



250 SW Taylor Street  
Portland, OR 97204

503-226-4211  
nwnatural.com

February 2, 2022

Angelica Greene  
Industrial Stormwater Permit Manager  
City of Portland Bureau of Environmental Services  
6543 N. Burlington Avenue  
Portland, OR 97203

Re: 1200-Z Permit Second Quarter 2022–2023 Discharge Monitoring Report  
NW Natural Gasco Property  
DEQ File Number 62231

Dear Ms. Greene,

Attached please find the Discharge Monitoring Report for the NW Natural Gasco Property for the 1200-Z second quarter reporting period.

Two stormwater samples were collected during this quarter. All benchmarks and impairment concentrations were met for this quarter.

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 (40 CFR 122.22(d)).

If you have any questions about this package, please contact Kendra Skellenger with Anchor QEA, LLC, at 503-924-6179.

Very truly yours,

A handwritten signature in blue ink that reads 'Kathryn Williams'.

Kathryn Williams  
Vice President of Public Affairs  
NW Natural





# Discharge Monitoring Report

## 1200-Z Permit

National Pollutant Discharge Elimination System Permit  
Industrial Stormwater Discharge General Permit

### Instructions:

This report must be completed for each quarter and submitted by the 15th of February, May, August and November to the appropriate agent. The report must contain the results of all stormwater monitoring conducted during each quarter, and variance requests are due semi-annually, in February and August. Sample for the pollutants at monitoring location(s) specified in your SWPCP and use the monitoring location(s) number from your SWPCP. You must include the laboratory results, including minimum detection level, Quality Assurance/Quality Control and analytical methods for the parameters analyzed. You must also submit pH field notes and chain of custody.

### Facility Information

Legal name: Northwest Natural Gas Company DEQ File No: 62231

Common name: NW Natural EPA #: ORR706061

Facility address: 7900 NW St. Helens Rd Reporting Quarter:  1st  2nd  3rd  4th \*see table 7

Facility City, Zip: Portland, OR 97210 Reporting Year: 2022 to 2023

Geo-Region: Portland Harbor 2nd Geo-Region: Select

Is your receiving water impaired for pH? No

Administered by:  
 Clean Water Services  
 City of Portland  
 City of Eugene

Primary SIC Code: 4925 Secondary SIC Code: \_\_\_\_\_

### Monitoring Information

Number of discharge point(s): 1

Number of monitoring location(s): 1

If different, you certify that the facility has established either: 1) the area has no exposure of stormwater to industrial activities, or 2) the effluent is substantially similar to effluent(s) monitored and the same BMPs are implemented and maintained. (See permit pg 23)

### Monitoring Waiver(s) If yes list date on DEQ or Agent approval letter.

<u>1/25/2023</u>	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

### DMR Submittal Checklist

Please check all applicable documents are included with you DMR submittal:

Original Signature     Laboratory Reports     Chain of Custody     QA/QC form Lab     pH field sheets

### Certification

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 (40 CFR 122.22(d)).

Signature: 

Date: 2/2/2023

Printed Name: Kathryn Williams  
Legally Authorized Representative

Title: Vice President of Public Affairs

Email: [kathryn.williams@nwnatural.com](mailto:kathryn.williams@nwnatural.com)

Telephone : 503.220.2370





For official use only:

Legal Name:

DEQ File No:

**Instructions:**

This report must be completed for each quarter and submitted by the 15th of February, May, August and November electronically through Your DEQ Online. The report must contain the results of all stormwater monitoring conducted during each quarter, and variance requests are due semi-annually, in February and August. Sample for the pollutants specified in your monitoring table provided by your DEQ at monitoring point(s) identified in your SWPCP. You must upload the laboratory results, including minimum detection level, Quality Assurance/Quality Control and analytical methods for the parameters analyzed. You must also submit pH field notes and chain of custody.

### Portland Harbor

Monitoring Location(s)	Sample Date	pH	Total Copper	Total Lead	Total Zinc	Total Suspended Solids	E. coli	Total Iron
		s.u.	mg/L	mg/L	mg/L	mg/L	organisms/100 mL	mg/L
001	<del>10.31.2022</del>	7.6	0.00299	0.000496	0.0486	7		0.358
001	12.29.2022	7.7	0.00233	0.000469	0.0283	ND (5.00)		2.24
Geometric Mean			0.0026	0.00	0.04	4		1
Geometric Mean								
Geometric Mean								
Geometric Mean								
Geometric Mean								
Geometric Mean								
<p style="color: red;">You must select if your receiving water is impaired for pH in the 'General' tab</p>								
<b>Benchmarks</b>		5.5-9.0	0.015	0.24	0.24	30		
<b>303(d) Limits</b>		OOPS	0.015	0.017	0.04		406	10



# FIELD SAMPLING DATA SHEET



6720 SW Macadam Ave, Suite 125, Portland, OR 97219  
Office: (503) 670-1108

**PROJECT NAME:** 1200Z Stormwater Monitoring 000029-02.78      **Location ID:** Outfall 107

**SITE ADDRESS:** 7900 NW St Helens Rd, Portland, OR      **BLIND ID:** O107-01-102822

**Easting:** 7624051.869      **Northing:** 705434.910

<b>WIND FROM:</b>	N	NE	E	<u>SE</u>	S	SW	W	NW	<u>IGH</u>	MEDIUM	HEAVY	
<b>WEATHER:</b>	SUNNY	PRTLY CLDY	CLOUDY	<u>RAIN</u>	No Wind				<b>TEMPERATURE:</b>	52 °F		

### YSI Calibration

<b>Date:</b>	10/28/22		
<b>Probe S/N:</b>	Gosco #1		
<b>Calibration Solution</b>	Initial	Final	Temperature
pH 4.01	4.13	4.00	21.0
pH 7.0	7.01	7.00	20.7

### Water Quality Data

<b>Sampling Method:</b> Grab
<b>Time (24 hour):</b> 1145
<b>pH (SU):</b> 7.61

§ METHODS: (A) Grab (B) Composite (C) Disposable Bailer (D) Peristaltic Pump (E) Waterra inertial pump (F) Other \_\_\_\_\_

### STORMWATER SAMPLING

<b>Date:</b> 10/28/22		<b>Time:</b> 1145		<b>Method:</b> <u>Grab</u>						(√ if used)	
Bottle Type		#	Volume	Preservative [circle]	Ice	Filter	pH				
VOA Glass	—	3	40 ml	HCl	YES	NO	---				
Amber Glass	—	5	1L	None	YES	NO	---				
Green Poly	—	1	125ml	NaOH	YES	NO	---				
Red Poly-total	10/28/22	1145	<u>250ml</u>	<u>HNO<sub>3</sub></u>	<u>YES</u>	<u>NO</u>	---	✓			
Red Poly-dissolved**	—	1	250ml	HNO <sub>3</sub>	YES	YES	---				
White Poly**	10/28/22	1145	<u>250ml</u>	<u>None</u>	<u>YES</u>	<u>NO</u>	---	✓			
Amber Glass*	—	2	1L	HCl	YES	NO	---				
<b>Total Bottles (include duplicate count):</b>			<u>2</u>	<b>VOA Trip Blank (circle if collected)</b>							

### BOTTLE TYPE ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)

VOA vial - Glass	VOCs by EPA 624 (3 VOAs)
AMBER - Glass (Unpreserved)	PAHs/HCB by EPA 625 (1L)      Pesticides by EPA 608 (1L)      PCBs by EPA 608 (1L)
AMBER - Glass (Preserved)	Oil and Grease by EPA 1664A (2L)
GREEN - Poly	Free Cyanide (ASTM D4282) and WAD Cyanide (SM 4500-CN I) ( 1 x 125 mL for both)
RED DISSOLVED - Poly**	Dissolved Metals (Cu, Pb) by EPA 200.8
RED TOTAL - Poly	<u>Total Metals (Cu, Fe, Pb, Zn) by EPA 200.8 (250 mL)</u> Total Mercury by EPA 245.1 (250 mL)
WHITE - Poly	TSS by SM2540 D

**Comments:**  
Turbidity = 4.55 NTUs clear/colorless

**SAMPLER:** Casey Montgomery  
(PRINTED NAME)

Casey Montgomery  
(SIGNATURE)



ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

Thursday, December 15, 2022

Kendra Skellenger  
Anchor QEA, LLC  
6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

RE: A2J1002 - Gasco 1200Z Stormwater Sampling - 000029-02.78T-14.014E

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2J1002, which was received by the laboratory on 10/31/2022 at 8:02:00AM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: [dthomas@apex-labs.com](mailto:dthomas@apex-labs.com), or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

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Cooler Receipt Information

(See Cooler Receipt Form for details)

Cooler #1	2.3 degC
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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.

All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

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Apex Laboratories

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Darwin Thomas, Business Development Director



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**Apex Laboratories, LLC**

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Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029-02.78T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> <b>A2J1002 - 12 15 22 1033</b>
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**ANALYTICAL REPORT FOR SAMPLES**

**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0107-01-102822	A2J1002-01	Water	10/28/22 11:45	10/31/22 08:02

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**ANALYTICAL SAMPLE RESULTS**

**Total Metals by EPA 200.8 (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>0107-01-102822 (A2J1002-01)</b>		<b>Matrix: Water</b>						
Batch: 22K0410								
<b>Copper</b>	<b>0.00299</b>	0.00100	0.00200	mg/L	1	11/11/22 04:00	EPA 200.8	
<b>Iron</b>	<b>0.358</b>	0.0250	0.0500	mg/L	1	11/11/22 04:00	EPA 200.8	
<b>Lead</b>	<b>0.000496</b>	0.000100	0.000200	mg/L	1	11/11/22 04:00	EPA 200.8	
<b>Zinc</b>	<b>0.0486</b>	0.00200	0.00400	mg/L	1	11/11/22 04:00	EPA 200.8	

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**ANALYTICAL SAMPLE RESULTS**

**Solid and Moisture Determinations**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>0107-01-102822 (A2J1002-01)</b>				<b>Matrix: Water</b>				
Batch: 22K0123								
<b>Total Suspended Solids</b>	<b>7.00</b>	---	5.00	mg/L	1	11/03/22 14:02	SM 2540 D	SL-1

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**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Total Metals by EPA 200.8 (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 22K0410 - EPA 3015A</b>						<b>Water</b>						
<b>Blank (22K0410-BLK1)</b>			Prepared: 11/10/22 13:25 Analyzed: 11/11/22 03:50									
<u>EPA 200.8</u>												
Copper	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
Iron	ND	0.0250	0.0500	mg/L	1	---	---	---	---	---	---	
Lead	ND	0.000100	0.000200	mg/L	1	---	---	---	---	---	---	
Zinc	ND	0.00200	0.00400	mg/L	1	---	---	---	---	---	---	
<b>LCS (22K0410-BS1)</b>						Prepared: 11/10/22 13:25 Analyzed: 11/11/22 03:55						
<u>EPA 200.8</u>												
Copper	0.0531	0.00100	0.00200	mg/L	1	0.0556	---	96	85-115%	---	---	
Iron	2.70	0.0250	0.0500	mg/L	1	2.78	---	97	85-115%	---	---	
Lead	0.0555	0.000100	0.000200	mg/L	1	0.0556	---	100	85-115%	---	---	
Zinc	0.0552	0.00200	0.00400	mg/L	1	0.0556	---	99	85-115%	---	---	
<b>Duplicate (22K0410-DUP1)</b>						Prepared: 11/10/22 13:25 Analyzed: 11/11/22 04:05						
<u>QC Source Sample: 0107-01-102822 (A2J1002-01)</u>												
<u>EPA 200.8</u>												
Copper	<b>0.00301</b>	0.00100	0.00200	mg/L	1	---	0.00299	---	---	0.7	20%	
Iron	<b>0.370</b>	0.0250	0.0500	mg/L	1	---	0.358	---	---	3	20%	
Lead	<b>0.000517</b>	0.000100	0.000200	mg/L	1	---	0.000496	---	---	4	20%	
Zinc	<b>0.0500</b>	0.00200	0.00400	mg/L	1	---	0.0486	---	---	3	20%	
<b>Matrix Spike (22K0410-MS1)</b>						Prepared: 11/10/22 13:25 Analyzed: 11/11/22 04:11						
<u>QC Source Sample: 0107-01-102822 (A2J1002-01)</u>												
<u>EPA 200.8</u>												
Copper	0.0551	0.00100	0.00200	mg/L	1	0.0556	0.00299	94	70-130%	---	---	
Iron	2.97	0.0250	0.0500	mg/L	1	2.78	0.358	94	70-130%	---	---	
Lead	0.0529	0.000100	0.000200	mg/L	1	0.0556	0.000496	94	70-130%	---	---	
Zinc	0.0981	0.00200	0.00400	mg/L	1	0.0556	0.0486	89	70-130%	---	---	
<b>Matrix Spike (22K0410-MS2)</b>						Prepared: 11/10/22 13:25 Analyzed: 11/11/22 04:21						
<u>QC Source Sample: Non-SDG (A2J1007-01)</u>												
<u>EPA 200.8</u>												
Copper	0.0619	0.00100	0.00200	mg/L	1	0.0556	0.00789	97	70-130%	---	---	

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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 Tigard, OR 97223  
 503-718-2323  
 ORELAP ID: OR100062

<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029-02.78T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> <b>A2J1002 - 12 15 22 1033</b>
--	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Total Metals by EPA 200.8 (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 22K0410 - EPA 3015A</b>						<b>Water</b>						
<b>Matrix Spike (22K0410-MS2)</b>						Prepared: 11/10/22 13:25 Analyzed: 11/11/22 04:21						
<b>QC Source Sample: Non-SDG (A2J1007-01)</b>												
Iron	3.34	0.0250	0.0500	mg/L	1	2.78	0.545	100	70-130%	---	---	
Lead	0.0552	0.000100	0.000200	mg/L	1	0.0556	0.00113	97	70-130%	---	---	
Zinc	0.118	0.00200	0.00400	mg/L	1	0.0556	0.0621	100	70-130%	---	---	

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--	--	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Solid and Moisture Determinations**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 22K0123 - Total Suspended Solids</b>						<b>Water</b>						
<b>Blank (22K0123-BLK1)</b>			Prepared: 11/03/22 14:02 Analyzed: 11/03/22 14:02									
<u>SM 2540 D</u>												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
<b>Duplicate (22K0123-DUP1)</b>			Prepared: 11/03/22 14:02 Analyzed: 11/03/22 14:02									
<u>QC Source Sample: Non-SDG (A2J1019-01)</u>												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	10%	SL-1
<b>Duplicate (22K0123-DUP2)</b>			Prepared: 11/03/22 14:02 Analyzed: 11/03/22 14:02									
<u>QC Source Sample: Non-SDG (A2J1026-05)</u>												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	ND	---	---	---	10%	SL-1
<b>Reference (22K0123-SRM1)</b>			Prepared: 11/03/22 14:02 Analyzed: 11/03/22 14:02									
<u>SM 2540 D</u>												
Total Suspended Solids	851	---		mg/L	1	828		103	85-115%	---	---	

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**SAMPLE PREPARATION INFORMATION**

**Total Metals by EPA 200.8 (ICPMS)**

Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 22K0410</u>							
A2J1002-01	Water	EPA 200.8	10/28/22 11:45	11/10/22 13:25	45mL/50mL	45mL/50mL	1.00

**Solid and Moisture Determinations**

Prep: Total Suspended Solids					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 22K0123</u>							
A2J1002-01	Water	SM 2540 D	10/28/22 11:45	11/03/22 14:02			NA

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**QUALIFIER DEFINITIONS**

**Client Sample and Quality Control (QC) Sample Qualifier Definitions:**

**Apex Laboratories**

**SL-1** Result is considered an estimated value. Less than 1 liter of sample was used in analysis and the method minimum residue of 2.5 mg was not met. Reporting level adjusted based on sample volume used.

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**REPORTING NOTES AND CONVENTIONS:**

**Abbreviations:**

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

**Detection Limits: Limit of Detection (LOD)**

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).  
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

**Reporting Limits: Limit of Quantitation (LOQ)**

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

**Reporting Conventions:**

- Basis: Results for soil samples are generally reported on a 100% dry weight basis.  
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.
- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")  
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

**QC Source:**

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.  
  
Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

**Miscellaneous Notes:**

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " \*\*\* " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

**Blanks:**

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to 1/2 the Reporting Limit (RL).  
-For Blank hits falling between 1/2 the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.  
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.  
For further details, please request a copy of this document.

Apex Laboratories

Darwin Thomas, Business Development Director

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Table with 3 columns: Client (Anchor QEA, LLC), Project (Gasco 1200Z Stormwater Sampling), and Report ID (A2J1002 - 12 15 22 1033).

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

Apex Laboratories

Handwritten signature of Darwin Thomas

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ANALYTICAL REPORT

Apex Laboratories, LLC

6700 S.W. Sandburg Street
Tigard, OR 97223
503-718-2323
ORELAP ID: OR100062

Table with project details: Anchor QEA, LLC; Project: Gasco 1200Z Stormwater Sampling; Project Number: 000029-02.78T-14.014E; Project Manager: Kendra Skellenger; Report ID: A2J1002 - 12 15 22 1033

LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Table header with columns: Matrix, Analysis, TNI\_ID, Analyte, TNI\_ID, Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

Apex Laboratories

Handwritten signature of Darwin Thomas

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ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

**Anchor QEA, LLC**  
6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

Project: **Gasco 1200Z Stormwater Sampling**  
Project Number: **000029-02.78T-14.014E**  
Project Manager: **Kendra Skellenger**

**Report ID:**  
**A2J1002 - 12 15 22 1033**

**APEX LABS**  
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

**CHAIN OF CUSTODY**

Lab # **A2J1002** LOC **1** of **1**

---

Company: **Anchor QEA**  
Address: **6720 S. Macadam Av. #125 Portland, OR**  
Project Mgr: **Kendra Skellenger**  
Phone: **503-670-1108**  
Email: **kkskellenger@anchorqea.com**

Project Name: **Gasco 1200Z Stormwater Sampling**  
Project #: **000029-02.78T-14.014E**

Sampled By: **Cathy Montgomery / R. Luffman**  
Site Location: **OR WA CA**  
AK ID: \_\_\_\_\_

---

SAMPLE ID	DATE	TIME	MATRIX	# OF CONTAINERS	SPECIAL INSTRUCTIONS:			
					1 Day	2 Day	3 Day	Other
<b>0107-01-102822</b>	<b>10/31/22</b>	<b>1145</b>	<b>inlet</b>	<b>2</b>	<b>Standard Turn Around Time (TAT) - 10 Business Days</b>			
					<b>TAT Requested (circle)</b>			
					<b>SAMPLES ARE HELD FOR 30 DAYS</b>			
					<b>RELINQUISHED BY:</b>			
					<b>RECEIVED BY:</b>			

  

<b>RELINQUISHED BY:</b> Signature: <i>[Signature]</i> Date: <b>10/31/22</b> Printed Name: <b>Roy Luffman</b> Company: <b>Anchor QEA</b>	<b>RECEIVED BY:</b> Signature: <i>[Signature]</i> Date: <b>10/31/22</b> Printed Name: <b>R Skellenger</b> Company: <b>APEX</b>	<b>RELINQUISHED BY:</b> Signature: _____ Date: _____ Printed Name: _____ Company: _____	<b>RECEIVED BY:</b> Signature: _____ Date: _____ Printed Name: _____ Company: _____
---	--	---	---

  

<b>ANALYSIS REQUEST</b> Priority Metals (13) Al, Sb, As, Ba, Be, Bi, Cd, Cr, Cu, Pb, Se, Si, Zn Hg, Mn, Mo, Ni, K, Mg, Na, Ti, V, Zn TOTAL DISS. TCLP TCLP Metals (9)	<b>TEST BY</b> X Total
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Darwin Thomas, Business Development Director

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**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

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503-718-2323  
ORELAP ID: OR100062

<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029-02.78T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> A2J1002 - 12 15 22 1033
--	--	--

**APEX LABS COOLER RECEIPT FORM**

Client: Anchor Element WO#: A2 J1002

Project/Project #: Gasco - 1Q 2022 1200Z Stormwater Sampling

Delivery Info: 000029-02.78 T-14.014E

Date/time received: 10/31/22 @ 0802 By: [Signature]

Delivered by: Apex  Client  ESS  FedEx  UPS  Swift  Senvoy  SDS  Other

Cooler Inspection Date/time inspected: 10/31/22 @ 1040 By: [Signature]

Chain of Custody included? Yes  No  Custody seals? Yes  No

Signed/dated by client? Yes  No

Signed/dated by Apex? Yes  No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>2.3</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>Real</u>						
Condition (In/Out):	<u>Good</u>						

Cooler out of temp? (Y/N) Possible reason why: [Signature]

Green dots applied to out of temperature samples? Yes/No

Out of temperature samples form initiated? Yes/No

Sample Inspection: Date/time inspected: 10/31/22 @ 13:22 By: [Signature]

All samples intact? Yes  No  Comments: \_\_\_\_\_

Bottle labels/COCs agree? Yes  No  Comments: \_\_\_\_\_

COC/container discrepancies form initiated? Yes  No

Containers/volumes received appropriate for analysis? Yes  No  Comments: \_\_\_\_\_

Do VOA vials have visible headspace? Yes  No  NA

Comments: \_\_\_\_\_

Water samples: pH checked: Yes  No  NA  pH appropriate? Yes  No  NA

Comments: \_\_\_\_\_

Additional information: \_\_\_\_\_

Labeled by: [Signature] Witness: [Signature] Cooler Inspected by: [Signature]

Form Y-003 R-00

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[Signature]

Darwin Thomas, Business Development Director

# FIELD SAMPLING DATA SHEET



6720 SW Macadam Ave, Suite 125, Portland, OR 97219  
Office: (503) 670-1108

**PROJECT NAME:** 1200Z Stormwater Monitoring 000029-02.78      **Location ID:** Outfall 107

**SITE ADDRESS:** 7900 NW St Helens Rd, Portland, OR      **BLIND ID:** O107-02-122922

**Easting:** 7624051.869      **Northing:** 705434.910

<b>WIND FROM:</b>	N	NE	E	SE	S	SW	W	NW	LIGHT	MEDIUM	HEAVY
	<b>WEATHER:</b> SUNNY			PRTLY CLDY		CLOUDY		RAIN		No Wind	

### YSI Calibration

<b>Date:</b>	12/28/22		
<b>Probe S/N:</b>	Gasco #1		
<b>Calibration Solution</b>	<b>Initial</b>	<b>Final</b>	<b>Temperature</b>
pH 4.01	3.29	4.00	19.7
pH 7.0	6.98	6.98	19.7

### Water Quality Data

<b>Sampling Method:</b> Grab
<b>Time (24 hour):</b> 0735
<b>pH (SU):</b> 7.73

§ **METHODS:** (A) Grab (B) Composite (C) Disposable Bailer (D) Peristaltic Pump (E) Waterra inertial pump (F) Other \_\_\_\_\_

### STORMWATER SAMPLING

<b>Date:</b> 12/29/22		<b>Time:</b> 0730		<b>Method:</b> Grab					[if used]	
Bottle Type	#	Volume	Preservative [circle]	Ice	Filter	pH				
VOA Glass	3	40 ml	HCl	YES	NO	---				
Amber Glass	5	1L	None	YES	NO	---				
Green Poly	1	125ml	NaOH	YES	NO	---				
Red Poly-total	12/29/22 0730 (1)	250ml	HNO <sub>3</sub>	YES	NO	---	✓			
Red Poly-dissolved**	---	1 250ml	HNO <sub>3</sub>	YES	YES	---				
White Poly**	12/29/22 0730 (1)	250ml	None	YES	NO	---	✓			
Amber Glass*	---	1L	HCl	YES	NO	---				
<b>Total Bottles (include duplicate count):</b> 2				<b>VOA Trip Blank (circle if collected)</b>						

BOTTLE TYPE	ANALYSIS PER BOTTLE TYPE (Circle applicable or write non-standard analysis below)
VOA vial - Glass	VOCs by EPA 624 (3 VOAs)
AMBER - Glass (Unpreserved)	PAHs/HCB by EPA 625 (1L)      Pesticides by EPA 608 (1L)      PCBs by EPA 608 (1L)
AMBER - Glass (Preserved)	Oil and Grease by EPA 1664A (2L)
GREEN - Poly	Free Cyanide (ASTM D4282) and WAD Cyanide (SM 4500-CN I) ( 1 x 125 mL for both)
RED DISSOLVED - Poly**	Dissolved Metals (Cu, Pb) by EPA 200.8
RED TOTAL - Poly	Total Metals (Cu, Fe, Pb, Zn) by EPA 200.8 (250 mL)      Total Mercury by EPA 245.1 (250 mL)
WHITE - Poly	TSS by SM2540 D

**Comments:**

Turbidity = 22.02 NTUs

**SAMPLER:** Casey Montgomery  
(PRINTED NAME)

[Signature]  
(SIGNATURE)





ANALYTICAL REPORT

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

Wednesday, January 25, 2023

Kendra Skellenger  
Anchor QEA, LLC  
6720 SW Macadam Ave. Suite 125  
Portland, OR 97219

RE: A2L1045 - Gasco 1200Z Stormwater Sampling - 000029.02.78 T-14.014E

Thank you for using Apex Laboratories. We greatly appreciate your business and strive to provide the highest quality services to the environmental industry.

Enclosed are the results of analyses for work order A2L1045, which was received by the laboratory on 12/29/2022 at 4:28:00PM.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: [dthomas@apex-labs.com](mailto:dthomas@apex-labs.com), or by phone at 503-718-2323.

Please note: All samples will be disposed of within 30 days of sample receipt, unless prior arrangements have been made.

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Cooler Receipt Information

(See Cooler Receipt Form for details)

Default Cooler            1.8 degC

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This Final Report is the official version of the data results for this sample submission, unless superseded by a subsequent, labeled amended report.  
All other deliverables derived from this data, including Electronic Data Deliverables (EDDs), CLP-like forms, client requested summary sheets, and all other products are considered secondary to this report.

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Apex Laboratories

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---

Darwin Thomas, Business Development Director





**ANALYTICAL REPORT**

**Apex Laboratories, LLC**

6700 S.W. Sandburg Street  
Tigard, OR 97223  
503-718-2323  
ORELAP ID: OR100062

<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029.02.78 T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> A2L1045 - 01 25 23 1308
--	---	--

**ANALYTICAL REPORT FOR SAMPLES**

**SAMPLE INFORMATION**

Client Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
0107-02-122922	A2L1045-01	Water	12/29/22 07:30	12/29/22 16:28

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Darwin Thomas, Business Development Director



ANALYTICAL REPORT

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ORELAP ID: OR100062

<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029.02.78 T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> <b>A2L1045 - 01 25 23 1308</b>
--	---	---

**ANALYTICAL SAMPLE RESULTS**

**Total Metals by EPA 200.8 (ICPMS)**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>0107-02-122922 (A2L1045-01)</b>		<b>Matrix: Water</b>						
Batch: 23A0388								
<b>Copper</b>	<b>0.00233</b>	0.00100	0.00200	mg/L	1	01/13/23 03:03	EPA 200.8	
<b>Iron</b>	<b>2.24</b>	0.0250	0.0500	mg/L	1	01/13/23 03:03	EPA 200.8	
<b>Lead</b>	<b>0.000469</b>	0.000100	0.000200	mg/L	1	01/13/23 03:03	EPA 200.8	
<b>Zinc</b>	<b>0.0283</b>	0.00200	0.00400	mg/L	1	01/13/23 03:03	EPA 200.8	

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<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029.02.78 T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> <b>A2L1045 - 01 25 23 1308</b>
--	---	---

**ANALYTICAL SAMPLE RESULTS**

**Solid and Moisture Determinations**

Analyte	Sample Result	Detection Limit	Reporting Limit	Units	Dilution	Date Analyzed	Method Ref.	Notes
<b>0107-02-122922 (A2L1045-01)</b>				<b>Matrix: Water</b>				
<u>Batch: 23A0059</u>								
Total Suspended Solids	ND	5.00	5.00	mg/L	1	01/04/23 14:37	SM 2540 D	SL-1

Apex Laboratories

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ANALYTICAL REPORT

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Tigard, OR 97223  
503-718-2323  
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<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029.02.78 T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> <b>A2L1045 - 01 25 23 1308</b>
--	---	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Total Metals by EPA 200.8 (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23A0388 - EPA 3015A</b>						<b>Water</b>						
<b>Blank (23A0388-BLK1)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/13/23 01:59									
<u>EPA 200.8</u>												
Copper	ND	0.00100	0.00200	mg/L	1	---	---	---	---	---	---	
Iron	ND	0.0250	0.0500	mg/L	1	---	---	---	---	---	---	
Zinc	ND	0.00200	0.00400	mg/L	1	---	---	---	---	---	---	
<b>Blank (23A0388-BLK2)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/14/23 00:55									
<u>EPA 200.8</u>												
Lead	ND	0.000100	0.000200	mg/L	1	---	---	---	---	---	---	Q-16
<b>LCS (23A0388-BS1)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/13/23 02:04									
<u>EPA 200.8</u>												
Copper	0.0570	0.00100	0.00200	mg/L	1	0.0556	---	103	85-115%	---	---	
Iron	2.78	0.0250	0.0500	mg/L	1	2.78	---	100	85-115%	---	---	
Zinc	0.0573	0.00200	0.00400	mg/L	1	0.0556	---	103	85-115%	---	---	
<b>LCS (23A0388-BS2)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/14/23 01:00									
<u>EPA 200.8</u>												
Lead	0.0584	0.000100	0.000200	mg/L	1	0.0556	---	105	85-115%	---	---	Q-16
<b>Duplicate (23A0388-DUP1)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/13/23 02:14									
<u>QC Source Sample: Non-SDG (A2L1028-01)</u>												
Copper	<b>0.00522</b>	0.00100	0.00200	mg/L	1	---	0.00501	---	---	4	20%	
Iron	<b>0.897</b>	0.0250	0.0500	mg/L	1	---	0.954	---	---	6	20%	
Zinc	<b>0.0682</b>	0.00200	0.00400	mg/L	1	---	0.0641	---	---	6	20%	
<b>Duplicate (23A0388-DUP3)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/16/23 18:42									
<u>QC Source Sample: Non-SDG (A2L1028-01RE1)</u>												
Lead	<b>0.00116</b>	0.000100	0.000200	mg/L	1	---	0.00116	---	---	0.08	20%	Q-16
<b>Matrix Spike (23A0388-MS1)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/13/23 02:24									
<u>QC Source Sample: Non-SDG (A2L1028-02)</u>												
<u>EPA 200.8</u>												
Copper	0.0573	0.00100	0.00200	mg/L	1	0.0556	0.00133	101	70-130%	---	---	

Apex Laboratories

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Darwin Thomas, Business Development Director





ANALYTICAL REPORT

**Apex Laboratories, LLC**  
 6700 S.W. Sandburg Street  
 Tigard, OR 97223  
 503-718-2323  
 ORELAP ID: OR100062

<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029.02.78 T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> <b>A2L1045 - 01 25 23 1308</b>
--	---	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Total Metals by EPA 200.8 (ICPMS)**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23A0388 - EPA 3015A</b>						<b>Water</b>						
<b>Matrix Spike (23A0388-MS1)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/13/23 02:24									
<u>QC Source Sample: Non-SDG (A2L1028-02)</u>												
Iron	3.00	0.0250	0.0500	mg/L	1	2.78	0.180	101	70-130%	---	---	
Zinc	0.0772	0.00200	0.00400	mg/L	1	0.0556	0.0213	101	70-130%	---	---	
<b>Matrix Spike (23A0388-MS2)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/13/23 02:58									
<u>QC Source Sample: Non-SDG (A2L1043-01)</u>												
<u>EPA 200.8</u>												
Copper	0.0688	0.00100	0.00200	mg/L	1	0.0556	0.00836	109	70-130%	---	---	
Iron	4.95	0.0250	0.0500	mg/L	1	2.78	1.99	107	70-130%	---	---	
Lead	0.0589	0.000100	0.000200	mg/L	1	0.0556	0.00109	104	70-130%	---	---	
Zinc	0.199	0.00200	0.00400	mg/L	1	0.0556	0.140	107	70-130%	---	---	
<b>Matrix Spike (23A0388-MS4)</b>			Prepared: 01/12/23 08:14 Analyzed: 01/16/23 18:52									
<u>QC Source Sample: Non-SDG (A2L1028-02RE2)</u>												
<u>EPA 200.8</u>												
Lead	0.0571	0.000100	0.000200	mg/L	1	0.0556	0.000110	103	70-130%	---	---	Q-16

Apex Laboratories

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503-718-2323  
ORELAP ID: OR100062

<b>Anchor QEA, LLC</b> 6720 SW Macadam Ave. Suite 125 Portland, OR 97219	Project: <b>Gasco 1200Z Stormwater Sampling</b> Project Number: <b>000029.02.78 T-14.014E</b> Project Manager: <b>Kendra Skellenger</b>	<b>Report ID:</b> <b>A2L1045 - 01 25 23 1308</b>
--	---	---

**QUALITY CONTROL (QC) SAMPLE RESULTS**

**Solid and Moisture Determinations**

Analyte	Result	Detection Limit	Reporting Limit	Units	Dilution	Spike Amount	Source Result	% REC	% REC Limits	RPD	RPD Limit	Notes
<b>Batch 23A0059 - Total Suspended Solids - 2022</b>						<b>Water</b>						
<b>Blank (23A0059-BLK1)</b>			Prepared: 01/04/23 14:37 Analyzed: 01/04/23 14:37									
<u>SM 2540 D</u>												
Total Suspended Solids	ND	5.00	5.00	mg/L	1	---	---	---	---	---	---	
<b>Duplicate (23A0059-DUP1)</b>			Prepared: 01/04/23 14:37 Analyzed: 01/04/23 14:37									
<u>QC Source Sample: Non-SDG (A2L1037-02)</u>												
Total Suspended Solids	<b>15.0</b>	5.00	5.00	mg/L	1	---	16.0	---	---	6.45	10%	SL-1
<b>Duplicate (23A0059-DUP2)</b>			Prepared: 01/04/23 14:37 Analyzed: 01/04/23 14:37									
<u>QC Source Sample: Non-SDG (A2L1081-01)</u>												
Total Suspended Solids	<b>70.0</b>	5.00	5.00	mg/L	1	---	56.0	---	---	<b>22.2</b>	<b>10%</b>	Q-04
<b>Reference (23A0059-SRM1)</b>			Prepared: 01/04/23 14:37 Analyzed: 01/04/23 14:37									
<u>SM 2540 D</u>												
Total Suspended Solids	823			mg/L	1	825		99.8	85-116%	---	---	

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**SAMPLE PREPARATION INFORMATION**

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23A0388</u>							
A2L1045-01	Water	EPA 200.8	12/29/22 07:30	01/12/23 08:14	45mL/50mL	45mL/50mL	1.00

Solid and Moisture Determinations

Prep: Total Suspended Solids - 2022					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
<u>Batch: 23A0059</u>							
A2L1045-01	Water	SM 2540 D	12/29/22 07:30	01/04/23 14:37			NA

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**QUALIFIER DEFINITIONS**

**Client Sample and Quality Control (QC) Sample Qualifier Definitions:**

**Apex Laboratories**

- Q-04** Spike recovery and/or RPD is outside control limits due to a non-homogeneous sample matrix.
- Q-16** Reanalysis of an original Batch QC sample.
- SL-1** Result is considered an estimated value. Less than 1 liter of sample was used in analysis and the method minimum residue of 2.5 mg was not met. Reporting level adjusted based on sample volume used.

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**REPORTING NOTES AND CONVENTIONS:**

**Abbreviations:**

- DET Analyte DETECTED at or above the detection or reporting limit.
- ND Analyte NOT DETECTED at or above the detection or reporting limit.
- NR Result Not Reported
- RPD Relative Percent Difference. RPDs for Matrix Spikes and Matrix Spike Duplicates are based on concentration, not recovery.

**Detection Limits: Limit of Detection (LOD)**

Limits of Detection (LODs) are normally set at a level of one half the validated Limit of Quantitation (LOQ).  
If no value is listed ('-----'), then the data has not been evaluated below the Reporting Limit.

**Reporting Limits: Limit of Quantitation (LOQ)**

Validated Limits of Quantitation (LOQs) are reported as the Reporting Limits for all analyses where the LOQ, MRL, PQL or CRL are requested. The LOQ represents a level at or above the low point of the calibration curve, that has been validated according to Apex Laboratories' comprehensive LOQ policies and procedures.

**Reporting Conventions:**

- Basis: Results for soil samples are generally reported on a 100% dry weight basis.  
The Result Basis is listed following the units as " dry", " wet", or " " (blank) designation.
- " dry" Sample results and Reporting Limits are reported on a dry weight basis. (i.e. "ug/kg dry")  
See Percent Solids section for details of dry weight analysis.
- " wet" Sample results and Reporting Limits for this analysis are normally dry weight corrected, but have not been modified in this case.
- " " Results without 'wet' or 'dry' designation are not normally dry weight corrected. These results are considered 'As Received'.

**QC Source:**

In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) may be analyzed to demonstrate accuracy and precision of the extraction batch.  
  
Non-Client Batch QC Samples (Duplicates and Matrix Spike/Duplicates) may not be included in this report. Please request a Full QC report if this data is required.

**Miscellaneous Notes:**

- " --- " QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- " \*\*\* " Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

**Blanks:**

Standard practice is to evaluate the results from Blank QC Samples down to a level equal to ½ the Reporting Limit (RL).  
-For Blank hits falling between ½ the RL and the RL (J flagged hits), the associated sample and QC data will receive a 'B-02' qualifier.  
-For Blank hits above the RL, the associated sample and QC data will receive a 'B' qualifier, per Apex Laboratories' Blank Policy.  
For further details, please request a copy of this document.

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Table with 3 columns: Client (Anchor QEA, LLC), Project (Gasco 1200Z Stormwater Sampling), and Report ID (A2L1045 - 01 25 23 1308).

REPORTING NOTES AND CONVENTIONS (Cont.):

Blanks (Cont.):

Sample results flagged with a 'B' or 'B-02' qualifier are potentially biased high if the sample results are less than ten times the level found in the blank for inorganic analyses, or less than five times the level found in the blank for organic analyses.

'B' and 'B-02' qualifications are only applied to sample results detected above the Reporting Level.

Preparation Notes:

Mixed Matrix Samples:

Water Samples:

Water samples containing significant amounts of sediment are decanted or separated prior to extraction, and only the water portion analyzed, unless otherwise directed by the client.

Soil and Sediment Samples:

Soil and Sediment samples containing significant amounts of water are decanted prior to extraction, and only the solid portion analyzed, unless otherwise directed by the client.

Sampling and Preservation Notes:

Certain regulatory programs, such as National Pollutant Discharge Elimination System (NPDES), require that activities such as sample filtration (for dissolved metals, orthophosphate, hexavalent chromium, etc.) and testing of short hold analytes (pH, Dissolved Oxygen, etc.) be performed in the field (on-site) within a short time window.

Data users should be aware of which regulations pertain to the samples they submit for testing. If related sample collection activities are not approved for a particular regulatory program, results should be considered estimates.

Samples that have been filtered and preserved at Apex Laboratories per client request are listed in the preparation section of the report with the date and time of filtration listed.

Apex Laboratories maintains detailed records on sample receipt, including client label verification, cooler temperature, sample preservation, hold time compliance and field filtration. Data is qualified as necessary, and the lack of qualification indicates compliance with required parameters.

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Handwritten signature of Darwin Thomas

Darwin Thomas, Business Development Director



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LABORATORY ACCREDITATION INFORMATION

ORELAP Certification ID: OR100062 (Primary Accreditation) - EPA ID: OR01039

All methods and analytes reported from work performed at Apex Laboratories are included on Apex Laboratories' ORELAP Scope of Certification, with the exception of any analyte(s) listed below:

Apex Laboratories

Table header with columns: Matrix, Analysis, TNI\_ID, Analyte, TNI\_ID, Accreditation

All reported analytes are included in Apex Laboratories' current ORELAP scope.

Secondary Accreditations

Apex Laboratories also maintains reciprocal accreditation with non-TNI states (Washington DOE), as well as other state specific accreditations not listed here.

Subcontract Laboratory Accreditations

Subcontracted data falls outside of Apex Laboratories' Scope of Accreditation. Please see the Subcontract Laboratory report for full details, or contact your Project Manager for more information.

Field Testing Parameters

Results for Field Tested data are provided by the client or sampler, and fall outside of Apex Laboratories' Scope of Accreditation.

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**APEX LABS**  
6700 SW Sandburg St., Tigard, OR 97223 Ph: 503-718-2323

**CHAIN OF CUSTODY**

Lab # **A2L1045** COC I of I

Company: <b>Anchor QEA</b>	Project Mgr: <b>Kendra Skellenger</b>	Project Name: <b>Gasco 20 2072 1200Z Stormwater Sampling</b>	Project #: <b>000029.02.78</b>	PO #
Address: <b>6720 S. Macadam Av #125 Portland, OR</b>	Phone: <b>503.670-1108</b>	Email: <b>k.skellenger@anchorqea.com</b>		
Sampled by: <b>Casey Montgomery / D Laffoon</b>	<b>ANALYSIS REQUEST</b>			
Site Location: <b>OR WA CA</b>				
AK ID				
SAMPLE ID				
<b>0107-02-122922</b>	LAB ID #	DATE	TIME	MATRIX
		<b>12/29/2022</b>	<b>0730</b>	<b>Water</b>
				# OF CONTAINERS
				<b>2</b>
				NWTRH-HCID
				NWTRH-DX
				NWTRH-GX
				8260 BTEX
				8260 RBDM VOCs
				8260 Halo VOCs
				8260 VOCs Full List
				8270 SIM PAHs
				8270 Semi-Vols Full List
				8082 PCBs
				8081 Pest
				RCRA Metals (8)
				Priority Metals (13)
				Al, Sb, As, Ba, Be, Bi, Cd, Ca, Cr, Co, Cu, Fe, Hg, Mn, Ni, Mn, Mo, Nf, K, Se, Ag, Na, Ti, Zn
				DTP
				TCLP DISS
				TCLP Metals (8)
				<b>X</b>
				<b>755 84 5M1540D</b>
				Archive

SPECIAL INSTRUCTIONS:

Normal Turn Around Time (TAT) = 10 Business Days

TAT Requested (circle): **1 Day**    2 Day    3 Day    4 DAY    5 DAY    Other: **Normal**

**RECEIVED BY:**

Signature: *[Signature]*    Date: **12/29/2022**

Printed Name: **Casey Montgomery**    Time: **1404**

Company: **Anchor QEA**

**RECEIVED BY:**

Signature: *[Signature]*    Date: **12/29/2022**

Printed Name: **Casey Montgomery**    Time: **1404**

Company: **Anchor QEA**

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*[Signature]*

Darwin Thomas, Business Development Director





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**APEX LABS COOLER RECEIPT FORM**

Client: Anchor QEA Element WO#: A2L1045

Project/Project #: Gasco 2Q 2022 1200Z Stormwater Sampling / 000029.02.78 T-14.014E

**Delivery Info:**  
 Date/time received: 12/29/22 @ 1404 By: AJM  
 Delivered by: Apex  Client  ESS  FedEx  UPS  Swift  Senvoy  SDS  Other

**Cooler Inspection** Date/time inspected: 12/29/22 @ 1510 By: AJM

Chain of Custody included? Yes  No  Custody seals? Yes  No

Signed/dated by client? Yes  No

Signed/dated by Apex? Yes  No

	Cooler #1	Cooler #2	Cooler #3	Cooler #4	Cooler #5	Cooler #6	Cooler #7
Temperature (°C)	<u>1.8</u>						
Received on ice? (Y/N)	<u>Y</u>						
Temp. blanks? (Y/N)	<u>Y</u>						
Ice type: (Gel/Real/Other)	<u>Real</u>						
Condition (In/Out):	<u>In</u>						

Cooler out of temp? (Y/N) Possible reason why: \_\_\_\_\_  
 Green dots applied to out of temperature samples? Yes  No   
 Out of temperature samples form initiated? Yes  No

**Sample Inspection:** Date/time inspected: 12/29/22 @ 16:27 By: AAW

All samples intact? Yes  No  Comments: \_\_\_\_\_

Bottle labels/COCs agree? Yes  No  Comments: \_\_\_\_\_

COC/container discrepancies form initiated? Yes  No

Containers/volumes received appropriate for analysis? Yes  No  Comments: \_\_\_\_\_

Do VOA vials have visible headspace? Yes  No  NA

Comments: \_\_\_\_\_

Water samples: pH checked: Yes  No  NA  pH appropriate? Yes  No  NA

Comments: \_\_\_\_\_

**Additional information:**  
 \_\_\_\_\_  
 \_\_\_\_\_

Labeled by: AAW Witness: DSS Cooler Inspected by: AAW

Form Y-003 R-00

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