total/NA	Prep	8011			608027	USL7	ELLE	02/19/25 23:30
Total/NA	Analysis	8011		1	608150	M6UH	ELLE	02/20/25 22:24

Laboratory References:
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-25
Alaska (UST)	State	17-027	02-28-25
Arizona	State	AZ0780	03-12-25
Arkansas DEQ	State	88-00660	08-09-25
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-25
Maine	State	2019012	03-12-25
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-25
Michigan	State	9930	01-31-25 *
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-25
New York	NELAP	10670	04-01-25
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-25
Oregon	NELAP	PA200001	09-11-25
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-25 *
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-25
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-25
Washington	State	C457	04-11-25
West Virginia (DW)	State	9906 C	01-31-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Lancaster Laboratories Environment Testing, LLC

Accreditation/Certification Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Method Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270D SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
8015D	Gasoline Range Organics (GRO) (GC)	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
8015D	Diesel Range Organics (DRO) (GC)	SW846	ELLE
8082A	Polychlorinated Biphenyls (PCBs) (GC)	SW846	ELLE
PCB	Total PCB Calculation	TAL SOP	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	ELLE
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
9040C	pH	SW846	ELLE
OIA-1677	Cyanide, Free (Flow Injection)	OI CORP	ELLE
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

OI CORP = OI Corporation Instrument Manual.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Tetra Tech Inc
Project/Site: QM Frederick - Frac Tank

Job ID: 410-208327-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-208327-1	QL-A3943-20250218	Water	02/18/25 10:15	02/18/25 16:20
410-208327-2	QL-F05392-20250218	Water	02/18/25 11:00	02/18/25 16:20
410-208327-3	QL-TB-20250218	Water	02/18/25 07:00	02/18/25 16:20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Login Sample Receipt Checklist

Client: Tetra Tech Inc

Job Number: 410-208327-1

Login Number: 208327

List Number: 1

Creator: Foreman, Kai

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature acceptable,where thermal pres is required(</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV:Container Temp acceptable,where thermal pres is required (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
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	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	