



Clear Water Compliance Services

Duncan Medlin

2525 West Casino Road, Suite 7A

Everett, WA 98204

RE: South Park Pump Station

Work Order Number: 2208467

Attention Duncan Medlin:

Fremont Analytical, Inc. received 2 sample(s) on 8/31/2022 for the analyses presented in the following report.

Volatile Organic Compounds by EPA Method 8260D

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager



CLIENT: Clear Water Compliance Services
Project: South Park Pump Station
Work Order: 2208467

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2208467-001	Discharge	08/31/2022 9:07 AM	08/31/2022 10:39 AM
2208467-002	Trip Blank	08/31/2022 8:09 AM	08/31/2022 10:39 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: Clear Water Compliance Services
Project: South Park Pump Station

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Qualifiers:

- * - Associated LCS is outside of control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Method Detection Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- DUP - Sample Duplicate
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MCL - Maximum Contaminant Level
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- REP - Sample Replicate
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Client: Clear Water Compliance Services

Collection Date: 8/31/2022 9:07:00 AM

Project: South Park Pump Station

Lab ID: 2208467-001

Matrix: Water

Client Sample ID: Discharge

Analyses	Result	RL	MDL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260D

Batch ID: 37626

Analyst: TN

Chloromethane	ND	0.750	0.260		µg/L	1	08/31/22 15:45:46
Vinyl chloride	ND	0.200	0.0235		µg/L	1	08/31/22 15:45:46
Acetone	ND	6.00	1.42		µg/L	1	08/31/22 15:45:46
Carbon disulfide	ND	0.500	0.206		µg/L	1	08/31/22 15:45:46
cis-1,2-Dichloroethene	ND	0.500	0.180		µg/L	1	08/31/22 15:45:46
2-Butanone (MEK)	ND	1.50	0.560		µg/L	1	08/31/22 15:45:46
Benzene	ND	0.440	0.179		µg/L	1	08/31/22 15:45:46
Toluene	ND	0.750	0.346		µg/L	1	08/31/22 15:45:46
Tetrachloroethene (PCE)	ND	0.400	0.159		µg/L	1	08/31/22 15:45:46
Ethylbenzene	ND	0.400	0.143		µg/L	1	08/31/22 15:45:46
m,p-Xylene	ND	1.00	0.394		µg/L	1	08/31/22 15:45:46
o-Xylene	ND	0.500	0.147		µg/L	1	08/31/22 15:45:46
Isopropylbenzene	ND	0.500	0.122		µg/L	1	08/31/22 15:45:46
tert-Butylbenzene	ND	0.500	0.115		µg/L	1	08/31/22 15:45:46
sec-Butylbenzene	ND	0.500	0.112		µg/L	1	08/31/22 15:45:46
n-Butylbenzene	ND	0.500	0.170		µg/L	1	08/31/22 15:45:46
Surr: Dibromofluoromethane	100	80 - 120			%Rec	1	08/31/22 15:45:46
Surr: Toluene-d8	94.6	80 - 120			%Rec	1	08/31/22 15:45:46
Surr: 1-Bromo-4-fluorobenzene	89.2	80 - 120			%Rec	1	08/31/22 15:45:46

Work Order: 2208467
CLIENT: Clear Water Compliance Services
Project: South Park Pump Station

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260D

Sample ID: LCS-37626		SampType: LCS		Units: µg/L		Prep Date: 8/31/2022		RunNo: 77943			
Client ID: LCSW		Batch ID: 37626				Analysis Date: 8/31/2022		SeqNo: 1601427			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	16.4	0.750	20.00	0	82.2	80	120				
Vinyl chloride	16.0	0.200	20.00	0	80.1	80	120				
Acetone	43.5	6.00	50.00	0	86.9	80	120				
cis-1,2-Dichloroethene	18.9	0.500	20.00	0	94.4	80	120				
2-Butanone (MEK)	46.4	1.50	50.00	0	92.7	80	120				
Benzene	17.2	0.440	20.00	0	85.9	80	120				
Toluene	16.8	0.750	20.00	0	83.8	80	120				
Tetrachloroethene (PCE)	17.7	0.400	20.00	0	88.6	80	120				
Ethylbenzene	18.1	0.400	20.00	0	90.5	80	120				
m,p-Xylene	38.5	1.00	40.00	0	96.2	80	120				
o-Xylene	19.9	0.500	20.00	0	99.6	80	120				
Isopropylbenzene	20.3	0.500	20.00	0	102	80	120				
tert-Butylbenzene	19.9	0.500	20.00	0	99.6	80	120				
sec-Butylbenzene	17.3	0.500	20.00	0	86.3	80	120				
n-Butylbenzene	18.7	0.500	20.00	0	93.3	80	120				
Surr: Dibromofluoromethane	24.4		25.00		97.5	80	120				
Surr: Toluene-d8	25.0		25.00		100	80	120				
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	80	120				

Sample ID: MB-37626		SampType: MBLK		Units: µg/L		Prep Date: 8/31/2022		RunNo: 77943			
Client ID: MBLKW		Batch ID: 37626				Analysis Date: 8/31/2022		SeqNo: 1601426			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.750									
Vinyl chloride	ND	0.200									
Acetone	ND	6.00									
cis-1,2-Dichloroethene	ND	0.500									
2-Butanone (MEK)	ND	1.50									
Benzene	ND	0.440									
Toluene	ND	0.750									
Tetrachloroethene (PCE)	ND	0.400									

Work Order: 2208467
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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260D

Sample ID: MB-37626	SampType: MBLK	Units: µg/L	Prep Date: 8/31/2022	RunNo: 77943							
Client ID: MBLKW	Batch ID: 37626		Analysis Date: 8/31/2022	SeqNo: 1601426							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Ethylbenzene	ND	0.400									
m,p-Xylene	ND	1.00									
o-Xylene	ND	0.500									
Isopropylbenzene	ND	0.500									
tert-Butylbenzene	ND	0.500									
sec-Butylbenzene	ND	0.500									
n-Butylbenzene	ND	0.500									
Surr: Dibromofluoromethane	24.3		25.00		97.0	80	120				
Surr: Toluene-d8	24.0		25.00		95.9	80	120				
Surr: 1-Bromo-4-fluorobenzene	23.2		25.00		92.9	80	120				

Sample ID: 2208429-004ADUP	SampType: DUP	Units: µg/L	Prep Date: 8/31/2022	RunNo: 77943							
Client ID: BATCH	Batch ID: 37626		Analysis Date: 8/31/2022	SeqNo: 1601424							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloromethane	ND	0.750						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Acetone	18.9	6.00						10.57	56.6	30	R
cis-1,2-Dichloroethene	ND	0.500						0	0	30	
2-Butanone (MEK)	ND	1.50						0	0	30	
Benzene	ND	0.440						0	0	30	
Toluene	ND	0.750						0	0	30	
Tetrachloroethene (PCE)	ND	0.400						0	0	30	
Ethylbenzene	ND	0.400						0	0	30	
m,p-Xylene	ND	1.00						0	0	30	
o-Xylene	ND	0.500						0	0	30	
Isopropylbenzene	ND	0.500						0	0	30	
tert-Butylbenzene	ND	0.500						0	0	30	
sec-Butylbenzene	ND	0.500						0	0	30	
n-Butylbenzene	ND	0.500						0	0	30	
Surr: Dibromofluoromethane	24.9		25.00		99.8	80	120		0		

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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260D

Sample ID: 2208429-004ADUP	SampType: DUP	Units: µg/L	Prep Date: 8/31/2022	RunNo: 77943							
Client ID: BATCH	Batch ID: 37626	Analysis Date: 8/31/2022	SeqNo: 1601424								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Toluene-d8	23.7		25.00		94.7	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	22.8		25.00		91.3	80	120		0		

Sample ID: 2208394-018ADUP	SampType: DUP	Units: µg/L	Prep Date: 8/31/2022	RunNo: 77943							
Client ID: BATCH	Batch ID: 37626	Analysis Date: 8/31/2022	SeqNo: 1601897								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.750						0	0	30	
Vinyl chloride	ND	0.200						0	0	30	
Acetone	ND	6.00						0	0	30	
cis-1,2-Dichloroethene	1.10	0.500						1.007	8.45	30	
2-Butanone (MEK)	ND	1.50						0	0	30	
Benzene	0.213	0.440						0.2086	1.99	30	J
Toluene	1.06	0.750						0.9637	9.82	30	
Tetrachloroethene (PCE)	0.244	0.400						0.2207	9.96	30	J
Ethylbenzene	1.35	0.400						1.166	14.6	30	
m,p-Xylene	13.0	1.00						11.07	15.8	30	
o-Xylene	5.00	0.500						4.196	17.6	30	
Isopropylbenzene	1.66	0.500						1.416	16.0	30	
tert-Butylbenzene	ND	0.500						0	0	30	
sec-Butylbenzene	ND	0.500						0	0	30	
n-Butylbenzene	ND	0.500						0	0	30	
Surr: Dibromofluoromethane	22.3		25.00		89.0	80	120		0		
Surr: Toluene-d8	22.3		25.00		89.3	80	120		0		
Surr: 1-Bromo-4-fluorobenzene	25.5		25.00		102	80	120		0		

Sample ID: 2208394-024AMS	SampType: MS	Units: µg/L	Prep Date: 8/31/2022	RunNo: 77943							
Client ID: BATCH	Batch ID: 37626	Analysis Date: 9/1/2022	SeqNo: 1601904								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	13.5	0.750	20.00	0	67.5	27.2	164				

Work Order: 2208467
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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260D

Sample ID: 2208394-024AMS	SampType: MS	Units: µg/L	Prep Date: 8/31/2022	RunNo: 77943
Client ID: BATCH	Batch ID: 37626		Analysis Date: 9/1/2022	SeqNo: 1601904

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Vinyl chloride	13.5	0.200	20.00	0	67.4	52.3	147				
Acetone	50.3	6.00	50.00	0	101	56.1	148				
cis-1,2-Dichloroethene	22.1	0.500	20.00	5.226	84.4	78.3	131				
2-Butanone (MEK)	45.3	1.50	50.00	0	90.6	61.5	139				
Benzene	16.9	0.440	20.00	1.445	77.3	78.5	133				S
Toluene	179	0.750	20.00	196.9	-89.8	77	133				S
Tetrachloroethene (PCE)	28.1	0.400	20.00	11.21	84.3	78	131				
Ethylbenzene	167	0.400	20.00	185.5	-94.8	77.9	133				S
m,p-Xylene	485	1.00	40.00	543.0	-146	74.8	133				S
o-Xylene	402	0.500	20.00	447.6	-228	81.2	126				S
Isopropylbenzene	91.1	0.500	20.00	78.25	64.4	79.1	132				S
tert-Butylbenzene	18.5	0.500	20.00	0	92.4	79.5	131				
sec-Butylbenzene	29.2	0.500	20.00	0	146	77.9	136				S
n-Butylbenzene	69.7	0.500	20.00	0	348	76	137				S
Surr: Dibromofluoromethane	21.2		25.00		84.8	80	120				
Surr: Toluene-d8	22.4		25.00		89.4	80	120				
Surr: 1-Bromo-4-fluorobenzene	26.0		25.00		104	80	120				

NOTES:

S - Spiked amount was low relative to sample concentration. Outlying spike recoveries may be expected.

Client Name: CWCS	Work Order Number: 2208467
Logged by: Clare Griggs	Date Received: 8/31/2022 10:39:00 AM

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
4. Shipping container/cooler in good condition? Yes No
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Present
6. Was an attempt made to cool the samples? Yes No NA
7. Were all items received at a temperature of >2°C to 6°C * Unknown prior to receipt. Yes No NA
8. Sample(s) in proper container(s)? Yes No
9. Sufficient sample volume for indicated test(s)? Yes No
10. Are samples properly preserved? Yes No
11. Was preservative added to bottles? Yes No NA
12. Is there headspace in the VOA vials? Yes No NA
13. Did all samples containers arrive in good condition(unbroken)? Yes No
14. Does paperwork match bottle labels? Yes No
15. Are matrices correctly identified on Chain of Custody? Yes No
16. Is it clear what analyses were requested? Yes No
17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Sample	25.3

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

