

Frac Tanks for Dust Control
N48962 and A4832
June 2025

Specific Method	CAS#	Matrix	Analyte	Results Basis	MD LRP Cleanup Stds_Tbl 1_GWs Aquifers_Oct2018	USEPA Aquatic_FreshWater_Acu te_2024	USEPA RSLs THQ 0.1_MCLs_Nov2024	410-224230-1 QM-N48962-251570-052725			410-224610-1 QM-A4832-265300-052925		
								Result	Units	Qualifier	Result	Units	Qualifier
8260D_LL	71-55-6	Water	1,1,1-Trichloroethane	Total	200		200	<0.080	ug/L		<0.080	ug/L	
8260D_LL	79-34-5	Water	1,1,2,2-Tetrachloroethane	Total	0.076			<0.10	ug/L		<0.10	ug/L	
8260D_LL	79-00-5	Water	1,1,2-Trichloroethane	Total	5		5	<0.080	ug/L		<0.080	ug/L	
8260D_LL	76-13-1	Water	1,1,2-Trichlorotrifluoroethane	Total				<0.080	ug/L		<0.080	ug/L	
8260D_LL	75-34-3	Water	1,1-Dichloroethane	Total	2.8			<0.10	ug/L		<0.10	ug/L	
8260D_LL	75-35-4	Water	1,1-Dichloroethene	Total	7		7	<0.10	ug/L		<0.10	ug/L	
8260D_LL	120-82-1	Water	1,2,4-Trichlorobenzene	Total	70		70	<0.070	ug/L		<0.070	ug/L	
8260D_LL	96-12-8	Water	1,2-Dibromo-3-Chloropropane	Total	0.2		0.2	<0.10	ug/L		<0.10	ug/L	
8260D_LL	95-50-1	Water	1,2-Dichlorobenzene	Total	600		600	<0.070	ug/L		<0.070	ug/L	
8260D_LL	107-06-2	Water	1,2-Dichloroethane	Total	5		5	<0.070	ug/L		<0.070	ug/L	
8260D_LL	78-87-5	Water	1,2-Dichloropropane	Total	5		5	<0.10	ug/L		<0.10	ug/L	
8260D_LL	541-73-1	Water	1,3-Dichlorobenzene	Total				<0.070	ug/L		<0.070	ug/L	
8260D_LL	106-46-7	Water	1,4-Dichlorobenzene	Total	75		75	<0.070	ug/L		<0.070	ug/L	
8260D_LL	78-93-3	Water	2-Butanone	Total	560			<1.0	ug/L		<1.0	ug/L	
8260D_LL	591-78-6	Water	2-Hexanone	Total				<2.0	ug/L		<2.0	ug/L	
8260D_LL	108-10-1	Water	4-Methyl-2-pentanone	Total	630			<1.0	ug/L		<1.0	ug/L	
8270D_SIM	83-32-9	Water	Acenaphthene	Total	53			<0.010	ug/L		<0.010	ug/L	
8270D_SIM	208-96-8	Water	Acenaphthylene	Total				<0.010	ug/L		<0.010	ug/L	
8260D_LL	67-64-1	Water	Acetone	Total	1400			<1.5	ug/L		<1.5	ug/L	
6020B	7429-90-5	Water	Aluminum	Total Recoverable	2000	1100		180	ug/L		2100	ug/L	
8270D_SIM	120-12-7	Water	Anthracene	Total	180			<0.010	ug/L		<0.010	ug/L	
6020B	7440-36-0	Water	Antimony	Total Recoverable	6		6	0.38	ug/L	J	0.43	ug/L	J
6020B	7440-38-2	Water	Arsenic	Total Recoverable	10	340	10	0.86	ug/L	J	1.3	ug/L	J
6020B	7440-39-3	Water	Barium	Total Recoverable	2000		2000	37	ug/L		44	ug/L	
8260D_LL	71-43-2	Water	Benzene	Total	5		5	<0.10	ug/L		<0.10	ug/L	
8270D_SIM	56-55-3	Water	Benzo[a]anthracene	Total	0.03			<0.010	ug/L		0.010	ug/L	J
8270D_SIM	50-32-8	Water	Benzo[a]pyrene	Total	0.2		0.2	<0.010	ug/L		0.013	ug/L	J
8270D_SIM	205-99-2	Water	Benzo[b]fluoranthene	Total	0.25			<0.049	ug/L		<0.048	ug/L	
8270D_SIM	191-24-2	Water	Benzo[g,h,i]perylene	Total				<0.010	ug/L	*1	<0.010	ug/L	*1
8270D_SIM	207-08-9	Water	Benzo[k]fluoranthene	Total	2.5			0.011	ug/L	J	0.010	ug/L	J
6020B	7440-41-7	Water	Beryllium	Total Recoverable	4		4	<0.12	ug/L		0.15	ug/L	J
8260D_LL	75-27-4	Water	Bromodichloromethane	Total	80		80	<0.080	ug/L		<0.080	ug/L	
8260D_LL	75-25-2	Water	Bromoform	Total	80		80	<0.30	ug/L		<0.30	ug/L	
8260D_LL	74-83-9	Water	Bromomethane	Total	0.75			<0.10	ug/L		<0.10	ug/L	
6020B	7440-43-9	Water	Cadmium	Total Recoverable	5	1.8	5	<0.15	ug/L		<0.15	ug/L	
6020B	7440-70-2	Water	Calcium	Total Recoverable				29000	ug/L		26000	ug/L	
8260D_LL	75-15-0	Water	Carbon disulfide	Total	81			<0.10	ug/L		<0.10	ug/L	
8260D_LL	56-23-5	Water	Carbon tetrachloride	Total	5		5	<0.10	ug/L		<0.10	ug/L	
8260D_LL	108-90-7	Water	Chlorobenzene	Total	100		100	<0.070	ug/L		<0.070	ug/L	
8260D_LL	75-00-3	Water	Chloroethane	Total	2100			<0.10	ug/L		<0.10	ug/L	
8260D_LL	67-66-3	Water	Chloroform	Total	80		80	<0.090	ug/L		<0.090	ug/L	
8260D_LL	74-87-3	Water	Chloromethane	Total	19			<0.10	ug/L		<0.10	ug/L	
6020B	7440-47-3	Water	Chromium	Total Recoverable	100		100	<0.55	ug/L		2.1	ug/L	
8270D_SIM	218-01-9	Water	Chrysene	Total	25			<0.026	ug/L		<0.026	ug/L	
8260D_LL	156-59-2	Water	cis-1,2-Dichloroethene	Total	70		70	<0.080	ug/L		<0.080	ug/L	
8260D_LL	10061-01-5	Water	cis-1,3-Dichloropropene	Total				<0.10	ug/L		<0.10	ug/L	
6020B	7440-48-4	Water	Cobalt	Total Recoverable				0.16	ug/L	J	1.1	ug/L	
6020B	7440-50-8	Water	Copper	Total Recoverable	1300		1300	2.6	ug/L		2.8	ug/L	
9040C	N/A	Water	Corrosivity	Total				No	NONE	HF	NO	NONE	HF
1677_Free	N/A	Water	Cyanide, Free	Total	0.2	0.022	0.2	<0.0050	mg/L		<0.0050	mg/L	
8260D_LL	110-82-7	Water	Cyclohexane	Total				<0.10	ug/L		<0.10	ug/L	
8270D_SIM	53-70-3	Water	Dibenz(a,h)anthracene	Total	0.025			<0.021	ug/L	*1	<0.020	ug/L	*1
8260D_LL	124-48-1	Water	Dibromochloromethane	Total	80		80	<0.080	ug/L		<0.080	ug/L	
8260D_LL	75-71-8	Water	Dichlorodifluoromethane	Total				<0.10	ug/L		<0.10	ug/L	
8015D_DRO	N/A	Water	DRO (C10-C28)	Total	47			<46	ug/L	*1	<45	ug/L	
8260D_LL	100-41-4	Water	Ethylbenzene	Total	700		700	<0.080	ug/L		<0.080	ug/L	
8011	106-93-4	Water	Ethylene Dibromide	Total	0.05		0.05	<0.0094	ug/L		<0.0094	ug/L	
8270D_SIM	206-44-0	Water	Fluoranthene	Total	80			<0.024	ug/L		<0.023	ug/L	
8270D_SIM	86-73-7	Water	Fluorene	Total	29			<0.010	ug/L		<0.010	ug/L	

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								Result	Units	Qualifier	Result	Units	Qualifier
300_ORGFM_28D	16984-48-8	Water	Fluoride	Total			4	1.6	mg/L	F1	1.6	mg/L	
8015D_GRO	N/A	Water	GRO	Total	47			<23	ug/L		<23	ug/L	
8270D_SIM	193-39-5	Water	Indeno[1,2,3-cd]pyrene	Total	0.25			<0.021	ug/L	*1	0.020	ug/L	J *1
6020B	7439-89-6	Water	Iron	Total Recoverable	1400	See Reg		130	ug/L		1700	ug/L	
8260D_LL	98-82-8	Water	Isopropylbenzene	Total	45			<0.080	ug/L		<0.080	ug/L	
6020B	7439-92-1	Water	Lead	Total Recoverable	15	65	10	0.26	ug/L	J	1.5	ug/L	
6020B	7439-95-4	Water	Magnesium	Total Recoverable				2300	ug/L		2500	ug/L	
6020B	7439-96-5	Water	Manganese	Total Recoverable	43			25	ug/L		32	ug/L	
7470A	7439-97-6	Water	Mercury	Total	2	1.4	2	<0.087	ug/L	*+	<0.087	ug/L	
8260D_LL	79-20-9	Water	Methyl acetate	Total				<0.20	ug/L		<0.20	ug/L	
8260D_LL	1634-04-4	Water	Methyl tertiary butyl ether	Total	20			<0.080	ug/L		<0.080	ug/L	
8260D_LL	108-87-2	Water	Methylcyclohexane	Total				<0.10	ug/L		<0.10	ug/L	
8260D_LL	75-09-2	Water	Methylene Chloride	Total	5		5	<0.20	ug/L		<0.20	ug/L	
8270D_SIM	91-20-3	Water	Naphthalene	Total	0.17			<0.071	ug/L		<0.069	ug/L	
6020B	7440-02-0	Water	Nickel	Total Recoverable	39	470		0.88	ug/L	J	2.2	ug/L	
8082A_LL	12674-11-2	Water	PCB-1016	Total	0.14	0.014*	0.5**	<0.0075	ug/L		<0.0076	ug/L	
8082A_LL	11104-28-2	Water	PCB-1221	Total	0.0047	0.014*	0.5**	<0.0075	ug/L		<0.0076	ug/L	
8082A_LL	11141-16-5	Water	PCB-1232	Total	0.0047	0.014*	0.5**	<0.0075	ug/L		<0.0076	ug/L	
8082A_LL	53469-21-9	Water	PCB-1242	Total	0.0078	0.014*	0.5**	<0.0075	ug/L		<0.0076	ug/L	
8082A_LL	12672-29-6	Water	PCB-1248	Total	0.0078	0.014*	0.5**	<0.0075	ug/L		0.018	ug/L	
8082A_LL	11097-69-1	Water	PCB-1254	Total	0.0078	0.014*	0.5**	<0.0047	ug/L		<0.0048	ug/L	
8082A_LL	11096-82-5	Water	PCB-1260	Total	0.0078	0.014*	0.5**	<0.0047	ug/L		<0.0048	ug/L	
9040C	N/A	Water	pH	Total		See Reg		7.8	S.U.	HF	7.9	S.U.	HF
8270D_SIM	85-01-8	Water	Phenanthrene	Total	12			<0.031	ug/L		<0.031	ug/L	
Total_PCB	1336-36-3	Water	Polychlorinated biphenyls, Total	Total	0.5		0.5	<0.0075	ug/L		0.018	ug/L	
6020B	7440-09-7	Water	Potassium	Total Recoverable				2700	ug/L		2900	ug/L	
8270D_SIM	129-00-0	Water	Pyrene	Total	12			<0.022	ug/L		<0.021	ug/L	
6020B	7782-49-2	Water	Selenium	Total Recoverable	50	See Reg	50	<0.28	ug/L		<0.28	ug/L	
6020B	7440-22-4	Water	Silver	Total Recoverable	9.4	3.2		<0.10	ug/L		<0.10	ug/L	
6020B	7440-23-5	Water	Sodium	Total Recoverable				3200	ug/L		3400	ug/L	
8260D_LL	100-42-5	Water	Styrene	Total	100		100	<0.070	ug/L		<0.070	ug/L	
9040C	N/A	Water	Temperature	Total				20.2	Degrees C	HF	20.8	Degrees C	HF
8260D_LL	127-18-4	Water	Tetrachloroethene	Total	5		5	<0.20	ug/L		<0.20	ug/L	
6020B	7440-28-0	Water	Thallium	Total Recoverable	2		2	<0.13	ug/L		0.13	ug/L	J
8260D_LL	108-88-3	Water	Toluene	Total	1000		1000	<0.080	ug/L		<0.080	ug/L	
8260D_LL	156-60-5	Water	trans-1,2-Dichloroethene	Total	100		100	<0.10	ug/L		<0.10	ug/L	
8260D_LL	10061-02-6	Water	trans-1,3-Dichloropropene	Total				<0.080	ug/L		<0.080	ug/L	
8260D_LL	79-01-6	Water	Trichloroethene	Total	5		5	<0.080	ug/L		<0.080	ug/L	
8260D_LL	75-69-4	Water	Trichlorofluoromethane	Total				<0.10	ug/L		<0.10	ug/L	
6020B	7440-62-2	Water	Vanadium	Total Recoverable	8.6			0.91	ug/L	J	4.0	ug/L	
8260D_LL	75-01-4	Water	Vinyl chloride	Total	2		2	<0.10	ug/L		<0.10	ug/L	
8260D_LL	1330-20-7	Water	Xylenes, Total	Total	10000		10000	<0.070	ug/L		<0.070	ug/L	
6020B	7440-66-6	Water	Zinc	Total Recoverable	600	120		8.0	ug/L	J	18	ug/L	

*0.014 ug/L is the aquatic life - chronic criteria for Total PCBs

**0.5 ug/L is the drinking water MCL for Total PCBs.

Results first compared to MCLs, then AWQCFA and MD LRP Cleanup Criteria if MCLs are not available.

Per the soil management plan, free cyanide would also be compared to the chronic AWQ criteria of 0.0052 ug/L, if discharging directly to surface water.

This table presents combined standards as specified by both MDE LMA and WSA. For LMA, results are compared to MCL and where there is no MCL to GWCS. For WSA, results are compared to lower of MCL and acute FW.

Gray shaded cells indicate non-detections where the laboratory reporting limit is greater than the MDGW standard where the MDGW standard is the only standard available.

MDGW - Maryland Groundwater Cleanup Standards

MCL - Maryland state (or federal) maximum contaminat level (MCL) for drinking water

NC- no criteria available for the given analyte.

U - not detected at a concentration above laboratory detection limits.

HF - sample was analyzed outside of holding time at contractor's request.

J - estimated concentration; concentration is greater than the MDL but less than the RL.

B - possible laboratory blank bias; analye found in the laboratory blank and in the sample.

for the noted analytes were recovered above the upper control limit. This affected the non-detect results.

*1 - LCS/LCSD exceeds allowable Relative percent difference

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
		QM-A4832	Ground surface in EC	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 QM-N48962			
		Operations Contributing to Flow			
		Operation	Average Flow		
		DA-11 Removal	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					

EPA Identification Number		NPDES Permit Number		Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026		
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.						
				Frequency		Flow Rate		Duration
	Outfall Number	Operation (list)	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.																						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th rowspan="2" style="width: 45%;">Brief Identification and Description of Project</th> <th rowspan="2" style="width: 15%;">Affected Outfalls (list outfall number)</th> <th rowspan="2" style="width: 20%;">Source(s) of Discharge</th> <th colspan="2" style="width: 20%;">Final Compliance Dates</th> </tr> <tr> <th style="width: 10%;">Required</th> <th style="width: 10%;">Projected</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>		Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates		Required	Projected															
	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							

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

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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
			6/9/2025

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
		Quantum Frederick	QM-A4832

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

TABLE 1. CONVENTIONAL POLLUTANT MONITORING REQUIREMENTS FOR CWA SECTION 301(b)(1)(A)(i)									
	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						
	Temperature (summer)	☒	°C	20.8					
8.	pH (minimum)	☒	Standard units	7.9					
	pH (maximum)	☒	Standard units	7.9					

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	0.43 J					
1.2 Arsenic, total (7440-38-2)	☐	☒	☐	Concentration Mass	ug/L	1.3					
1.3 Beryllium, total (7440-41-7)	☐	☒	☐	Concentration Mass	ug/L	0.15 J					
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	2.1					
1.6 Copper, total (7440-50-8)	☒	☒	☐	Concentration Mass	ug/L	2.8					
1.7 Lead, total (7439-92-1)	☒	☒	☐	Concentration Mass	ug/L	1.5					
1.8 Mercury, total (7439-97-6)	☐	☐	☒	Concentration Mass	ug/L	< 0.087 U					
1.9 Nickel, total (7440-02-0)	☒	☒	☐	Concentration Mass	ug/L	2.2					
1.10 Selenium, total (7782-49-2)	☐	☐	☒	Concentration Mass	ug/L	< 0.28 U					
1.11 Silver, total (7440-22-4)	☐	☐	☒	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
1.12 Thallium, total (7440-28-0)	☐	☒	☐	Concentration Mass	ug/L	0.13 J				
1.13 Zinc, total (7440-66-6)	☐	☒	☐	Concentration Mass	ug/L	18.0				
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						
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						
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	< 0.09 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	ug/L	< 0.1 U				
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	ug/L	< 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	ug/L	< 0.08 U				
2.26 1,1,2-trichloroethane (79-00-5)	☐	☐	☒	Concentration Mass	ug/L	< 0.08 U				
2.27 Trichloroethylene (79-01-6)	☐	☐	☒	Concentration Mass						
2.28 Vinyl chloride (75-01-4)	☐	☐	☒	Concentration Mass	ug/L	< 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	< 0.01 U				
4.2 Acenaphthylene (208-96-8)	☒	☐	☒	Concentration Mass	ug/L	< 0.01 U				
4.3 Anthracene (120-12-7)	☒	☐	☒	Concentration Mass	ug/L	< 0.01 U				
4.4 Benzidine (92-87-5)	☐	☐	☒	Concentration Mass						
4.5 Benzo (a) anthracene (56-55-3)	☒	☐	☒	Concentration Mass	ug/L	0.01 J				
4.6 Benzo (a) pyrene (50-32-8)	☒	☐	☒	Concentration Mass	ug/L	0.013 J				

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	ug/L	< 0.01 U				
4.9 Benzo (k) fluoranthene (207-08-9)	☐	☐	☒	Concentration Mass	ug/L	< 0.01 J				
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	< 0.026 U				
4.19 Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☒	Concentration Mass	ug/L	< 0.02 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							
4.20 1,2-dichlorobenzene (95-50-1)	☐	☐	☒	Concentration Mass	ug/L	< 0.07 U			Long-Term Average Value	Number of Analyses
4.21 1,3-dichlorobenzene (541-73-1)	☐	☐	☒	Concentration Mass	ug/L	< 0.07 U				
4.22 1,4-dichlorobenzene (106-46-7)	☐	☐	☒	Concentration Mass	ug/L	< 0.07 U				
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 Mass	ug/L	< 0.023 U				
4.32 Fluorene (86-73-7)	☐	☐	☒	Concentration Mass	ug/L	< 0.01 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	< 0.02 U				
4.38 Isophorone (78-59-1)	☐	☐	☒	Concentration Mass						
4.39 Naphthalene (91-20-3)	☒	☐	☒	Concentration Mass	ug/L	< 0.069 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	< 0.031 U				
4.45 Pyrene (129-00-0)	☐	☐	☒	Concentration Mass	ug/L	< 0.021 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
4.46 1,2,4-trichlorobenzene (120-82-1)	☐	☐	☒	Concentration Mass	ug/L	< 0.07 U				
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	ug/L	< 0.0076 U				
5.19 PCB-1254 (11097-69-1)	☒	☐	☒	Concentration Mass	ug/L	< 0.0048 U				
5.20 PCB-1221 (11104-28-2)	☒	☐	☒	Concentration Mass	ug/L	< 0.0076 U				
5.21 PCB-1232 (11141-16-5)	☒	☐	☒	Concentration Mass	ug/L	< 0.0076 U				
5.22 PCB-1248 (12672-29-6)	☒	☒	☐	Concentration Mass	ug/L	0.018				
5.23 PCB-1260 (11096-82-5)	☒	☐	☒	Concentration Mass	ug/L	< 0.0048 U				
5.24 PCB-1016 (12674-11-2)	☒	☐	☒	Concentration Mass	ug/L	< 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
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 <i>each</i> 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 <i>each</i> 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	1.6				
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	2100 ug/L					
15. Barium, total (7440-39-3)	☒	☐	Concentration Mass	44 ug/L					
16. Boron, total (7440-42-8)	☐	☒	Concentration Mass						
17. Cobalt, total (7440-48-4)	☒	☐	Concentration Mass	1.1 ug/L					
18. Iron, total (7439-89-6)	☒	☐	Concentration Mass	1700 ug/L					
19. Magnesium, total (7439-95-4)	☒	☐	Concentration Mass	2500 ug/L					
20. Molybdenum, total (7439-98-7)	☐	☒	Concentration Mass						
21. Manganese, total (7439-96-5)	☒	☐	Concentration Mass	32 ug/L					
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 QM-A4832	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	☐	☒		

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
		QM-N48962	Ground surface in EC	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 QM-N48962			
		Operations Contributing to Flow			
		Operation	Average Flow		
		DA-11 Removal	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					

EPA Identification Number		NPDES Permit Number		Facility Name Quantum Frederick		OMB No. 2040-0004 Expires 07/31/2026		
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.						
				Frequency		Flow Rate		
				Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	Duration
				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.																						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th rowspan="2" style="width: 40%;">Brief Identification and Description of Project</th> <th rowspan="2" style="width: 15%;">Affected Outfalls (list outfall number)</th> <th rowspan="2" style="width: 20%;">Source(s) of Discharge</th> <th colspan="2" style="width: 25%;">Final Compliance Dates</th> </tr> <tr> <th style="width: 10%;">Required</th> <th style="width: 15%;">Projected</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>		Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates		Required	Projected															
	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
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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

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
			6/9/2025

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number QM-N48962
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TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii))¹

TABLE 1. CONVENTIONAL POLLUTANTS FOR CONVENTIONAL TREATMENT PLANTS (10 CFS PER 100,000 GPD)									
	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	20.2					
8.	pH (minimum)	☒	Standard units	7.8					
	pH (maximum)	☒	Standard units	7.8					

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	0.38 J				
1.2 Arsenic, total (7440-38-2)	☐	☒	☐	Concentration Mass	ug/L	0.86 J				
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	< 0.55 U				
1.6 Copper, total (7440-50-8)	☒	☒	☐	Concentration Mass	ug/L	2.6				
1.7 Lead, total (7439-92-1)	☒	☒	☐	Concentration Mass	ug/L	0.26 J				
1.8 Mercury, total (7439-97-6)	☐	☐	☒	Concentration Mass	ug/L	< 0.087 U				
1.9 Nickel, total (7440-02-0)	☒	☒	☐	Concentration Mass	ug/L	0.88				
1.10 Selenium, total (7782-49-2)	☐	☐	☒	Concentration Mass	ug/L	< 0.28 U				
1.11 Silver, total (7440-22-4)	☐	☐	☒	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
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	8.0				
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						
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						
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	< 0.09 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	ug/L	< 0.1 U				
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	ug/L	< 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	ug/L	< 0.08 U				
2.26 1,1,2-trichloroethane (79-00-5)	☐	☐	☒	Concentration Mass	ug/L	< 0.08 U				
2.27 Trichloroethylene (79-01-6)	☐	☐	☒	Concentration Mass						
2.28 Vinyl chloride (75-01-4)	☐	☐	☒	Concentration Mass	ug/L	< 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	< 0.01 U				
4.2 Acenaphthylene (208-96-8)	☒	☐	☒	Concentration Mass	ug/L	< 0.01 U				
4.3 Anthracene (120-12-7)	☒	☐	☒	Concentration Mass	ug/L	< 0.01 U				
4.4 Benzidine (92-87-5)	☐	☐	☒	Concentration Mass						
4.5 Benzo (a) anthracene (56-55-3)	☒	☐	☒	Concentration Mass	ug/L	< 0.01 U				
4.6 Benzo (a) pyrene (50-32-8)	☒	☐	☒	Concentration Mass	ug/L	< 0.01 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	ug/L	< 0.01 U				
4.9 Benzo (k) fluoranthene (207-08-9)	☐	☒	☐	Concentration Mass	ug/L	0.011 J				
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	< 0.026 U				
4.19 Dibenzo (a,h) anthracene (53-70-3)	☐	☐	☒	Concentration Mass	ug/L	< 0.021 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							
4.20 1,2-dichlorobenzene (95-50-1)	☐	☐	☒	Concentration Mass	ug/L	< 0.07 U			Long-Term Average Value	Number of Analyses
4.21 1,3-dichlorobenzene (541-73-1)	☐	☐	☒	Concentration Mass	ug/L	< 0.07 U				
4.22 1,4-dichlorobenzene (106-46-7)	☐	☐	☒	Concentration Mass	ug/L	< 0.07 U				
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 Mass	ug/L	< 0.024 U				
4.32 Fluorene (86-73-7)	☐	☐	☒	Concentration Mass	ug/L	< 0.01 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	< 0.071 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	< 0.031 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		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 Mass	ug/L	< 0.07 U				
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	ug/L	< 0.0075 U				
5.19 PCB-1254 (11097-69-1)	☒	☐	☒	Concentration Mass	ug/L	< 0.0047 U				
5.20 PCB-1221 (11104-28-2)	☒	☐	☒	Concentration Mass	ug/L	< 0.0075 U				
5.21 PCB-1232 (11141-16-5)	☒	☐	☒	Concentration Mass	ug/L	< 0.0075 U				
5.22 PCB-1248 (12672-29-6)	☒	☐	☒	Concentration Mass	ug/L	< 0.0075 U				
5.23 PCB-1260 (11096-82-5)	☒	☐	☒	Concentration Mass	ug/L	< 0.0047 U				
5.24 PCB-1016 (12674-11-2)	☒	☐	☒	Concentration Mass	ug/L	< 0.0075 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 <i>each</i> 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 <i>each</i> 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	1.6				
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	180					
15. Barium, total (7440-39-3)	☒	☐	Concentration Mass	37					
16. Boron, total (7440-42-8)	☐	☒	Concentration Mass						
17. Cobalt, total (7440-48-4)	☒	☐	Concentration Mass	0.16 J					
18. Iron, total (7439-89-6)	☒	☐	Concentration Mass	130					
19. Magnesium, total (7439-95-4)	☒	☐	Concentration Mass	2300					
20. Molybdenum, total (7439-98-7)	☐	☒	Concentration Mass						
21. Manganese, total (7439-96-5)	☒	☐	Concentration Mass	25					
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 QM-N48962
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OMB No. 2040-0004
Expires 07/31/2026

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. Dintrobenzene	☐	☒		
30. Diquat	☐	☒		
31. Disulfoton	☐	☒		
32. Diuron	☐	☒		
33. Epichlorohydrin	☐	☒		
34. Ethion	☐	☒		
35. Ethylene diamine	☐	☒		
36. Ethylene dibromide	☐	☒		
37. Formaldehyde	☐	☒		
38. Furfural	☐	☒		

EPA Identification Number	NPDES Permit Number	Facility Name Quantum Frederick	Outfall Number QM-N48962	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		
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	☐	☒		

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 QM-N48962
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OMB No. 2040-0004
Expires 07/31/2026

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 6/6/2025 10:44:11 AM

JOB DESCRIPTION

Soil and Water Analysis - QL Frederick

JOB NUMBER

410-224230-1

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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6/6/2025 10:44:11 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: 410-224230-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Metals

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

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)

Eurofins Lancaster Laboratories Environment Testing, LLC

Definitions/Glossary

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

Job ID: 410-224230-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

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Case Narrative

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

Job ID: 410-224230-1

Job ID: 410-224230-1

Eurofins Lancaster Laboratories Environment

Job Narrative 410-224230-1

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 5/27/2025 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 3.2°C and 5.4°C.

GC/MS VOA

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-650097 recovered outside acceptance criteria, low biased, for 2-Hexanone. 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

Method 8270D_SIM: The continuing calibration verification (CCV) associated with batch 410-651365 recovered above the upper control limit for Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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: Soil and Water Analysis - QL Frederick

Job ID: 410-224230-1

Client Sample ID: QM-N48962-251570-052725

Lab Sample ID: 410-224230-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	0.011	J	0.052	0.010	ug/L	1		8270D SIM	Total/NA
Fluoride	1.6	F1	0.20	0.10	mg/L	1		EPA 300.0 R2.1	Total/NA
Aluminum	180		25	12	ug/L	1		6020B	Total Recoverable
Antimony	0.38	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Arsenic	0.86	J	2.0	0.68	ug/L	1		6020B	Total Recoverable
Barium	37		2.0	0.75	ug/L	1		6020B	Total Recoverable
Calcium	29000		120	50	ug/L	1		6020B	Total Recoverable
Cobalt	0.16	J	0.50	0.16	ug/L	1		6020B	Total Recoverable
Copper	2.6		1.0	0.85	ug/L	1		6020B	Total Recoverable
Iron	130		50	20	ug/L	1		6020B	Total Recoverable
Lead	0.26	J	0.50	0.12	ug/L	1		6020B	Total Recoverable
Magnesium	2300		50	16	ug/L	1		6020B	Total Recoverable
Manganese	25		2.0	0.95	ug/L	1		6020B	Total Recoverable
Nickel	0.88	J	1.0	0.40	ug/L	1		6020B	Total Recoverable
Potassium	2700		200	65	ug/L	1		6020B	Total Recoverable
Sodium	3200		200	90	ug/L	1		6020B	Total Recoverable
Zinc	8.0	J	10	4.0	ug/L	1		6020B	Total Recoverable
Vanadium	0.91	J	4.0	0.79	ug/L	1		6020B	Total Recoverable
pH	7.8	HF	0.01	0.01	S.U.	1		9040C	Total/NA
Temperature	20.2	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: TB-052725

Lab Sample ID: 410-224230-2

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: Soil and Water Analysis - QL Frederick

Job ID: 410-224230-1

Client Sample ID: QM-N48962-251570-052725

Lab Sample ID: 410-224230-1

Date Collected: 05/27/25 08:15

Matrix: Water

Date Received: 05/27/25 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			05/29/25 13:50	1
1,1,1,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 13:50	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 13:50	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			05/29/25 13:50	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 13:50	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 13:50	1
2-Butanone	<1.0		5.0	1.0	ug/L			05/29/25 13:50	1
2-Hexanone	<2.0	cn	5.0	2.0	ug/L			05/29/25 13:50	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			05/29/25 13:50	1
Acetone	<1.5		5.0	1.5	ug/L			05/29/25 13:50	1
Benzene	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
Bromoform	<0.30		1.0	0.30	ug/L			05/29/25 13:50	1
Bromomethane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			05/29/25 13:50	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 13:50	1
Chloroethane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Chloroform	<0.090		0.50	0.090	ug/L			05/29/25 13:50	1
Chloromethane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Cyclohexane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
Methyl acetate	<0.20		1.0	0.20	ug/L			05/29/25 13:50	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			05/29/25 13:50	1
Styrene	<0.070		0.50	0.070	ug/L			05/29/25 13:50	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			05/29/25 13:50	1
Toluene	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
Trichloroethene	<0.080		0.50	0.080	ug/L			05/29/25 13:50	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			05/29/25 13:50	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			05/29/25 13:50	1

Eurolins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

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

Job ID: 410-224230-1

Client Sample ID: QM-N48962-251570-052725

Lab Sample ID: 410-224230-1

Date Collected: 05/27/25 08:15

Matrix: Water

Date Received: 05/27/25 16:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		05/29/25 13:50	1
4-Bromofluorobenzene (Surr)	92		80 - 120		05/29/25 13:50	1
Dibromofluoromethane (Surr)	102		80 - 120		05/29/25 13:50	1
Toluene-d8 (Surr)	102		80 - 120		05/29/25 13:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.010		0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Acenaphthylene	<0.010		0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Anthracene	<0.010		0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Benzo[a]anthracene	<0.010		0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Benzo[a]pyrene	<0.010		0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Benzo[b]fluoranthene	<0.049		0.052	0.049	ug/L		06/01/25 08:15	06/02/25 14:44	1
Benzo[g,h,i]perylene	<0.010	*1	0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Benzo[k]fluoranthene	0.011	J	0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Chrysene	<0.026		0.052	0.026	ug/L		06/01/25 08:15	06/02/25 14:44	1
Dibenz(a,h)anthracene	<0.021	*1	0.052	0.021	ug/L		06/01/25 08:15	06/02/25 14:44	1
Fluoranthene	<0.024		0.052	0.024	ug/L		06/01/25 08:15	06/02/25 14:44	1
Fluorene	<0.010		0.052	0.010	ug/L		06/01/25 08:15	06/02/25 14:44	1
Indeno[1,2,3-cd]pyrene	<0.021	*1	0.052	0.021	ug/L		06/01/25 08:15	06/02/25 14:44	1
Naphthalene	<0.071	cn	0.073	0.071	ug/L		06/01/25 08:15	06/02/25 14:44	1
Phenanthrene	<0.031		0.073	0.031	ug/L		06/01/25 08:15	06/02/25 14:44	1
Pyrene	<0.022		0.052	0.022	ug/L		06/01/25 08:15	06/02/25 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	56		10 - 121	06/01/25 08:15	06/02/25 14:44	1
1-Methylnaphthalene-d10 (Surr)	87		30 - 127	06/01/25 08:15	06/02/25 14:44	1
Fluoranthene-d10 (Surr)	98		34 - 130	06/01/25 08:15	06/02/25 14:44	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			05/30/25 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	97		63 - 135		05/30/25 18:47	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		0.019	0.0094	ug/L		05/29/25 00:30	05/30/25 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	114		46 - 136	05/29/25 00:30	05/30/25 01:06	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	104		46 - 136	05/29/25 00:30	05/30/25 01:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	<46	*1	100	46	ug/L		06/03/25 15:51	06/04/25 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	69		32 - 125	06/03/25 15:51	06/04/25 13:32	1

Client Sample Results

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

Job ID: 410-224230-1

Client Sample ID: QM-N48962-251570-052725

Lab Sample ID: 410-224230-1

Date Collected: 05/27/25 08:15

Matrix: Water

Date Received: 05/27/25 16:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0075		0.0094	0.0075	ug/L		06/05/25 08:42	06/05/25 20:34	1
PCB-1221 (1C)	<0.0075		0.0094	0.0075	ug/L		06/05/25 08:42	06/05/25 20:34	1
PCB-1232 (1C)	<0.0075		0.0094	0.0075	ug/L		06/05/25 08:42	06/05/25 20:34	1
PCB-1242 (1C)	<0.0075		0.0094	0.0075	ug/L		06/05/25 08:42	06/05/25 20:34	1
PCB-1248 (1C)	<0.0075		0.0094	0.0075	ug/L		06/05/25 08:42	06/05/25 20:34	1
PCB-1254 (1C)	<0.0047		0.0094	0.0047	ug/L		06/05/25 08:42	06/05/25 20:34	1
PCB-1260 (1C)	<0.0047		0.0094	0.0047	ug/L		06/05/25 08:42	06/05/25 20:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	124		46 - 161	06/05/25 08:42	06/05/25 20:34	1
DCB Decachlorobiphenyl (Surr) (2C)	115		46 - 161	06/05/25 08:42	06/05/25 20:34	1
Tetrachloro-m-xylene (1C)	78		41 - 146	06/05/25 08:42	06/05/25 20:34	1
Tetrachloro-m-xylene (2C)	75		41 - 146	06/05/25 08:42	06/05/25 20:34	1

Method: TAL SOP PCB - Total PCB Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0075		0.0094	0.0075	ug/L			06/05/25 20:34	1
PCB-1221	<0.0075		0.0094	0.0075	ug/L			06/05/25 20:34	1
PCB-1232	<0.0075		0.0094	0.0075	ug/L			06/05/25 20:34	1
PCB-1242	<0.0075		0.0094	0.0075	ug/L			06/05/25 20:34	1
PCB-1248	<0.0075		0.0094	0.0075	ug/L			06/05/25 20:34	1
PCB-1254	<0.0047		0.0094	0.0047	ug/L			06/05/25 20:34	1
PCB-1260	<0.0047		0.0094	0.0047	ug/L			06/05/25 20:34	1
Polychlorinated biphenyls, Total	<0.0075		0.0094	0.0075	ug/L			06/05/25 20:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.6	F1	0.20	0.10	mg/L			06/02/25 20:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	180		25	12	ug/L		05/28/25 21:50	05/29/25 11:41	1
Antimony	0.38	J	1.0	0.20	ug/L		05/28/25 21:50	05/29/25 11:41	1
Arsenic	0.86	J	2.0	0.68	ug/L		05/28/25 21:50	05/29/25 11:41	1
Barium	37		2.0	0.75	ug/L		05/28/25 21:50	05/29/25 11:41	1
Beryllium	<0.12		0.50	0.12	ug/L		05/28/25 21:50	05/29/25 11:41	1
Cadmium	<0.15		0.50	0.15	ug/L		05/28/25 21:50	05/29/25 11:41	1
Calcium	29000		120	50	ug/L		05/28/25 21:50	05/29/25 11:41	1
Chromium	<0.55		2.0	0.55	ug/L		05/28/25 21:50	05/29/25 11:41	1
Cobalt	0.16	J	0.50	0.16	ug/L		05/28/25 21:50	05/29/25 11:41	1
Copper	2.6		1.0	0.85	ug/L		05/28/25 21:50	05/29/25 11:41	1
Iron	130		50	20	ug/L		05/28/25 21:50	05/29/25 11:41	1
Lead	0.26	J	0.50	0.12	ug/L		05/28/25 21:50	05/29/25 11:41	1
Magnesium	2300		50	16	ug/L		05/28/25 21:50	05/29/25 11:41	1
Manganese	25		2.0	0.95	ug/L		05/28/25 21:50	05/29/25 11:41	1
Nickel	0.88	J	1.0	0.40	ug/L		05/28/25 21:50	05/29/25 11:41	1
Potassium	2700		200	65	ug/L		05/28/25 21:50	05/29/25 11:41	1
Selenium	<0.28		1.0	0.28	ug/L		05/28/25 21:50	05/29/25 11:41	1
Silver	<0.10		0.50	0.10	ug/L		05/28/25 21:50	05/29/25 11:41	1
Sodium	3200		200	90	ug/L		05/28/25 21:50	05/29/25 11:41	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

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

Job ID: 410-224230-1

Client Sample ID: QM-N48962-251570-052725

Lab Sample ID: 410-224230-1

Date Collected: 05/27/25 08:15

Matrix: Water

Date Received: 05/27/25 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		05/28/25 21:50	05/29/25 11:41	1
Zinc	8.0	J	10	4.0	ug/L		05/28/25 21:50	05/29/25 11:41	1
Vanadium	0.91	J	4.0	0.79	ug/L		05/28/25 21:50	05/29/25 11:41	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.087	*+	0.20	0.087	ug/L		05/29/25 09:00	05/29/25 19:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.8	HF	0.01	0.01	S.U.			05/29/25 13:45	1
Temperature (SW846 9040C)	20.2	HF	0.01	0.01	Degrees C			05/29/25 13:45	1
Corrosivity (SW846 9040C)	No	HF	0.01	0.01	NONE			05/29/25 13:45	1
Cyanide, Free (OI CORP OIA-1677)	<0.0050		0.0060	0.0050	mg/L			05/28/25 11:43	1

Client Sample ID: TB-052725

Lab Sample ID: 410-224230-2

Date Collected: 05/20/25 07:00

Matrix: Water

Date Received: 05/27/25 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			05/29/25 12:28	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 12:28	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 12:28	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			05/29/25 12:28	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 12:28	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 12:28	1
2-Butanone	<1.0		5.0	1.0	ug/L			05/29/25 12:28	1
2-Hexanone	<2.0	cn	5.0	2.0	ug/L			05/29/25 12:28	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			05/29/25 12:28	1
Acetone	<1.5		5.0	1.5	ug/L			05/29/25 12:28	1
Benzene	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
Bromoform	<0.30		1.0	0.30	ug/L			05/29/25 12:28	1
Bromomethane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			05/29/25 12:28	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 12:28	1
Chloroethane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Chloroform	<0.090		0.50	0.090	ug/L			05/29/25 12:28	1
Chloromethane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

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

Job ID: 410-224230-1

Client Sample ID: TB-052725

Lab Sample ID: 410-224230-2

Date Collected: 05/20/25 07:00

Matrix: Water

Date Received: 05/27/25 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			05/29/25 12:28	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
Methyl acetate	<0.20		1.0	0.20	ug/L			05/29/25 12:28	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			05/29/25 12:28	1
Styrene	<0.070		0.50	0.070	ug/L			05/29/25 12:28	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			05/29/25 12:28	1
Toluene	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
Trichloroethene	<0.080		0.50	0.080	ug/L			05/29/25 12:28	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			05/29/25 12:28	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			05/29/25 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		05/29/25 12:28	1
4-Bromofluorobenzene (Surr)	92		80 - 120		05/29/25 12:28	1
Dibromofluoromethane (Surr)	104		80 - 120		05/29/25 12:28	1
Toluene-d8 (Surr)	104		80 - 120		05/29/25 12:28	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			05/28/25 12:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	95		63 - 135		05/28/25 12:59	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		0.019	0.0095	ug/L		05/29/25 00:30	05/30/25 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	107		46 - 136	05/29/25 00:30	05/30/25 01:40	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	105		46 - 136	05/29/25 00:30	05/30/25 01:40	1

Surrogate Summary

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

Job ID: 410-224230-1

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)
410-224230-1	QM-N48962-251570-052725	105	92	102	102
410-224230-2	TB-052725	103	92	104	104
LCS 410-650097/4	Lab Control Sample	103	97	105	103
LCSD 410-650097/5	Lab Control Sample Dup	106	95	104	102
MB 410-650097/7	Method Blank	107	92	102	101

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 (10-121)	MNPd10 (30-127)	FLN10 (34-130)
410-224230-1	QM-N48962-251570-052725	56	87	98
LCS 410-651124/2-A	Lab Control Sample	86	78	93
LCSD 410-651124/3-A	Lab Control Sample Dup	86	80	94
MB 410-651124/1-A	Method Blank	70	67	78

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)					
410-224230-1	QM-N48962-251570-052725	97					
410-224230-2	TB-052725	95					
LCS 410-649547/6	Lab Control Sample	83					
LCS 410-650766/6	Lab Control Sample	86					
LCSD 410-649547/7	Lab Control Sample Dup	84					
LCSD 410-650766/7	Lab Control Sample Dup	85					
MB 410-649547/5	Method Blank	92					
MB 410-650766/5	Method Blank	96					

Surrogate Legend

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

Surrogate Summary

Client: Tetra Tech Inc

Job ID: 410-224230-1

Project/Site: Soil and Water Analysis - QL Frederick

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1122TCA1 (46-136)	1122TCA2 (46-136)
410-224230-1	QM-N48962-251570-052725	114	104
410-224230-1 MS	QM-N48962-251570-052725	118	112
410-224230-2	TB-052725	107	105
LCS 410-650001/2-A	Lab Control Sample	109	106
LCSD 410-650001/3-A	Lab Control Sample Dup	107	105
MB 410-650001/1-A	Method Blank	107	103
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)	
410-224230-1	QM-N48962-251570-052725	69	
LCS 410-652373/2-A	Lab Control Sample	76	
LCSD 410-652373/3-A	Lab Control Sample Dup	49	
MB 410-652373/1-A	Method Blank	67	
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)
410-224230-1	QM-N48962-251570-052725	124	115	78	75
LCS 410-653244/2-A	Lab Control Sample	126	110	79	74
MB 410-653244/1-A	Method Blank	125	114	76	71
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: 410-224230-1

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

Lab Sample ID: MB 410-650097/7

Matrix: Water

Analysis Batch: 650097

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			05/29/25 10:41	1
1,1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 10:41	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 10:41	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			05/29/25 10:41	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 10:41	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 10:41	1
2-Butanone	<1.0		5.0	1.0	ug/L			05/29/25 10:41	1
2-Hexanone	<2.0		5.0	2.0	ug/L			05/29/25 10:41	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			05/29/25 10:41	1
Acetone	<1.5		5.0	1.5	ug/L			05/29/25 10:41	1
Benzene	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
Bromoform	<0.30		1.0	0.30	ug/L			05/29/25 10:41	1
Bromomethane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			05/29/25 10:41	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			05/29/25 10:41	1
Chloroethane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Chloroform	<0.090		0.50	0.090	ug/L			05/29/25 10:41	1
Chloromethane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Cyclohexane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
Methyl acetate	<0.20		1.0	0.20	ug/L			05/29/25 10:41	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			05/29/25 10:41	1
Styrene	<0.070		0.50	0.070	ug/L			05/29/25 10:41	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			05/29/25 10:41	1
Toluene	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
Trichloroethene	<0.080		0.50	0.080	ug/L			05/29/25 10:41	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			05/29/25 10:41	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			05/29/25 10:41	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: MB 410-650097/7

Matrix: Water

Analysis Batch: 650097

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		05/29/25 10:41	1
4-Bromofluorobenzene (Surr)	92		80 - 120		05/29/25 10:41	1
Dibromofluoromethane (Surr)	102		80 - 120		05/29/25 10:41	1
Toluene-d8 (Surr)	101		80 - 120		05/29/25 10:41	1

Lab Sample ID: LCS 410-650097/4

Matrix: Water

Analysis Batch: 650097

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	5.25		ug/L		105	78 - 126
1,1,1,2,2-Tetrachloroethane	5.00	5.14		ug/L		103	75 - 123
1,1,1,2-Trichloroethane	5.00	5.15		ug/L		103	80 - 120
1,1-Dichloroethane	5.00	5.41		ug/L		108	74 - 120
1,1-Dichloroethene	5.00	5.67		ug/L		113	80 - 131
1,2,4-Trichlorobenzene	5.00	5.60		ug/L		112	68 - 122
1,2-Dibromo-3-Chloropropane	5.00	4.81		ug/L		96	75 - 124
1,2-Dibromoethane	5.00	5.05		ug/L		101	80 - 120
1,2-Dichlorobenzene	5.00	5.14		ug/L		103	80 - 120
1,2-Dichloroethane	5.00	5.07		ug/L		101	69 - 122
1,2-Dichloropropane	5.00	5.38		ug/L		108	80 - 120
1,3-Dichlorobenzene	5.00	5.19		ug/L		104	80 - 120
1,4-Dichlorobenzene	5.00	4.80		ug/L		96	80 - 120
2-Butanone	62.5	66.9		ug/L		107	59 - 141
2-Hexanone	62.5	51.7		ug/L		83	52 - 140
4-Methyl-2-pentanone	62.5	57.5		ug/L		92	55 - 140
Acetone	62.5	54.0		ug/L		86	60 - 146
Benzene	5.00	5.18		ug/L		104	80 - 120
Bromodichloromethane	5.00	5.22		ug/L		104	80 - 123
Bromoform	5.00	5.00		ug/L		100	75 - 126
Bromomethane	5.00	4.72		ug/L		94	63 - 120
Carbon disulfide	5.00	4.82		ug/L		96	67 - 130
Carbon tetrachloride	5.00	5.22		ug/L		104	64 - 141
Chlorobenzene	5.00	4.93		ug/L		99	80 - 120
Chloroethane	5.00	5.07		ug/L		101	63 - 120
Chloroform	5.00	5.25		ug/L		105	80 - 120
Chloromethane	5.00	4.20		ug/L		84	56 - 124
cis-1,2-Dichloroethene	5.00	4.97		ug/L		99	80 - 122
cis-1,3-Dichloropropene	5.00	4.81		ug/L		96	67 - 121
Cyclohexane	5.00	5.16		ug/L		103	69 - 120
Dibromochloromethane	5.00	5.20		ug/L		104	80 - 123
Dichlorodifluoromethane	5.00	5.15		ug/L		103	43 - 123
Ethylbenzene	5.00	5.15		ug/L		103	80 - 120
1,1,2-Trichlorotrifluoroethane	5.00	4.75		ug/L		95	67 - 124
Isopropylbenzene	5.00	5.81		ug/L		116	80 - 120
Methyl acetate	5.00	4.79		ug/L		96	59 - 143
Methyl tertiary butyl ether	5.00	4.67		ug/L		93	69 - 120
Methylcyclohexane	5.00	5.07		ug/L		101	80 - 120

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: LCS 410-650097/4

Matrix: Water

Analysis Batch: 650097

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	5.37		ug/L		107	80 - 120
Styrene	5.00	5.29		ug/L		106	80 - 120
Tetrachloroethene	5.00	4.96		ug/L		99	80 - 120
Toluene	5.00	5.18		ug/L		104	80 - 120
trans-1,2-Dichloroethene	5.00	5.53		ug/L		111	80 - 122
trans-1,3-Dichloropropene	5.00	5.20		ug/L		104	61 - 129
Trichloroethene	5.00	5.11		ug/L		102	80 - 120
Trichlorofluoromethane	5.00	4.68		ug/L		94	53 - 136
Vinyl chloride	5.00	4.50		ug/L		90	60 - 125
Xylenes, Total	15.0	15.4		ug/L		103	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	105		80 - 120
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: LCSD 410-650097/5

Matrix: Water

Analysis Batch: 650097

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	5.26		ug/L		105	78 - 126	0	30
1,1,1,2-Tetrachloroethane	5.00	5.05		ug/L		101	75 - 123	2	30
1,1,2-Trichloroethane	5.00	5.06		ug/L		101	80 - 120	2	30
1,1-Dichloroethane	5.00	5.39		ug/L		108	74 - 120	0	30
1,1-Dichloroethene	5.00	5.60		ug/L		112	80 - 131	1	30
1,2,4-Trichlorobenzene	5.00	5.54		ug/L		111	68 - 122	1	30
1,2-Dibromo-3-Chloropropane	5.00	4.54		ug/L		91	75 - 124	6	30
1,2-Dibromoethane	5.00	5.06		ug/L		101	80 - 120	0	30
1,2-Dichlorobenzene	5.00	5.12		ug/L		102	80 - 120	0	30
1,2-Dichloroethane	5.00	5.12		ug/L		102	69 - 122	1	30
1,2-Dichloropropane	5.00	5.26		ug/L		105	80 - 120	2	30
1,3-Dichlorobenzene	5.00	5.24		ug/L		105	80 - 120	1	30
1,4-Dichlorobenzene	5.00	4.76		ug/L		95	80 - 120	1	30
2-Butanone	62.5	63.3		ug/L		101	59 - 141	6	30
2-Hexanone	62.5	54.9		ug/L		88	52 - 140	6	30
4-Methyl-2-pentanone	62.5	60.9		ug/L		97	55 - 140	6	30
Acetone	62.5	57.2		ug/L		91	60 - 146	6	30
Benzene	5.00	5.10		ug/L		102	80 - 120	1	30
Bromodichloromethane	5.00	5.17		ug/L		103	80 - 123	1	30
Bromoform	5.00	4.88		ug/L		98	75 - 126	2	30
Bromomethane	5.00	4.66		ug/L		93	63 - 120	1	30
Carbon disulfide	5.00	4.79		ug/L		96	67 - 130	1	30
Carbon tetrachloride	5.00	5.12		ug/L		102	64 - 141	2	30
Chlorobenzene	5.00	4.95		ug/L		99	80 - 120	0	30
Chloroethane	5.00	5.05		ug/L		101	63 - 120	0	30
Chloroform	5.00	5.24		ug/L		105	80 - 120	0	30

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QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: LCSD 410-650097/5

Matrix: Water

Analysis Batch: 650097

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	4.11		ug/L		82	56 - 124	2	30
cis-1,2-Dichloroethene	5.00	4.96		ug/L		99	80 - 122	0	30
cis-1,3-Dichloropropene	5.00	4.76		ug/L		95	67 - 121	1	30
Cyclohexane	5.00	5.13		ug/L		103	69 - 120	1	30
Dibromochloromethane	5.00	5.08		ug/L		102	80 - 123	2	30
Dichlorodifluoromethane	5.00	5.04		ug/L		101	43 - 123	2	30
Ethylbenzene	5.00	5.09		ug/L		102	80 - 120	1	30
1,1,2-Trichlorotrifluoroethane	5.00	4.75		ug/L		95	67 - 124	0	30
Isopropylbenzene	5.00	5.82		ug/L		116	80 - 120	0	30
Methyl acetate	5.00	4.58		ug/L		92	59 - 143	4	30
Methyl tertiary butyl ether	5.00	4.65		ug/L		93	69 - 120	1	30
Methylcyclohexane	5.00	5.00		ug/L		100	80 - 120	2	30
Methylene Chloride	5.00	5.40		ug/L		108	80 - 120	1	30
Styrene	5.00	5.26		ug/L		105	80 - 120	1	30
Tetrachloroethene	5.00	4.86		ug/L		97	80 - 120	2	30
Toluene	5.00	5.07		ug/L		101	80 - 120	2	30
trans-1,2-Dichloroethene	5.00	5.37		ug/L		107	80 - 122	3	30
trans-1,3-Dichloropropene	5.00	5.08		ug/L		102	61 - 129	2	30
Trichloroethene	5.00	5.11		ug/L		102	80 - 120	0	30
Trichlorofluoromethane	5.00	4.66		ug/L		93	53 - 136	0	30
Vinyl chloride	5.00	4.48		ug/L		90	60 - 125	1	30
Xylenes, Total	15.0	15.4		ug/L		102	80 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	104		80 - 120
Toluene-d8 (Surr)	102		80 - 120

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

Lab Sample ID: MB 410-651124/1-A

Matrix: Water

Analysis Batch: 651365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 651124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Acenaphthylene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Anthracene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[a]anthracene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[a]pyrene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[b]fluoranthene	<0.047		0.050	0.047	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[g,h,i]perylene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[k]fluoranthene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Chrysene	<0.025		0.050	0.025	ug/L		06/01/25 08:15	06/02/25 06:18	1
Dibenz(a,h)anthracene	<0.020		0.050	0.020	ug/L		06/01/25 08:15	06/02/25 06:18	1
Fluoranthene	<0.023		0.050	0.023	ug/L		06/01/25 08:15	06/02/25 06:18	1
Fluorene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Indeno[1,2,3-cd]pyrene	<0.020		0.050	0.020	ug/L		06/01/25 08:15	06/02/25 06:18	1

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: MB 410-651124/1-A

Matrix: Water

Analysis Batch: 651365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 651124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.068		0.070	0.068	ug/L		06/01/25 08:15	06/02/25 06:18	1
Phenanthrene	<0.030		0.070	0.030	ug/L		06/01/25 08:15	06/02/25 06:18	1
Pyrene	<0.021		0.050	0.021	ug/L		06/01/25 08:15	06/02/25 06:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	70		10 - 121	06/01/25 08:15	06/02/25 06:18	1
1-Methylnaphthalene-d10 (Surr)	67		30 - 127	06/01/25 08:15	06/02/25 06:18	1
Fluoranthene-d10 (Surr)	78		34 - 130	06/01/25 08:15	06/02/25 06:18	1

Lab Sample ID: LCS 410-651124/2-A

Matrix: Water

Analysis Batch: 651843

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 651124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	1.00	0.806		ug/L		81	33 - 122
Acenaphthylene	1.00	0.855		ug/L		86	35 - 123
Anthracene	1.00	0.900		ug/L		90	40 - 127
Benzo[a]anthracene	1.00	0.834		ug/L		83	34 - 128
Benzo[a]pyrene	1.00	0.912		ug/L		91	38 - 134
Benzo[b]fluoranthene	1.00	0.772		ug/L		77	35 - 131
Benzo[g,h,i]perylene	1.00	1.05		ug/L		105	31 - 139
Benzo[k]fluoranthene	1.00	0.965		ug/L		96	42 - 146
Chrysene	1.00	0.872		ug/L		87	34 - 134
Dibenz(a,h)anthracene	1.00	0.910		ug/L		91	29 - 136
Fluoranthene	1.00	0.859		ug/L		86	36 - 129
Fluorene	1.00	0.876		ug/L		88	35 - 124
Indeno[1,2,3-cd]pyrene	1.00	0.860		ug/L		86	28 - 137
Naphthalene	1.00	0.960		ug/L		96	26 - 120
Phenanthrene	1.00	0.845		ug/L		85	37 - 125
Pyrene	1.00	0.802		ug/L		80	34 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	86		10 - 121
1-Methylnaphthalene-d10 (Surr)	78		30 - 127
Fluoranthene-d10 (Surr)	93		34 - 130

Lab Sample ID: LCSD 410-651124/3-A

Matrix: Water

Analysis Batch: 651365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 651124

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	1.00	0.829		ug/L		83	33 - 122	3	30
Acenaphthylene	1.00	0.879		ug/L		88	35 - 123	3	30
Anthracene	1.00	0.919		ug/L		92	40 - 127	2	30
Benzo[a]anthracene	1.00	0.840		ug/L		84	34 - 128	1	30
Benzo[a]pyrene	1.00	0.929		ug/L		93	38 - 134	2	30
Benzo[b]fluoranthene	1.00	0.857		ug/L		86	35 - 131	10	30
Benzo[g,h,i]perylene	1.00	0.599	*1	ug/L		60	31 - 139	55	30

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: LCSD 410-651124/3-A

Matrix: Water

Analysis Batch: 651365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 651124

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[k]fluoranthene	1.00	1.09		ug/L		109	42 - 146	13	30
Chrysene	1.00	0.835		ug/L		84	34 - 134	4	30
Dibenz(a,h)anthracene	1.00	0.516	*1	ug/L		52	29 - 136	55	30
Fluoranthene	1.00	0.892		ug/L		89	36 - 129	4	30
Fluorene	1.00	0.853		ug/L		85	35 - 124	3	30
Indeno[1,2,3-cd]pyrene	1.00	0.557	*1	ug/L		56	28 - 137	43	30
Naphthalene	1.00	1.02		ug/L		102	26 - 120	6	30
Phenanthrene	1.00	0.864		ug/L		86	37 - 125	2	30
Pyrene	1.00	0.803		ug/L		80	34 - 129	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	86		10 - 121
1-Methylnaphthalene-d10 (Surr)	80		30 - 127
Fluoranthene-d10 (Surr)	94		34 - 130

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

Lab Sample ID: MB 410-649547/5

Matrix: Water

Analysis Batch: 649547

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
GRO (1C)	<23		50	23	ug/L			05/28/25 11:17	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene (fid) (1C)	92		63 - 135		05/28/25 11:17	1			

Lab Sample ID: LCS 410-649547/6

Matrix: Water

Analysis Batch: 649547

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits			
Gasoline (Unleaded) (1C)			1100	1030		ug/L		94	66 - 120		
Surrogate	LCS		Limits	LCS							
	%Recovery	Qualifier									
a,a,a-Trifluorotoluene (fid) (1C)	83		63 - 135								

Lab Sample ID: LCSD 410-649547/7

Matrix: Water

Analysis Batch: 649547

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	1040		ug/L		94	66 - 120	1	30
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits								
a,a,a-Trifluorotoluene (fid) (1C)	84		63 - 135								

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: MB 410-650766/5

Matrix: Water

Analysis Batch: 650766

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			05/30/25 11:35	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	96		63 - 135					05/30/25 11:35	1

Lab Sample ID: LCS 410-650766/6

Matrix: Water

Analysis Batch: 650766

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	1040		ug/L		94	66 - 120		
Surrogate	%Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	86		63 - 135						

Lab Sample ID: LCSD 410-650766/7

Matrix: Water

Analysis Batch: 650766

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	1070		ug/L		97	66 - 120	3	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	85		63 - 135						

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

Lab Sample ID: MB 410-650001/1-A

Matrix: Water

Analysis Batch: 650338

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 650001

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.010		0.020	0.010	ug/L		05/29/25 00:30	05/29/25 22:17	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	107		46 - 136				05/29/25 00:30	05/29/25 22:17	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	103		46 - 136				05/29/25 00:30	05/29/25 22:17	1

Lab Sample ID: LCS 410-650001/2-A

Matrix: Water

Analysis Batch: 650338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 650001

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethylene Dibromide (1C)	0.129	0.130		ug/L		100	60 - 140		

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: LCS 410-650001/2-A

Matrix: Water

Analysis Batch: 650338

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 650001

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane (Surr) (1C)	109		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	106		46 - 136

Lab Sample ID: LCSD 410-650001/3-A

Matrix: Water

Analysis Batch: 650338

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 650001

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	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane (Surr) (1C)	107		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	105		46 - 136

Lab Sample ID: 410-224230-1 MS

Matrix: Water

Analysis Batch: 650338

Client Sample ID: QM-N48962-251570-052725

Prep Type: Total/NA

Prep Batch: 650001

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylene Dibromide (1C)	<0.0094		0.122	0.143		ug/L		117	60 - 140

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane (Surr) (1C)	118		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	112		46 - 136

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

Lab Sample ID: MB 410-652373/1-A

Matrix: Water

Analysis Batch: 652747

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 652373

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	<45		100	45	ug/L		06/03/25 15:51	06/04/25 12:23	1

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
o-terphenyl (Surr)	67		32 - 125	06/03/25 15:51	06/04/25 12:23	1			

Lab Sample ID: LCS 410-652373/2-A

Matrix: Water

Analysis Batch: 652747

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 652373

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
DRO (C10-C28)	603	572		ug/L		95	20 - 115

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QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: LCS 410-652373/2-A

Matrix: Water

Analysis Batch: 652747

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 652373

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -terphenyl (Surr)	76		32 - 125

Lab Sample ID: LCSD 410-652373/3-A

Matrix: Water

Analysis Batch: 652747

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 652373

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
DRO (C10-C28)	603	343	*1	ug/L		57	20 - 115	50	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -terphenyl (Surr)	49		32 - 125

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

Lab Sample ID: MB 410-653244/1-A

Matrix: Water

Analysis Batch: 653727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 653244

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1221 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1232 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1242 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1248 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1254 (1C)	<0.0050		0.010	0.0050	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1260 (1C)	<0.0050		0.010	0.0050	ug/L		06/05/25 08:42	06/05/25 18:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	125		46 - 161	06/05/25 08:42	06/05/25 18:50	1
DCB Decachlorobiphenyl (Surr) (2C)	114		46 - 161	06/05/25 08:42	06/05/25 18:50	1
Tetrachloro- <i>m</i> -xylene (1C)	76		41 - 146	06/05/25 08:42	06/05/25 18:50	1
Tetrachloro- <i>m</i> -xylene (2C)	71		41 - 146	06/05/25 08:42	06/05/25 18:50	1

Lab Sample ID: LCS 410-653244/2-A

Matrix: Water

Analysis Batch: 653727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 653244

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016 (1C)	0.500	0.399		ug/L		80	60 - 117
PCB-1260 (1C)	0.500	0.477		ug/L		95	81 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	126		46 - 161
DCB Decachlorobiphenyl (Surr) (2C)	110		46 - 161
Tetrachloro- <i>m</i> -xylene (1C)	79		41 - 146
Tetrachloro- <i>m</i> -xylene (2C)	74		41 - 146

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: MB 410-651639/5

Matrix: Water

Analysis Batch: 651639

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.20	0.10	mg/L			06/02/25 08:41	1

Lab Sample ID: LCS 410-651639/3

Matrix: Water

Analysis Batch: 651639

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	0.759		mg/L		101	90 - 110

Lab Sample ID: LCSD 410-651639/4

Matrix: Water

Analysis Batch: 651639

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	0.713		mg/L		95	90 - 110	6	20

Lab Sample ID: 410-224230-1 MS

Matrix: Water

Analysis Batch: 651639

Client Sample ID: QM-N48962-251570-052725

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Fluoride	1.6	F1	0.500	2.00	F1	mg/L		80	90 - 110

Lab Sample ID: 410-224230-1 DU

Matrix: Water

Analysis Batch: 651639

Client Sample ID: QM-N48962-251570-052725

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	1.6	F1	1.61		mg/L		0.7	15

Method: 9040C - pH

Lab Sample ID: LCS 410-650365/1

Matrix: Water

Analysis Batch: 650365

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	7.0		S.U.		101	95 - 105

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

Lab Sample ID: MB 410-649762/17

Matrix: Water

Analysis Batch: 649762

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			05/28/25 11:41	1

QC Sample Results

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

Job ID: 410-224230-1

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

Lab Sample ID: LCS 410-649762/16

Matrix: Water

Analysis Batch: 649762

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	0.0524		mg/L		105	82 - 132		

Lab Sample ID: 410-224230-1 MS

Matrix: Water

Analysis Batch: 649762

Client Sample ID: QM-N48962-251570-052725

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Free	<0.0050		0.0500	0.0535		mg/L		107	82 - 130		

Lab Sample ID: 410-224230-1 MSD

Matrix: Water

Analysis Batch: 649762

Client Sample ID: QM-N48962-251570-052725

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Free	<0.0050		0.0500	0.0540		mg/L		108	82 - 130	1	11

QC Association Summary

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

Job ID: 410-224230-1

GC/MS VOA

Analysis Batch: 650097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	8260D	
410-224230-2	TB-052725	Total/NA	Water	8260D	
MB 410-650097/7	Method Blank	Total/NA	Water	8260D	
LCS 410-650097/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-650097/5	Lab Control Sample Dup	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 651124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	3510C	
MB 410-651124/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-651124/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-651124/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 651365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	8270D SIM	651124
MB 410-651124/1-A	Method Blank	Total/NA	Water	8270D SIM	651124
LCSD 410-651124/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	651124

Analysis Batch: 651843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-651124/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	651124

GC VOA

Analysis Batch: 649547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-2	TB-052725	Total/NA	Water	8015D	
MB 410-649547/5	Method Blank	Total/NA	Water	8015D	
LCS 410-649547/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 410-649547/7	Lab Control Sample Dup	Total/NA	Water	8015D	

Analysis Batch: 650766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	8015D	
MB 410-650766/5	Method Blank	Total/NA	Water	8015D	
LCS 410-650766/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 410-650766/7	Lab Control Sample Dup	Total/NA	Water	8015D	

GC Semi VOA

Prep Batch: 650001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	8011	
410-224230-2	TB-052725	Total/NA	Water	8011	
MB 410-650001/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-650001/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-650001/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
410-224230-1 MS	QM-N48962-251570-052725	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 410-224230-1

GC Semi VOA

Analysis Batch: 650338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	8011	650001
410-224230-2	TB-052725	Total/NA	Water	8011	650001
MB 410-650001/1-A	Method Blank	Total/NA	Water	8011	650001
LCS 410-650001/2-A	Lab Control Sample	Total/NA	Water	8011	650001
LCSD 410-650001/3-A	Lab Control Sample Dup	Total/NA	Water	8011	650001
410-224230-1 MS	QM-N48962-251570-052725	Total/NA	Water	8011	650001

Prep Batch: 652373

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	3510C	
MB 410-652373/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-652373/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-652373/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 652747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	8015D	652373
MB 410-652373/1-A	Method Blank	Total/NA	Water	8015D	652373
LCS 410-652373/2-A	Lab Control Sample	Total/NA	Water	8015D	652373
LCSD 410-652373/3-A	Lab Control Sample Dup	Total/NA	Water	8015D	652373

Prep Batch: 653244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	3510C	
MB 410-653244/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-653244/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 653727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	8082A	653244
MB 410-653244/1-A	Method Blank	Total/NA	Water	8082A	653244
LCS 410-653244/2-A	Lab Control Sample	Total/NA	Water	8082A	653244

Analysis Batch: 654003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	PCB	

HPLC/IC

Analysis Batch: 651639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	EPA 300.0 R2.1	
MB 410-651639/5	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-651639/3	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCSD 410-651639/4	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	
410-224230-1 MS	QM-N48962-251570-052725	Total/NA	Water	EPA 300.0 R2.1	
410-224230-1 DU	QM-N48962-251570-052725	Total/NA	Water	EPA 300.0 R2.1	

QC Association Summary

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

Job ID: 410-224230-1

Metals

Prep Batch: 649958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total Recoverable	Water	3005A	

Prep Batch: 650120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	7470A	

Analysis Batch: 650419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total Recoverable	Water	6020B	649958

Analysis Batch: 650574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	7470A	650120

General Chemistry

Analysis Batch: 649762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	OIA-1677	
MB 410-649762/17	Method Blank	Total/NA	Water	OIA-1677	
LCS 410-649762/16	Lab Control Sample	Total/NA	Water	OIA-1677	
410-224230-1 MS	QM-N48962-251570-052725	Total/NA	Water	OIA-1677	
410-224230-1 MSD	QM-N48962-251570-052725	Total/NA	Water	OIA-1677	

Analysis Batch: 650365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224230-1	QM-N48962-251570-052725	Total/NA	Water	9040C	
LCS 410-650365/1	Lab Control Sample	Total/NA	Water	9040C	

Lab Chronicle

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

Job ID: 410-224230-1

Client Sample ID: QM-N48962-251570-052725

Lab Sample ID: 410-224230-1

Date Collected: 05/27/25 08:15

Matrix: Water

Date Received: 05/27/25 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	650097	N7YK	ELLE	05/29/25 13:50
Total/NA	Prep	3510C			651124	L2FU	ELLE	06/01/25 08:15
Total/NA	Analysis	8270D SIM		1	651365	TB8M	ELLE	06/02/25 14:44
Total/NA	Analysis	8015D		1	650766	P5AM	ELLE	05/30/25 18:47
Total/NA	Prep	8011			650001	USL7	ELLE	05/29/25 00:30
Total/NA	Analysis	8011		1	650338	URS0	ELLE	05/30/25 01:06
Total/NA	Prep	3510C			652373	JDJ2	ELLE	06/03/25 15:51
Total/NA	Analysis	8015D		1	652747	A2VL	ELLE	06/04/25 13:32
Total/NA	Prep	3510C			653244	ZFS6	ELLE	06/05/25 08:42
Total/NA	Analysis	8082A		1	653727	URS0	ELLE	06/05/25 20:34
Total/NA	Analysis	PCB		1	654003	URS0	ELLE	06/05/25 20:34
Total/NA	Analysis	EPA 300.0 R2.1		1	651639	PYC6	ELLE	06/02/25 20:31
Total Recoverable	Prep	3005A			649958	UAMX	ELLE	05/28/25 21:50
Total Recoverable	Analysis	6020B		1	650419	SAM2	ELLE	05/29/25 11:41
Total/NA	Prep	7470A			650120	X3ZX	ELLE	05/29/25 09:00
Total/NA	Analysis	7470A		1	650574	IJ3I	ELLE	05/29/25 19:03
Total/NA	Analysis	9040C		1	650365	DI9Q	ELLE	05/29/25 13:45
Total/NA	Analysis	OIA-1677		1	649762	Q3HN	ELLE	05/28/25 11:43

Client Sample ID: TB-052725

Lab Sample ID: 410-224230-2

Date Collected: 05/20/25 07:00

Matrix: Water

Date Received: 05/27/25 16:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	650097	N7YK	ELLE	05/29/25 12:28
Total/NA	Analysis	8015D		1	649547	P5AM	ELLE	05/28/25 12:59
Total/NA	Prep	8011			650001	USL7	ELLE	05/29/25 00:30
Total/NA	Analysis	8011		1	650338	URS0	ELLE	05/30/25 01:40

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

Job ID: 410-224230-1

Project/Site: Soil and Water Analysis - QL Frederick

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	12-30-26
Arizona	State	AZ0780	03-12-26
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
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
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	03-12-27
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-26
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	04-01-26
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	01-31-26
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	06-14-26
Washington	State	C457	04-11-26

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

Eurofins Lancaster Laboratories Environment Testing, LLC

Accreditation/Certification Summary

Client: Tetra Tech Inc

Job ID: 410-224230-1

Project/Site: Soil and Water Analysis - QL Frederick

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 (DW)	State	9906 C	03-31-26
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: Soil and Water Analysis - QL Frederick

Job ID: 410-224230-1

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: 410-224230-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-224230-1	QM-N48962-251570-052725	Water	05/27/25 08:15	05/27/25 16:20
410-224230-2	TB-052725	Water	05/20/25 07:00	05/27/25 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: 410-224230-1

Login Number: 224230

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 1

Creator: Fuehrer, Stephanie

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(</=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.	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 >6mm in diameter (none, if from WV)?	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Lancaster Laboratories Environment Testing, LLC

ANALYTICAL REPORT

PREPARED FOR

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

Generated 6/6/2025 10:45:58 AM

JOB DESCRIPTION

Soil and Water Analysis - QL Frederick

JOB NUMBER

410-224610-1

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



Generated
6/6/2025 10:45:58 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: 410-224610-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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.

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: 410-224610-1

Job ID: 410-224610-1

Eurofins Lancaster Laboratories Environment

Job Narrative 410-224610-1

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 5/29/2025 4:50 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.9°C.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): TB-052925 (410-224610-2). The container labels list 5/29/25, while the COC lists 3/7/25. The client was contacted, and the lab was instructed to follow the container label in email on 6/2.

GC/MS VOA

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-652655 recovered outside acceptance criteria, low biased, for Bromomethane and Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

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

GC/MS Semi VOA

Method 8270D_SIM: The continuing calibration verification (CCV) associated with batch 410-651843 recovered above the upper control limit for Naphthalene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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: Soil and Water Analysis - QL Frederick

Job ID: 410-224610-1

Client Sample ID: QM-A4832-265300-052925

Lab Sample ID: 410-224610-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.010	J	0.051	0.010	ug/L	1		8270D SIM	Total/NA
Benzo[a]pyrene	0.013	J	0.051	0.010	ug/L	1		8270D SIM	Total/NA
Benzo[k]fluoranthene	0.010	J	0.051	0.010	ug/L	1		8270D SIM	Total/NA
Indeno[1,2,3-cd]pyrene	0.020	J *1	0.051	0.020	ug/L	1		8270D SIM	Total/NA
PCB-1248 (1C)	0.018		0.0095	0.0076	ug/L	1		8082A	Total/NA
PCB-1248	0.018		0.0095	0.0076	ug/L	1		PCB	Total/NA
Polychlorinated biphenyls, Total	0.018		0.0095	0.0076	ug/L	1		PCB	Total/NA
Fluoride	1.6		0.20	0.10	mg/L	1		EPA 300.0 R2.1	Total/NA
Aluminum	2100		25	12	ug/L	1		6020B	Total Recoverable
Antimony	0.43	J	1.0	0.20	ug/L	1		6020B	Total Recoverable
Arsenic	1.3	J	2.0	0.68	ug/L	1		6020B	Total Recoverable
Barium	44		2.0	0.75	ug/L	1		6020B	Total Recoverable
Beryllium	0.15	J	0.50	0.12	ug/L	1		6020B	Total Recoverable
Calcium	26000		120	50	ug/L	1		6020B	Total Recoverable
Chromium	2.1		2.0	0.55	ug/L	1		6020B	Total Recoverable
Cobalt	1.1		0.50	0.16	ug/L	1		6020B	Total Recoverable
Copper	2.8		1.0	0.85	ug/L	1		6020B	Total Recoverable
Iron	1700		50	20	ug/L	1		6020B	Total Recoverable
Lead	1.5		0.50	0.12	ug/L	1		6020B	Total Recoverable
Magnesium	2500		50	16	ug/L	1		6020B	Total Recoverable
Manganese	32		2.0	0.95	ug/L	1		6020B	Total Recoverable
Nickel	2.2		1.0	0.40	ug/L	1		6020B	Total Recoverable
Potassium	2900		200	65	ug/L	1		6020B	Total Recoverable
Sodium	3400		200	90	ug/L	1		6020B	Total Recoverable
Thallium	0.13	J	0.50	0.13	ug/L	1		6020B	Total Recoverable
Zinc	18		10	4.0	ug/L	1		6020B	Total Recoverable
Vanadium	4.0		4.0	0.79	ug/L	1		6020B	Total Recoverable
pH	7.9	HF	0.01	0.01	S.U.	1		9040C	Total/NA
Temperature	20.8	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: TB-052925

Lab Sample ID: 410-224610-2

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: Soil and Water Analysis - QL Frederick

Job ID: 410-224610-1

Client Sample ID: QM-A4832-265300-052925

Lab Sample ID: 410-224610-1

Date Collected: 05/29/25 09:45

Matrix: Water

Date Received: 05/29/25 16:50

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			06/04/25 17:46	1
1,1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 17:46	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 17:46	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			06/04/25 17:46	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 17:46	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 17:46	1
2-Butanone	<1.0		5.0	1.0	ug/L			06/04/25 17:46	1
2-Hexanone	<2.0		5.0	2.0	ug/L			06/04/25 17:46	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			06/04/25 17:46	1
Acetone	<1.5		5.0	1.5	ug/L			06/04/25 17:46	1
Benzene	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
Bromoform	<0.30		1.0	0.30	ug/L			06/04/25 17:46	1
Bromomethane	<0.10	cn	0.50	0.10	ug/L			06/04/25 17:46	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			06/04/25 17:46	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 17:46	1
Chloroethane	<0.10	cn	0.50	0.10	ug/L			06/04/25 17:46	1
Chloroform	<0.090		0.50	0.090	ug/L			06/04/25 17:46	1
Chloromethane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Cyclohexane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
Methyl acetate	<0.20		1.0	0.20	ug/L			06/04/25 17:46	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			06/04/25 17:46	1
Styrene	<0.070		0.50	0.070	ug/L			06/04/25 17:46	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			06/04/25 17:46	1
Toluene	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
Trichloroethene	<0.080		0.50	0.080	ug/L			06/04/25 17:46	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			06/04/25 17:46	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			06/04/25 17:46	1

Eurolins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

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

Job ID: 410-224610-1

Client Sample ID: QM-A4832-265300-052925

Lab Sample ID: 410-224610-1

Date Collected: 05/29/25 09:45

Matrix: Water

Date Received: 05/29/25 16:50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		06/04/25 17:46	1
4-Bromofluorobenzene (Surr)	94		80 - 120		06/04/25 17:46	1
Dibromofluoromethane (Surr)	106		80 - 120		06/04/25 17:46	1
Toluene-d8 (Surr)	96		80 - 120		06/04/25 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.010		0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Acenaphthylene	<0.010		0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Anthracene	<0.010		0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Benzo[a]anthracene	0.010	J	0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Benzo[a]pyrene	0.013	J	0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Benzo[b]fluoranthene	<0.048		0.051	0.048	ug/L		06/01/25 08:15	06/03/25 00:19	1
Benzo[g,h,i]perylene	<0.010	*1	0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Benzo[k]fluoranthene	0.010	J	0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Chrysene	<0.026		0.051	0.026	ug/L		06/01/25 08:15	06/03/25 00:19	1
Dibenz(a,h)anthracene	<0.020	*1	0.051	0.020	ug/L		06/01/25 08:15	06/03/25 00:19	1
Fluoranthene	<0.023		0.051	0.023	ug/L		06/01/25 08:15	06/03/25 00:19	1
Fluorene	<0.010		0.051	0.010	ug/L		06/01/25 08:15	06/03/25 00:19	1
Indeno[1,2,3-cd]pyrene	0.020	J *1	0.051	0.020	ug/L		06/01/25 08:15	06/03/25 00:19	1
Naphthalene	<0.069	cn	0.071	0.069	ug/L		06/01/25 08:15	06/03/25 00:19	1
Phenanthrene	<0.031		0.071	0.031	ug/L		06/01/25 08:15	06/03/25 00:19	1
Pyrene	<0.021		0.051	0.021	ug/L		06/01/25 08:15	06/03/25 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	57		10 - 121	06/01/25 08:15	06/03/25 00:19	1
1-Methylnaphthalene-d10 (Surr)	85		30 - 127	06/01/25 08:15	06/03/25 00:19	1
Fluoranthene-d10 (Surr)	90		34 - 130	06/01/25 08:15	06/03/25 00:19	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			06/02/25 13:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	92		63 - 135		06/02/25 13:51	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		0.019	0.0094	ug/L		06/03/25 23:39	06/04/25 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	123		46 - 136	06/03/25 23:39	06/04/25 13:43	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	115		46 - 136	06/03/25 23:39	06/04/25 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	<45		100	45	ug/L		06/05/25 08:51	06/05/25 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	79		32 - 125	06/05/25 08:51	06/05/25 18:49	1

Client Sample Results

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

Job ID: 410-224610-1

Client Sample ID: QM-A4832-265300-052925

Lab Sample ID: 410-224610-1

Date Collected: 05/29/25 09:45

Matrix: Water

Date Received: 05/29/25 16:50

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		06/05/25 08:42	06/05/25 21:00	1
PCB-1221 (1C)	<0.0076		0.0095	0.0076	ug/L		06/05/25 08:42	06/05/25 21:00	1
PCB-1232 (1C)	<0.0076		0.0095	0.0076	ug/L		06/05/25 08:42	06/05/25 21:00	1
PCB-1242 (1C)	<0.0076		0.0095	0.0076	ug/L		06/05/25 08:42	06/05/25 21:00	1
PCB-1248 (1C)	0.018		0.0095	0.0076	ug/L		06/05/25 08:42	06/05/25 21:00	1
PCB-1254 (1C)	<0.0048		0.0095	0.0048	ug/L		06/05/25 08:42	06/05/25 21:00	1
PCB-1260 (1C)	<0.0048		0.0095	0.0048	ug/L		06/05/25 08:42	06/05/25 21:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	107		46 - 161	06/05/25 08:42	06/05/25 21:00	1
DCB Decachlorobiphenyl (Surr) (2C)	93		46 - 161	06/05/25 08:42	06/05/25 21:00	1
Tetrachloro-m-xylene (1C)	74		41 - 146	06/05/25 08:42	06/05/25 21:00	1
Tetrachloro-m-xylene (2C)	71		41 - 146	06/05/25 08:42	06/05/25 21:00	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			06/05/25 21:00	1
PCB-1221	<0.0076		0.0095	0.0076	ug/L			06/05/25 21:00	1
PCB-1232	<0.0076		0.0095	0.0076	ug/L			06/05/25 21:00	1
PCB-1242	<0.0076		0.0095	0.0076	ug/L			06/05/25 21:00	1
PCB-1248	0.018		0.0095	0.0076	ug/L			06/05/25 21:00	1
PCB-1254	<0.0048		0.0095	0.0048	ug/L			06/05/25 21:00	1
PCB-1260	<0.0048		0.0095	0.0048	ug/L			06/05/25 21:00	1
Polychlorinated biphenyls, Total	0.018		0.0095	0.0076	ug/L			06/05/25 21:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.6		0.20	0.10	mg/L			06/04/25 17:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2100		25	12	ug/L		06/01/25 21:00	06/02/25 13:01	1
Antimony	0.43	J	1.0	0.20	ug/L		06/01/25 21:00	06/02/25 13:01	1
Arsenic	1.3	J	2.0	0.68	ug/L		06/01/25 21:00	06/02/25 13:01	1
Barium	44		2.0	0.75	ug/L		06/01/25 21:00	06/02/25 13:01	1
Beryllium	0.15	J	0.50	0.12	ug/L		06/01/25 21:00	06/02/25 13:01	1
Cadmium	<0.15		0.50	0.15	ug/L		06/01/25 21:00	06/02/25 13:01	1
Calcium	26000		120	50	ug/L		06/01/25 21:00	06/02/25 13:01	1
Chromium	2.1		2.0	0.55	ug/L		06/01/25 21:00	06/02/25 13:01	1
Cobalt	1.1		0.50	0.16	ug/L		06/01/25 21:00	06/02/25 13:01	1
Copper	2.8		1.0	0.85	ug/L		06/01/25 21:00	06/02/25 13:01	1
Iron	1700		50	20	ug/L		06/01/25 21:00	06/02/25 13:01	1
Lead	1.5		0.50	0.12	ug/L		06/01/25 21:00	06/02/25 13:01	1
Magnesium	2500		50	16	ug/L		06/01/25 21:00	06/02/25 13:01	1
Manganese	32		2.0	0.95	ug/L		06/01/25 21:00	06/02/25 13:01	1
Nickel	2.2		1.0	0.40	ug/L		06/01/25 21:00	06/02/25 13:01	1
Potassium	2900		200	65	ug/L		06/01/25 21:00	06/02/25 13:01	1
Selenium	<0.28		1.0	0.28	ug/L		06/01/25 21:00	06/02/25 13:01	1
Silver	<0.10		0.50	0.10	ug/L		06/01/25 21:00	06/02/25 13:01	1
Sodium	3400		200	90	ug/L		06/01/25 21:00	06/02/25 13:01	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

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

Job ID: 410-224610-1

Client Sample ID: QM-A4832-265300-052925

Lab Sample ID: 410-224610-1

Date Collected: 05/29/25 09:45

Matrix: Water

Date Received: 05/29/25 16:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	0.13	J	0.50	0.13	ug/L		06/01/25 21:00	06/02/25 13:01	1
Zinc	18		10	4.0	ug/L		06/01/25 21:00	06/02/25 13:01	1
Vanadium	4.0		4.0	0.79	ug/L		06/01/25 21:00	06/02/25 13:01	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.087		0.20	0.087	ug/L		06/01/25 23:50	06/02/25 18:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9040C)	7.9	HF	0.01	0.01	S.U.			06/03/25 14:27	1
Temperature (SW846 9040C)	20.8	HF	0.01	0.01	Degrees C			06/03/25 14:27	1
Corrosivity (SW846 9040C)	NO	HF	0.01	0.01	NONE			06/03/25 14:27	1
Cyanide, Free (OI CORP OIA-1677)	<0.0050		0.0060	0.0050	mg/L			06/05/25 14:28	1

Client Sample ID: TB-052925

Lab Sample ID: 410-224610-2

Date Collected: 05/29/25 07:00

Matrix: Water

Date Received: 05/29/25 16:50

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			06/04/25 13:19	1
1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 13:19	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 13:19	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			06/04/25 13:19	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 13:19	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 13:19	1
2-Butanone	<1.0		5.0	1.0	ug/L			06/04/25 13:19	1
2-Hexanone	<2.0		5.0	2.0	ug/L			06/04/25 13:19	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			06/04/25 13:19	1
Acetone	<1.5		5.0	1.5	ug/L			06/04/25 13:19	1
Benzene	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
Bromoform	<0.30		1.0	0.30	ug/L			06/04/25 13:19	1
Bromomethane	<0.10	cn	0.50	0.10	ug/L			06/04/25 13:19	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			06/04/25 13:19	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 13:19	1
Chloroethane	<0.10	cn	0.50	0.10	ug/L			06/04/25 13:19	1
Chloroform	<0.090		0.50	0.090	ug/L			06/04/25 13:19	1
Chloromethane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1

Eurofins Lancaster Laboratories Environment Testing, LLC

Client Sample Results

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

Job ID: 410-224610-1

Client Sample ID: TB-052925

Lab Sample ID: 410-224610-2

Date Collected: 05/29/25 07:00

Matrix: Water

Date Received: 05/29/25 16:50

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			06/04/25 13:19	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
Methyl acetate	<0.20		1.0	0.20	ug/L			06/04/25 13:19	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			06/04/25 13:19	1
Styrene	<0.070		0.50	0.070	ug/L			06/04/25 13:19	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			06/04/25 13:19	1
Toluene	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
Trichloroethene	<0.080		0.50	0.080	ug/L			06/04/25 13:19	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			06/04/25 13:19	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			06/04/25 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		06/04/25 13:19	1
4-Bromofluorobenzene (Surr)	93		80 - 120		06/04/25 13:19	1
Dibromofluoromethane (Surr)	105		80 - 120		06/04/25 13:19	1
Toluene-d8 (Surr)	97		80 - 120		06/04/25 13:19	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			06/02/25 12:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	95		63 - 135		06/02/25 12:35	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		0.019	0.0095	ug/L		06/03/25 23:39	06/04/25 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	110		46 - 136	06/03/25 23:39	06/04/25 14:00	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	108		46 - 136	06/03/25 23:39	06/04/25 14:00	1

Surrogate Summary

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

Job ID: 410-224610-1

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)
410-224610-1	QM-A4832-265300-052925	99	94	106	96
410-224610-2	TB-052925	100	93	105	97
LCS 410-652655/5	Lab Control Sample	100	97	103	101
MB 410-652655/7	Method Blank	100	95	105	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 (10-121)	MNPd10 (30-127)	FLN10 (34-130)
410-224610-1	QM-A4832-265300-052925	57	85	90
LCS 410-651124/2-A	Lab Control Sample	86	78	93
LCSD 410-651124/3-A	Lab Control Sample Dup	86	80	94
MB 410-651124/1-A	Method Blank	70	67	78

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)				
410-224610-1	QM-A4832-265300-052925	92				
410-224610-2	TB-052925	95				
LCS 410-651452/6	Lab Control Sample	86				
LCSD 410-651452/7	Lab Control Sample Dup	86				
MB 410-651452/5	Method Blank	95				

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)
410-224610-1	QM-A4832-265300-052925	123	115
410-224610-2	TB-052925	110	108
LCS 410-652531/2-A	Lab Control Sample	120	119
LCSD 410-652531/3-A	Lab Control Sample Dup	112	114

Eurofins Lancaster Laboratories Environment Testing, LLC

Surrogate Summary

Client: Tetra Tech Inc

Job ID: 410-224610-1

Project/Site: Soil and Water Analysis - QL Frederick

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)
MB 410-652531/1-A	Method Blank	111	111
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)	
410-224610-1	QM-A4832-265300-052925	79	
LCS 410-653304/2-A	Lab Control Sample	80	
MB 410-653304/1-A	Method Blank	84	
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)
410-224610-1	QM-A4832-265300-052925	107	93	74	71
LCS 410-653244/2-A	Lab Control Sample	126	110	79	74
MB 410-653244/1-A	Method Blank	125	114	76	71
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: 410-224610-1

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

Lab Sample ID: MB 410-652655/7

Matrix: Water

Analysis Batch: 652655

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			06/04/25 11:50	1
1,1,1,2,2-Tetrachloroethane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
1,1,2-Trichloroethane	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
1,1-Dichloroethane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
1,1-Dichloroethene	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
1,2,4-Trichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 11:50	1
1,2-Dibromo-3-Chloropropane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
1,2-Dibromoethane	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
1,2-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 11:50	1
1,2-Dichloroethane	<0.070		0.50	0.070	ug/L			06/04/25 11:50	1
1,2-Dichloropropane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
1,3-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 11:50	1
1,4-Dichlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 11:50	1
2-Butanone	<1.0		5.0	1.0	ug/L			06/04/25 11:50	1
2-Hexanone	<2.0		5.0	2.0	ug/L			06/04/25 11:50	1
4-Methyl-2-pentanone	<1.0		5.0	1.0	ug/L			06/04/25 11:50	1
Acetone	<1.5		5.0	1.5	ug/L			06/04/25 11:50	1
Benzene	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Bromodichloromethane	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
Bromoform	<0.30		1.0	0.30	ug/L			06/04/25 11:50	1
Bromomethane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Carbon disulfide	<0.10		1.0	0.10	ug/L			06/04/25 11:50	1
Carbon tetrachloride	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Chlorobenzene	<0.070		0.50	0.070	ug/L			06/04/25 11:50	1
Chloroethane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Chloroform	<0.090		0.50	0.090	ug/L			06/04/25 11:50	1
Chloromethane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
cis-1,2-Dichloroethene	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
cis-1,3-Dichloropropene	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Cyclohexane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Dibromochloromethane	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
Dichlorodifluoromethane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Ethylbenzene	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
1,1,2-Trichlorotrifluoroethane	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
Isopropylbenzene	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
Methyl acetate	<0.20		1.0	0.20	ug/L			06/04/25 11:50	1
Methyl tertiary butyl ether	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
Methylcyclohexane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Methylene Chloride	<0.20		0.50	0.20	ug/L			06/04/25 11:50	1
Styrene	<0.070		0.50	0.070	ug/L			06/04/25 11:50	1
Tetrachloroethene	<0.20		0.50	0.20	ug/L			06/04/25 11:50	1
Toluene	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
trans-1,2-Dichloroethene	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
trans-1,3-Dichloropropene	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
Trichloroethene	<0.080		0.50	0.080	ug/L			06/04/25 11:50	1
Trichlorofluoromethane	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Vinyl chloride	<0.10		0.50	0.10	ug/L			06/04/25 11:50	1
Xylenes, Total	<0.070		1.0	0.070	ug/L			06/04/25 11:50	1

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QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: MB 410-652655/7

Matrix: Water

Analysis Batch: 652655

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		06/04/25 11:50	1
4-Bromofluorobenzene (Surr)	95		80 - 120		06/04/25 11:50	1
Dibromofluoromethane (Surr)	105		80 - 120		06/04/25 11:50	1
Toluene-d8 (Surr)	98		80 - 120		06/04/25 11:50	1

Lab Sample ID: LCS 410-652655/5

Matrix: Water

Analysis Batch: 652655

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	4.82		ug/L		96	78 - 126
1,1,1,2-Tetrachloroethane	5.00	4.50		ug/L		90	75 - 123
1,1,1,2-Trichloroethane	5.00	4.62		ug/L		92	80 - 120
1,1-Dichloroethane	5.00	4.67		ug/L		93	74 - 120
1,1-Dichloroethene	5.00	5.02		ug/L		100	80 - 131
1,2,4-Trichlorobenzene	5.00	4.59		ug/L		92	68 - 122
1,2-Dibromo-3-Chloropropane	5.00	4.37		ug/L		87	75 - 124
1,2-Dibromoethane	5.00	4.68		ug/L		94	80 - 120
1,2-Dichlorobenzene	5.00	4.52		ug/L		90	80 - 120
1,2-Dichloroethane	5.00	4.29		ug/L		86	69 - 122
1,2-Dichloropropane	5.00	4.67		ug/L		93	80 - 120
1,3-Dichlorobenzene	5.00	4.59		ug/L		92	80 - 120
1,4-Dichlorobenzene	5.00	4.60		ug/L		92	80 - 120
2-Butanone	62.5	60.4		ug/L		97	59 - 141
2-Hexanone	62.5	57.2		ug/L		92	52 - 140
4-Methyl-2-pentanone	62.5	55.1		ug/L		88	55 - 140
Acetone	62.5	54.4		ug/L		87	60 - 146
Benzene	5.00	4.51		ug/L		90	80 - 120
Bromodichloromethane	5.00	4.87		ug/L		97	80 - 123
Bromoform	5.00	4.86		ug/L		97	75 - 126
Bromomethane	5.00	3.50		ug/L		70	63 - 120
Carbon disulfide	5.00	4.63		ug/L		93	67 - 130
Carbon tetrachloride	5.00	4.96		ug/L		99	64 - 141
Chlorobenzene	5.00	4.60		ug/L		92	80 - 120
Chloroethane	5.00	3.46		ug/L		69	63 - 120
Chloroform	5.00	4.67		ug/L		93	80 - 120
Chloromethane	5.00	4.45		ug/L		89	56 - 124
cis-1,2-Dichloroethene	5.00	4.60		ug/L		92	80 - 122
cis-1,3-Dichloropropene	5.00	4.39		ug/L		88	67 - 121
Cyclohexane	5.00	4.06		ug/L		81	69 - 120
Dibromochloromethane	5.00	5.14		ug/L		103	80 - 123
Dichlorodifluoromethane	5.00	4.13		ug/L		83	43 - 123
Ethylbenzene	5.00	4.52		ug/L		90	80 - 120
1,1,2-Trichlorotrifluoroethane	5.00	4.30		ug/L		86	67 - 124
Isopropylbenzene	5.00	5.07		ug/L		101	80 - 120
Methyl acetate	5.00	4.03		ug/L		81	59 - 143
Methyl tertiary butyl ether	5.00	4.19		ug/L		84	69 - 120
Methylcyclohexane	5.00	4.07		ug/L		81	80 - 120

QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: LCS 410-652655/5

Matrix: Water

Analysis Batch: 652655

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	4.69		ug/L		94	80 - 120
Styrene	5.00	4.62		ug/L		92	80 - 120
Tetrachloroethene	5.00	4.80		ug/L		96	80 - 120
Toluene	5.00	4.54		ug/L		91	80 - 120
trans-1,2-Dichloroethene	5.00	4.68		ug/L		94	80 - 122
trans-1,3-Dichloropropene	5.00	4.62		ug/L		92	61 - 129
Trichloroethene	5.00	4.48		ug/L		90	80 - 120
Trichlorofluoromethane	5.00	3.47		ug/L		69	53 - 136
Vinyl chloride	5.00	3.92		ug/L		78	60 - 125
Xylenes, Total	15.0	13.6		ug/L		91	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	97		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 410-651124/1-A

Matrix: Water

Analysis Batch: 651365

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 651124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Acenaphthylene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Anthracene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[a]anthracene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[a]pyrene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[b]fluoranthene	<0.047		0.050	0.047	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[g,h,i]perylene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Benzo[k]fluoranthene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Chrysene	<0.025		0.050	0.025	ug/L		06/01/25 08:15	06/02/25 06:18	1
Dibenz(a,h)anthracene	<0.020		0.050	0.020	ug/L		06/01/25 08:15	06/02/25 06:18	1
Fluoranthene	<0.023		0.050	0.023	ug/L		06/01/25 08:15	06/02/25 06:18	1
Fluorene	<0.010		0.050	0.010	ug/L		06/01/25 08:15	06/02/25 06:18	1
Indeno[1,2,3-cd]pyrene	<0.020		0.050	0.020	ug/L		06/01/25 08:15	06/02/25 06:18	1
Naphthalene	<0.068		0.070	0.068	ug/L		06/01/25 08:15	06/02/25 06:18	1
Phenanthrene	<0.030		0.070	0.030	ug/L		06/01/25 08:15	06/02/25 06:18	1
Pyrene	<0.021		0.050	0.021	ug/L		06/01/25 08:15	06/02/25 06:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	70		10 - 121	06/01/25 08:15	06/02/25 06:18	1
1-Methylnaphthalene-d10 (Surr)	67		30 - 127	06/01/25 08:15	06/02/25 06:18	1
Fluoranthene-d10 (Surr)	78		34 - 130	06/01/25 08:15	06/02/25 06:18	1

QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: LCS 410-651124/2-A

Matrix: Water

Analysis Batch: 651843

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 651124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	1.00	0.806		ug/L		81	33 - 122
Acenaphthylene	1.00	0.855		ug/L		86	35 - 123
Anthracene	1.00	0.900		ug/L		90	40 - 127
Benzo[a]anthracene	1.00	0.834		ug/L		83	34 - 128
Benzo[a]pyrene	1.00	0.912		ug/L		91	38 - 134
Benzo[b]fluoranthene	1.00	0.772		ug/L		77	35 - 131
Benzo[g,h,i]perylene	1.00	1.05		ug/L		105	31 - 139
Benzo[k]fluoranthene	1.00	0.965		ug/L		96	42 - 146
Chrysene	1.00	0.872		ug/L		87	34 - 134
Dibenz(a,h)anthracene	1.00	0.910		ug/L		91	29 - 136
Fluoranthene	1.00	0.859		ug/L		86	36 - 129
Fluorene	1.00	0.876		ug/L		88	35 - 124
Indeno[1,2,3-cd]pyrene	1.00	0.860		ug/L		86	28 - 137
Naphthalene	1.00	0.960		ug/L		96	26 - 120
Phenanthrene	1.00	0.845		ug/L		85	37 - 125
Pyrene	1.00	0.802		ug/L		80	34 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	86		10 - 121
1-Methylnaphthalene-d10 (Surr)	78		30 - 127
Fluoranthene-d10 (Surr)	93		34 - 130

Lab Sample ID: LCSD 410-651124/3-A

Matrix: Water

Analysis Batch: 651365

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 651124

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	1.00	0.829		ug/L		83	33 - 122	3	30
Acenaphthylene	1.00	0.879		ug/L		88	35 - 123	3	30
Anthracene	1.00	0.919		ug/L		92	40 - 127	2	30
Benzo[a]anthracene	1.00	0.840		ug/L		84	34 - 128	1	30
Benzo[a]pyrene	1.00	0.929		ug/L		93	38 - 134	2	30
Benzo[b]fluoranthene	1.00	0.857		ug/L		86	35 - 131	10	30
Benzo[g,h,i]perylene	1.00	0.599	*1	ug/L		60	31 - 139	55	30
Benzo[k]fluoranthene	1.00	1.09		ug/L		109	42 - 146	13	30
Chrysene	1.00	0.835		ug/L		84	34 - 134	4	30
Dibenz(a,h)anthracene	1.00	0.516	*1	ug/L		52	29 - 136	55	30
Fluoranthene	1.00	0.892		ug/L		89	36 - 129	4	30
Fluorene	1.00	0.853		ug/L		85	35 - 124	3	30
Indeno[1,2,3-cd]pyrene	1.00	0.557	*1	ug/L		56	28 - 137	43	30
Naphthalene	1.00	1.02		ug/L		102	26 - 120	6	30
Phenanthrene	1.00	0.864		ug/L		86	37 - 125	2	30
Pyrene	1.00	0.803		ug/L		80	34 - 129	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Benzo(a)pyrene-d12 (Surr)	86		10 - 121
1-Methylnaphthalene-d10 (Surr)	80		30 - 127
Fluoranthene-d10 (Surr)	94		34 - 130

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QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: MB 410-651452/5

Matrix: Water

Analysis Batch: 651452

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			06/02/25 10:26	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid) (1C)	95		63 - 135					06/02/25 10:26	1

Lab Sample ID: LCS 410-651452/6

Matrix: Water

Analysis Batch: 651452

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	1020		ug/L		93	66 - 120		
Surrogate	%Recovery	LCS Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	86		63 - 135						

Lab Sample ID: LCSD 410-651452/7

Matrix: Water

Analysis Batch: 651452

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	1060		ug/L		97	66 - 120	4	30
Surrogate	%Recovery	LCSD Qualifier	Limits						
a,a,a-Trifluorotoluene (fid) (1C)	86		63 - 135						

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

Lab Sample ID: MB 410-652531/1-A

Matrix: Water

Analysis Batch: 652600

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 652531

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene Dibromide (1C)	<0.010		0.020	0.010	ug/L		06/03/25 23:39	06/04/25 10:53	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane (Surr) (1C)	111		46 - 136				06/03/25 23:39	06/04/25 10:53	1
1,1,2,2-Tetrachloroethane (Surr) (2C)	111		46 - 136				06/03/25 23:39	06/04/25 10:53	1

Lab Sample ID: LCS 410-652531/2-A

Matrix: Water

Analysis Batch: 652600

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 652531

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ethylene Dibromide (1C)	0.129	0.131		ug/L		101	60 - 140		

QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: LCS 410-652531/2-A

Matrix: Water

Analysis Batch: 652600

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 652531

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane (Surr) (1C)	120		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	119		46 - 136

Lab Sample ID: LCSD 410-652531/3-A

Matrix: Water

Analysis Batch: 652600

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 652531

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylene Dibromide (1C)	0.129	0.128		ug/L		99	60 - 140	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane (Surr) (1C)	112		46 - 136
1,1,2,2-Tetrachloroethane (Surr) (2C)	114		46 - 136

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

Lab Sample ID: MB 410-653304/1-A

Matrix: Water

Analysis Batch: 653544

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 653304

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (C10-C28)	<45		100	45	ug/L		06/05/25 08:51	06/05/25 17:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o- terphenyl (Surr)	84		32 - 125	06/05/25 08:51	06/05/25 17:18	1

Lab Sample ID: LCS 410-653304/2-A

Matrix: Water

Analysis Batch: 653544

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 653304

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
DRO (C10-C28)	603	568		ug/L		94	20 - 115

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
o- terphenyl (Surr)	80		32 - 125

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

Lab Sample ID: MB 410-653244/1-A

Matrix: Water

Analysis Batch: 653727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 653244

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1221 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1

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QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: MB 410-653244/1-A

Matrix: Water

Analysis Batch: 653727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 653244

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1242 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1248 (1C)	<0.0080		0.010	0.0080	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1254 (1C)	<0.0050		0.010	0.0050	ug/L		06/05/25 08:42	06/05/25 18:50	1
PCB-1260 (1C)	<0.0050		0.010	0.0050	ug/L		06/05/25 08:42	06/05/25 18:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl (Surr) (1C)	125		46 - 161	06/05/25 08:42	06/05/25 18:50	1
DCB Decachlorobiphenyl (Surr) (2C)	114		46 - 161	06/05/25 08:42	06/05/25 18:50	1
Tetrachloro-m-xylene (1C)	76		41 - 146	06/05/25 08:42	06/05/25 18:50	1
Tetrachloro-m-xylene (2C)	71		41 - 146	06/05/25 08:42	06/05/25 18:50	1

Lab Sample ID: LCS 410-653244/2-A

Matrix: Water

Analysis Batch: 653727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 653244

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
PCB-1016 (1C)	0.500	0.399		ug/L		80	60 - 117
PCB-1260 (1C)	0.500	0.477		ug/L		95	81 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
DCB Decachlorobiphenyl (Surr) (1C)	126		46 - 161
DCB Decachlorobiphenyl (Surr) (2C)	110		46 - 161
Tetrachloro-m-xylene (1C)	79		41 - 146
Tetrachloro-m-xylene (2C)	74		41 - 146

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

Lab Sample ID: MB 410-652712/20

Matrix: Water

Analysis Batch: 652712

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.20	0.10	mg/L			06/04/25 11:55	1

Lab Sample ID: MB 410-652712/70

Matrix: Water

Analysis Batch: 652712

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.10		0.20	0.10	mg/L			06/05/25 05:28	1

QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: LCS 410-652712/18
Matrix: Water
Analysis Batch: 652712

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	0.794		mg/L		106	90 - 110

Lab Sample ID: LCS 410-652712/68
Matrix: Water
Analysis Batch: 652712

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	0.739		mg/L		98	90 - 110

Lab Sample ID: LCSD 410-652712/19
Matrix: Water
Analysis Batch: 652712

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	0.684		mg/L		91	90 - 110	15	20

Lab Sample ID: LCSD 410-652712/69
Matrix: Water
Analysis Batch: 652712

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	0.727		mg/L		97	90 - 110	2	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-651175/1-A
Matrix: Water
Analysis Batch: 651775

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 651175

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	<12		25	12	ug/L		06/01/25 21:00	06/02/25 12:44	1
Antimony	<0.20		1.0	0.20	ug/L		06/01/25 21:00	06/02/25 12:44	1
Arsenic	<0.68		2.0	0.68	ug/L		06/01/25 21:00	06/02/25 12:44	1
Barium	<0.75		2.0	0.75	ug/L		06/01/25 21:00	06/02/25 12:44	1
Beryllium	<0.12		0.50	0.12	ug/L		06/01/25 21:00	06/02/25 12:44	1
Cadmium	<0.15		0.50	0.15	ug/L		06/01/25 21:00	06/02/25 12:44	1
Calcium	<50		120	50	ug/L		06/01/25 21:00	06/02/25 12:44	1
Chromium	<0.55		2.0	0.55	ug/L		06/01/25 21:00	06/02/25 12:44	1
Cobalt	<0.16		0.50	0.16	ug/L		06/01/25 21:00	06/02/25 12:44	1
Copper	<0.85		1.0	0.85	ug/L		06/01/25 21:00	06/02/25 12:44	1
Iron	<20		50	20	ug/L		06/01/25 21:00	06/02/25 12:44	1
Lead	<0.12		0.50	0.12	ug/L		06/01/25 21:00	06/02/25 12:44	1
Magnesium	<16		50	16	ug/L		06/01/25 21:00	06/02/25 12:44	1
Manganese	<0.95		2.0	0.95	ug/L		06/01/25 21:00	06/02/25 12:44	1
Nickel	<0.40		1.0	0.40	ug/L		06/01/25 21:00	06/02/25 12:44	1
Potassium	<65		200	65	ug/L		06/01/25 21:00	06/02/25 12:44	1
Selenium	<0.28		1.0	0.28	ug/L		06/01/25 21:00	06/02/25 12:44	1
Silver	<0.10		0.50	0.10	ug/L		06/01/25 21:00	06/02/25 12:44	1
Sodium	<90		200	90	ug/L		06/01/25 21:00	06/02/25 12:44	1
Thallium	<0.13		0.50	0.13	ug/L		06/01/25 21:00	06/02/25 12:44	1

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QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: MB 410-651175/1-A

Matrix: Water

Analysis Batch: 651775

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 651175

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	<4.0		10	4.0	ug/L		06/01/25 21:00	06/02/25 12:44	1
Vanadium	<0.79		4.0	0.79	ug/L		06/01/25 21:00	06/02/25 12:44	1

Lab Sample ID: LCS 410-651175/2-A

Matrix: Water

Analysis Batch: 651775

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 651175

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5000	5060		ug/L		101	90 - 110
Antimony	100	101		ug/L		101	90 - 115
Arsenic	500	499		ug/L		100	90 - 109
Barium	500	515		ug/L		103	90 - 113
Beryllium	50.0	50.6		ug/L		101	82 - 120
Cadmium	50.0	50.9		ug/L		102	90 - 112
Calcium	5000	4870		ug/L		97	90 - 112
Chromium	500	509		ug/L		102	90 - 110
Cobalt	500	500		ug/L		100	90 - 110
Copper	500	506		ug/L		101	90 - 110
Iron	5000	5090		ug/L		102	90 - 111
Lead	50.0	50.8		ug/L		102	90 - 110
Magnesium	5000	5010		ug/L		100	90 - 110
Manganese	500	501		ug/L		100	90 - 111
Nickel	500	497		ug/L		99	90 - 109
Potassium	5000	5070		ug/L		101	90 - 110
Selenium	100	97.2		ug/L		97	90 - 110
Silver	50.0	51.8		ug/L		104	90 - 112
Sodium	5000	5040		ug/L		101	89 - 114
Thallium	100	97.1		ug/L		97	90 - 110
Zinc	500	509		ug/L		102	90 - 112
Vanadium	500	500		ug/L		100	90 - 109

Lab Sample ID: LCSD 410-651175/3-A

Matrix: Water

Analysis Batch: 651775

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 651175

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	5000	4870		ug/L		97	90 - 110	4	20
Antimony	100	100		ug/L		100	90 - 115	1	20
Arsenic	500	490		ug/L		98	90 - 109	2	20
Barium	500	507		ug/L		101	90 - 113	1	20
Beryllium	50.0	51.2		ug/L		102	82 - 120	1	20
Cadmium	50.0	50.4		ug/L		101	90 - 112	1	20
Calcium	5000	4900		ug/L		98	90 - 112	1	20
Chromium	500	497		ug/L		99	90 - 110	3	20
Cobalt	500	504		ug/L		101	90 - 110	1	20
Copper	500	493		ug/L		99	90 - 110	3	20
Iron	5000	4920		ug/L		98	90 - 111	3	20
Lead	50.0	51.0		ug/L		102	90 - 110	0	20
Magnesium	5000	5010		ug/L		100	90 - 110	0	20

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Sample Results

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

Job ID: 410-224610-1

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

Lab Sample ID: LCSD 410-651175/3-A

Matrix: Water

Analysis Batch: 651775

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 651175

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	500	501		ug/L		100	90 - 111	0	20
Nickel	500	502		ug/L		100	90 - 109	1	20
Potassium	5000	5090		ug/L		102	90 - 110	0	20
Selenium	100	100		ug/L		100	90 - 110	3	20
Silver	50.0	51.3		ug/L		103	90 - 112	1	20
Sodium	5000	5100		ug/L		102	89 - 114	1	20
Thallium	100	101		ug/L		101	90 - 110	4	20
Zinc	500	497		ug/L		99	90 - 112	2	20
Vanadium	500	505		ug/L		101	90 - 109	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-651174/1-A

Matrix: Water

Analysis Batch: 651956

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 651174

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.087		0.20	0.087	ug/L		06/01/25 23:50	06/02/25 18:33	1

Lab Sample ID: LCS 410-651174/2-A

Matrix: Water

Analysis Batch: 651956

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 651174

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.03		ug/L		103	80 - 118

Method: 9040C - pH

Lab Sample ID: LCS 410-652321/1

Matrix: Water

Analysis Batch: 652321

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 410-653853/17

Matrix: Water

Analysis Batch: 653853

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			06/05/25 14:13	1

Lab Sample ID: LCS 410-653853/16

Matrix: Water

Analysis Batch: 653853

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	0.0492		mg/L		98	82 - 132

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

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

Job ID: 410-224610-1

GC/MS VOA

Analysis Batch: 652655

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	8260D	
410-224610-2	TB-052925	Total/NA	Water	8260D	
MB 410-652655/7	Method Blank	Total/NA	Water	8260D	
LCS 410-652655/5	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 651124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	3510C	
MB 410-651124/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-651124/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-651124/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 651365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-651124/1-A	Method Blank	Total/NA	Water	8270D SIM	651124
LCSD 410-651124/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM	651124

Analysis Batch: 651843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	8270D SIM	651124
LCS 410-651124/2-A	Lab Control Sample	Total/NA	Water	8270D SIM	651124

GC VOA

Analysis Batch: 651452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	8015D	
410-224610-2	TB-052925	Total/NA	Water	8015D	
MB 410-651452/5	Method Blank	Total/NA	Water	8015D	
LCS 410-651452/6	Lab Control Sample	Total/NA	Water	8015D	
LCSD 410-651452/7	Lab Control Sample Dup	Total/NA	Water	8015D	

GC Semi VOA

Prep Batch: 652531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	8011	
410-224610-2	TB-052925	Total/NA	Water	8011	
MB 410-652531/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-652531/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-652531/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 652600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	8011	652531
410-224610-2	TB-052925	Total/NA	Water	8011	652531
MB 410-652531/1-A	Method Blank	Total/NA	Water	8011	652531
LCS 410-652531/2-A	Lab Control Sample	Total/NA	Water	8011	652531
LCSD 410-652531/3-A	Lab Control Sample Dup	Total/NA	Water	8011	652531

QC Association Summary

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

Job ID: 410-224610-1

GC Semi VOA

Prep Batch: 653244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	3510C	
MB 410-653244/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-653244/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 653304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	3510C	
MB 410-653304/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-653304/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 653544

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	8015D	653304
MB 410-653304/1-A	Method Blank	Total/NA	Water	8015D	653304
LCS 410-653304/2-A	Lab Control Sample	Total/NA	Water	8015D	653304

Analysis Batch: 653727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	8082A	653244
MB 410-653244/1-A	Method Blank	Total/NA	Water	8082A	653244
LCS 410-653244/2-A	Lab Control Sample	Total/NA	Water	8082A	653244

Analysis Batch: 654003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	PCB	

HPLC/IC

Analysis Batch: 652712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	EPA 300.0 R2.1	
MB 410-652712/20	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 410-652712/70	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-652712/18	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCS 410-652712/68	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCSD 410-652712/19	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	
LCSD 410-652712/69	Lab Control Sample Dup	Total/NA	Water	EPA 300.0 R2.1	

Metals

Prep Batch: 651174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	7470A	
MB 410-651174/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-651174/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 651175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total Recoverable	Water	3005A	
MB 410-651175/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-651175/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-651175/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Eurofins Lancaster Laboratories Environment Testing, LLC

QC Association Summary

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

Job ID: 410-224610-1

Metals

Analysis Batch: 651775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total Recoverable	Water	6020B	651175
MB 410-651175/1-A	Method Blank	Total Recoverable	Water	6020B	651175
LCS 410-651175/2-A	Lab Control Sample	Total Recoverable	Water	6020B	651175
LCSD 410-651175/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	651175

Analysis Batch: 651956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	7470A	651174
MB 410-651174/1-A	Method Blank	Total/NA	Water	7470A	651174
LCS 410-651174/2-A	Lab Control Sample	Total/NA	Water	7470A	651174

General Chemistry

Analysis Batch: 652321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	9040C	
LCS 410-652321/1	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 653853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-224610-1	QM-A4832-265300-052925	Total/NA	Water	OIA-1677	
MB 410-653853/17	Method Blank	Total/NA	Water	OIA-1677	
LCS 410-653853/16	Lab Control Sample	Total/NA	Water	OIA-1677	

Lab Chronicle

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

Job ID: 410-224610-1

Client Sample ID: QM-A4832-265300-052925

Lab Sample ID: 410-224610-1

Date Collected: 05/29/25 09:45

Matrix: Water

Date Received: 05/29/25 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	652655	N7YK	ELLE	06/04/25 17:46
Total/NA	Prep	3510C			651124	L2FU	ELLE	06/01/25 08:15
Total/NA	Analysis	8270D SIM		1	651843	UJM0	ELLE	06/03/25 00:19
Total/NA	Analysis	8015D		1	651452	P5AM	ELLE	06/02/25 13:51
Total/NA	Prep	8011			652531	USL7	ELLE	06/03/25 23:39
Total/NA	Analysis	8011		1	652600	URS0	ELLE	06/04/25 13:43
Total/NA	Prep	3510C			653304	QKX3	ELLE	06/05/25 08:51
Total/NA	Analysis	8015D		1	653544	UHEW	ELLE	06/05/25 18:49
Total/NA	Prep	3510C			653244	ZFS6	ELLE	06/05/25 08:42
Total/NA	Analysis	8082A		1	653727	URS0	ELLE	06/05/25 21:00
Total/NA	Analysis	PCB		1	654003	URS0	ELLE	06/05/25 21:00
Total/NA	Analysis	EPA 300.0 R2.1		1	652712	PYC6	ELLE	06/04/25 17:06
Total Recoverable	Prep	3005A			651175	UAMX	ELLE	06/01/25 21:00
Total Recoverable	Analysis	6020B		1	651775	SAM2	ELLE	06/02/25 13:01
Total/NA	Prep	7470A			651174	UAMX	ELLE	06/01/25 23:50
Total/NA	Analysis	7470A		1	651956	IJ3I	ELLE	06/02/25 18:47
Total/NA	Analysis	9040C		1	652321	DI9Q	ELLE	06/03/25 14:27
Total/NA	Analysis	OIA-1677		1	653853	UJE2	ELLE	06/05/25 14:28

Client Sample ID: TB-052925

Lab Sample ID: 410-224610-2

Date Collected: 05/29/25 07:00

Matrix: Water

Date Received: 05/29/25 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	652655	N7YK	ELLE	06/04/25 13:19
Total/NA	Analysis	8015D		1	651452	P5AM	ELLE	06/02/25 12:35
Total/NA	Prep	8011			652531	USL7	ELLE	06/03/25 23:39
Total/NA	Analysis	8011		1	652600	URS0	ELLE	06/04/25 14:00

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

Job ID: 410-224610-1

Project/Site: Soil and Water Analysis - QL Frederick

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	12-30-26
Arizona	State	AZ0780	03-12-26
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
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
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	03-12-27
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-26
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	04-01-26
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	01-31-26
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	06-14-26
Washington	State	C457	04-11-26

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

Eurofins Lancaster Laboratories Environment Testing, LLC

Accreditation/Certification Summary

Client: Tetra Tech Inc

Job ID: 410-224610-1

Project/Site: Soil and Water Analysis - QL Frederick

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 (DW)	State	9906 C	03-31-26
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: Soil and Water Analysis - QL Frederick

Job ID: 410-224610-1

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

Job ID: 410-224610-1

Project/Site: Soil and Water Analysis - QL Frederick

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-224610-1	QM-A4832-265300-052925	Water	05/29/25 09:45	05/29/25 16:50
410-224610-2	TB-052925	Water	05/29/25 07:00	05/29/25 16:50

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Chain of Custody Record

410-224610 Chain of Custody

[illegible]

Login Sample Receipt Checklist

Client: Tetra Tech Inc

Job Number: 410-224610-1

Login Number: 224610

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(</=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	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Lancaster Laboratories Environment Testing, LLC